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**Review of the City's Telecommunications  
Phase 1 – Cellular Telephones  
Follow-up**

May 15, 2006

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# Review of the City's Telecommunications Phase 1 – Cellular Telephones Follow-up

## 1. Introduction

This is a follow-up review to determine the status of actions taken to address six recommendations contained in the OCA's March 2002 report on cellular telephones. The primary objective of that review was to determine whether existing practices were adequate to ensure that cellular telephone usage by City staff was justified and reasonably controlled.

The follow-up review was delayed to allow the administration time to stabilize processes following changing the method of service delivery and subsequent reorganization.

## 2. Background

### 2.1. Summary of Original Report

At the time of the review the City's telecommunications were being managed under contract by a third party reporting to the General Manager of Corporate Services. The services provided under the contract included:

- Advisory and Consulting Services – Provide consulting and advisory services to City departments and their stakeholders to assist in making cost-effective and innovative use of telecommunication.
- Vendor Management – Establish, negotiate, and manage vendor/supplier master contracts and monitor the effectiveness of service delivery.
- Strategic Planning – Establish measurement information to monitor the effectiveness of telecommunication uses within the cooperation and to establish a strategic direction for the corporation.

The following table compares wireless/mobile telecommunication costs incurred in 1996 to those incurred in 2000 and 2001. The table reflects costs for services used by departments reporting to the City Manager and do not include costs incurred by Edmonton Police Service or other boards and authorities.

Device	Annual Cost (\$000)		
	1996	2000	2001
Cellular Telephones	\$65	\$475	\$559
<i>Average Annual Increase</i>		157.7%	17.7%
Mobile Radio Rental	<u>863</u>	<u>491</u>	<u>453</u>
<b>Total cellphones &amp; radio</b>	<b>\$928</b>	<b>\$966</b>	<b>\$1,012</b>
<i>Average Annual Increase</i>		1.0%	4.8%

Between 1996 and 2000, cellular telephone costs increased by 630.8% for an average of 157.7% annually. Costs increased by an additional 17.7% in 2001. These increases were offset by a reduction in mobile radio rental, with average annual increases of 1.0% for cellphones and radios combined between 1996 and 2000 and 4.8% between 2000 and 2001.

In 2002, the use of cellular telephones was covered under City policy A1420, *Long Distance, Facsimile and Cellular Phone Expense*. This policy was developed in 1992 prior to wide acceptance or use of cellular telephones and required departments to establish their own procedures. Discussions with departmental staff indicated that formal departmental procedures to guide the acquisition, use and monitoring of cellular telephones did not exist.

Further, at the time of the review the service provider was unable to produce reliable electronic billing information that was required to analyze cellular telephone usage. Billing and payment practices were manual and decentralized, with each department having its own process for distribution and review of detailed invoices. As a result, an effective analysis of cellular telephone usage within the Corporation and an independent assessment of billing accuracy was not possible.

A total of 6 recommendations were made to the Corporate Services Department to strengthen controls over the acquisition and usage of cellular telephones as well as the billing and payment process. Management accepted the recommendations and action plans were developed to address all recommendations. Management originally planned to complete actions to address the recommendations by December 2002.

## 2.2. Current Wireless Service

The Information Technology (IT) strategic vision is: "A secure environment providing direct, authorized access to consistent integrated information by anyone, anytime, anywhere, using any enabled device."

Currently telecommunications is managed by the Network and Telecommunications Section in the Information Technology Branch. Services provided by this section relative to wireless technology include:

- Help desk support for calls received through the central IT call centre.

- Maintenance of the online tool for telecommunication requests from department staff.
- Provision of a single point of contract between wireless technology users and the service provider(s) in areas including products/service delivery, installation and training sessions offered by the vendor.
- Development and delivery of end user training materials on telephony functions techniques and hardware operations.
- Reporting on current year changes to the City’s telecommunication infrastructure (e.g., additions, changes, moves).

The following table summarizes wireless telecommunication costs incurred from 2002 through 2005. The table reflects costs for services used by departments reporting to the City Manager as well as costs incurred by Edmonton Police Service. The OCA’s attempts to segregate the costs incurred by Edmonton Police Service were unsuccessful due to the manner in which the data is recorded. Consequently, the data in this table is not directly comparable to that of the table in section 2.1.

	Annual Cost (\$000)			
	2002	2003	2004	2005
<b>Total</b>	<b>\$1,281</b>	<b>\$1,412</b>	<b>\$1,926</b>	<b>\$2,338</b>
<i>Annual Increase</i>		10.2%	36.4%	21.4%

The primary reason for the increase in costs in 2003 was due to the 9.8% increase in the number of cellular phones and handheld devices in use. In 2004 and 2005 the number of these devices increased by 12.7% and 8.7% or approximately one-third of the increase in cost of wireless service. The other major reason for the increases in 2004 and 2005 was the introduction or expansion of wireless data service in areas such as building inspection, assessment and taxation and the DATS Mobile Data System.

The following Administrative Directive and guidelines provide the framework for the use of cellular telephones:

- Administrative Directive A1100C, *Employee Code of Conduct* came into effect on June 27, 2002 and established principles for appropriate conduct in the workplace by City employees.
- Administrative Directive A1429B, *Acceptable Use of Communications Technology* approved October 25, 2005 provided guidance on the use of all communications devices and is consistent with the Employee Code of Conduct.
- Occupation Health and Safety guidelines for the use of *Cell Phones and Communication Devices While Operating Vehicles and Equipment* were endorsed by SMT on June 18, 2004.

Contract obligations for approximately 80% of the wireless devices in use by City staff have expired or will expire by the end of 2006. A Voice and Data Wireless RFP (request for proposals) has been issued to establish a contractual relationship(s) for the acquisition of wireless devices and services that represent the best overall solution the City. The cost of service will be a key consideration when evaluating proposals and issuing contracts.

### 3. Scope and Methodology

This review was undertaken using the OCA's standard follow-up processes starting with a review of documented action or results of actions. That review was then followed by discussions and, where required, validation of information provided to demonstrate the actions taken. Since an RFP which may change the way in which cellular telephone service is provided was being developed, the OCA reviewed the RFP to determine if the request addresses the opportunities for improvement recommended in the original report.

This review was limited to reviewing the action taken to address the recommendations contained in the original report.

### 4. Summary of Results

The OCA assessed the implementation status of management's actions to address the six recommendations contained in the original report. The following table summarizes the implementation status for each recommendation.

Appendix	Status	Number
A	Complete	1
B	In progress	5
–	Not implemented	–
–	No longer applicable	–
<b>Total recommendations</b>		<b>6</b>

### 5. Conclusion

The format of electronic data currently received by the City does not facilitate effective or efficient monitoring of wireless services. Monitoring of usage and review of billings are currently manual processes that have been delegated to operational areas. The Voice and Data Wireless RFP issued at the time of this review identifies the City's requirements for electronic billing and reporting. The criteria that will be used to assess proposals requires vendors to provide data on usage and cost in a specified electronic form.

Operational areas are currently responsible for monitoring cellular telephone usage and reviewing billings. Each area has established processes that meet their individual needs. Corporate standards do not exist. This is consistent with the delivery of shared services to the City prior to 2005 when the priority was on delivering services required by operational areas. In January 2005 SMT approved a revised shared services model that promotes balancing corporate and operational requirements in the delivery of service. On October 20, 2005 SMT approved a governance structure that identifies the need to ensure that monitoring roles and accountability are defined and assigned accordingly.

The OCA expects that when usage and billing data are received in a useable electronic format and when appropriate roles and responsibilities have been defined, that the City will be able to effectively and efficiently monitor usage and verify accuracy of billings. A further follow-up review on voice and data wireless usage will be scheduled for 2008.

The OCA thanks all City staff who participated in this review for their support, cooperation and feedback.

**Appendix A – Recommendations with Implementation Status Assessed as Complete****Original Recommendation**

1. That the Corporate Services Department evaluate the cellular telephone plan for potential conflict with the use of City Asset provision of the planned revisions to the Code of Ethics. (*original recommendation number 2.3*)

**Follow-up Review – Implementation Status:**

Complete     In progress     Not implemented     No longer applicable

**Action Taken:**

Cellular telephones plans have been evaluated against the current *Employee Code of Conduct* and *Acceptable use of Telecommunication Technology* directives as well as criteria such as the need to contact staff outside normal working hours.

**Appendix B – Recommendations with Implementation Status Assessed as In Progress**

Original Recommendation	Management Response
<p>2. That the Corporate Services Department in conjunction with other corporate and operational groups develop general procedures/guidelines that address the acquisition and use of cellular telephones/wireless communication and monitoring of their use. <i>(original recommendation number 1.1)</i></p>	<p>Procedures will be developed that provide guidance to departments on the acquisition of communications instruments as well as on their appropriate use. Where required, other corporate groups will be involved to ensure safety issues are addressed in the appropriate City procedures.</p> <p><b>Planned Implementation Date:</b> December 2002</p>

Follow-up Review – Implementation Status:
<p><input type="checkbox"/> Complete    <input checked="" type="checkbox"/> In progress    <input type="checkbox"/> Not implemented    <input type="checkbox"/> No longer applicable</p> <p><b>Justification for Further Action:</b>                      Guidance is available for two of the three areas identified in the recommendation. 1) Seven user profiles have been developed to provide guidance for the acquisition of wireless products and services. Final decisions on the type of device and service to acquire are made by operational areas in manners consistent with the current delegation of authority. 2) Guidance is available for the safe use of cellular phones while driving.                      Action has not been taken to fully define the roles and responsibilities related to monitoring of cellular telephone usage. <b>Roles and responsibilities will be defined based on the principles set out in the Shared Services Governance Committee Terms of Reference.</b></p> <p><b>Revised Implementation Date:</b>    December 2007</p>

**Appendix B – Recommendations with Implementation Status Assessed as In Progress**

Original Recommendation	Management Response
<p>3. That the Corporate Services Department enter into discussion with the service provider to determine when reliable electronic billing data will be available on a consistent basis. <i>(original recommendation number 2.1)</i></p> <p>4. That the Corporate Services Department develop a process that will permit regular analysis of billing information to assess the cost effectiveness of the selected cellular telephone plan and strategy as well as overall compliance to procedures. <i>(original recommendation number 2.2)</i></p>	<p>The Telecommunications Services Office meets with Telus Mobility on a regular basis, the requirement for accurate and reliable data will be emphasized at these meetings. When reliable data is available it will be analyzed and cost effectiveness assessed.</p> <p><b>Planned Implementation Date:</b> December 2002</p>

Follow-up Review – Implementation Status:
<p><input type="checkbox"/> Complete    <input checked="" type="checkbox"/> In progress    <input type="checkbox"/> Not implemented    <input type="checkbox"/> No longer applicable</p> <p><b>Justification for Further Action:</b></p> <p>Discussions with the vendor have resulted in data being available electronically. However, the format does not allow the City to effectively utilize the information. <b>The Voice and Data Wireless RFP identifies the need for reliable electronic information that can be analyzed efficiently and will be one of the criteria used for selecting vendors on a go-forward basis.</b></p> <p>A corporate process that permits regular analysis of billing information is not in place. Operational areas have adopted practices that meet their individual needs, but there is no corporate requirement to monitor and report usage. Review of usage for personal calls varies and includes self assessments, supervisory reviews and independent reviews by Telecom Site Coordinators. <b>Requirements for monitoring for compliance with City policies and directives will be included in the definition of roles and responsibilities.</b></p> <p><b>Revised Implementation Date:</b>    December 2007</p>

**Appendix B – Recommendations with Implementation Status Assessed as In Progress**

Original Recommendation	Management Response
<p>5. That the Corporate Services Department review all processes related to cellular telephone billing to ensure standardized, cost effective controls are in place that provide assurance that billing data and payments are accurate. <i>(original recommendation number 3.1)</i></p>	<p>All processes currently in place will be reviewed and standardized procedures will be developed and implemented to ensure cost effective controls are in place that provide assurance that telecommunication charges and payments are accurate.</p> <p><b>Planned Implementation Date:</b> December 2002</p>

Follow-up Review – Implementation Status:
<p><input type="checkbox"/> Complete    <input checked="" type="checkbox"/> In progress    <input type="checkbox"/> Not implemented    <input type="checkbox"/> No longer applicable</p> <p><b>Justification for Further Action:</b> A standard process for verifying billing information and approving payment is not in place. Review of usage for personal and long distance calls varies and includes self assessments, supervisory reviews and independent reviews by Telecom Site Coordinators. <b>A corporate process that can be used to provide greater assurance that bills are accurate will be developed once reliable electronic billing data is readily available.</b></p> <p><b>Revised Implementation Date:</b>    December 2007</p>

**Appendix B – Recommendations with Implementation Status Assessed as In Progress**

Original Recommendation	Management Response
<p>6. That the Corporate Services Department produce management reports on a regular basis that identify activity levels and exceptional usage to management for appropriate action. <i>(original recommendation number 3.2)</i></p>	<p>Management reports will be produced and circulated once reliable data is available in an electronic format.</p> <p><b>Planned Implementation Date:</b> December 2002</p>

Follow-up Review – Implementation Status:			
<input type="checkbox"/> Complete	<input checked="" type="checkbox"/> In progress	<input type="checkbox"/> Not implemented	<input type="checkbox"/> No longer applicable
<p><b>Justification for Further Action:</b> Discussions with the vendor have resulted in data being available electronically. However, the format does not allow the City to effectively utilize the information. Therefore, corporate reports to support a monitoring function are not produced. Only one Section Telecom Coordinator contacted assesses billing and usage on an ongoing basis. A few operational areas record billing information in an Excel spreadsheet periodically review that information, otherwise review of cellphone usage is left to individual supervisors/directors or employees. The Voice and Data Wireless RFP identifies the need for reliable electronic information. <b>Management reports will be developed once reliable electronic data is readily available.</b></p> <p><b>Revised Implementation Date:</b> December 2007</p>			