

Clause 6 in Report No. 11 of Committee of the Whole was adopted, without amendment, by the Council of The Regional Municipality of York at its meeting held on June 25, 2015.

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York Region Transit (YRT/Viva)
On-board Security Camera System Upgrade Contract Award

Committee of the Whole recommends adoption of the following recommendation contained in the report dated May 21, 2015 from the Commissioner of Transportation Services:

1. Council approve the award of a contract for the upgrade of York Region Transit (YRT/Viva) on-board security camera system to SEON Design Inc., pursuant to the direct purchase provisions of the Purchasing Bylaw on the following terms:
 - a) The Region pay SEON Design Inc., \$2,342,244, excluding taxes, for the upgrade of equipment, software, vehicle licenses and installation services.
 - b) The Region pay SEON Design Inc., for annual software support and maintenance and spare parts an additional \$350,000, excluding taxes.
 - c) The term of the contract be five years, from July 1, 2015 to June 30, 2020.
2. Council authorize the Commissioner of Transportation Services to execute the contract.

1. Purpose

This report seeks Council approval for the award of a contract to SEON Design Inc. for the upgrade of YRT/Viva on-board security camera system. The report also seeks approval for the payment of annual software support and maintenance and spare parts cost to SEON Design Inc. for a term of five years effective July 1, 2015.

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Council approval is required for a direct purchase pursuant to the provisions of Section 9 of the Purchasing Bylaw, on the basis that the paramount consideration in seeking the system upgrade is compatible with existing equipment and service, as all new buses purchased since 2011 have been installed with the new cameras and the next generation of on-board security camera system

2. Background

Installation of security cameras on transit vehicles was approved by Council in April 2006. The security camera system provides the following benefits:

- Operator and customer security – prominent placement of surveillance equipment has a natural deterrence effect in reducing criminal activity, this results in improved customer and operator security
- Recording during incidents – surveillance equipment is integrated with emergency alarm buttons and once activated saves the video recording in a protected space which can be downloaded later for investigation
- Risk management – recorded video provides evidence during incident claims from vehicular accidents, slips and falls, as well as potential negligence claims relating to passenger and driver security
- Evidence for police investigation – police have been requesting video to help them investigate criminal activities
- Customer service – to resolve and respond to fare disputes and other complaints for in-service vehicles
- Contractor performance – to track and monitor contractor operations, which can include contractor compliance as it relates to operating, maintenance or customer service parameters

The existing on-board security camera system was procured in 2007 through a competitive process from SEON Design Inc.

The original contract was procured in January 2007 with 11 bidders. The on-board security camera system was initially installed in 2007. The system consists of four to eight cameras, depending on the vehicle type and model and includes a digital video recorder that continuously records and stores the video. The system is integrated with the vehicle emergency alarm, which allows the video to be recorded, stored and protected for a predefined time interval before and after the emergency alarm is activated.

The existing on-board security camera system is becoming difficult to maintain

The following lists some challenges in maintaining the existing on-board security camera system in a reliable and working condition:

- The existing vehicle software and hardware are no longer supported by the contractor as newer and improved camera hardware has become available
- It is extremely difficult to source spare parts and components
- The central software is outdated and does not allow efficient monitoring, operation and maintenance of the system
- Retrieving video from the vehicle is a time-consuming and labour-intensive process as the on-board computer hard drive has to be physically removed for video download

3. Analysis and Options

Existing on-board security camera system requires timely retrieval of video to ensure that video is not overwritten

Due to the design of the existing on-board security camera system, video recording is overwritten in a cyclical manner once the hard drive reaches its capacity. Therefore it is necessary that the video be downloaded in a timely manner when requested. This involves downtime for the buses while the video is being retrieved.

The number of requests for video download has been increasing every year and reached approximately 2400 in 2014. The purpose of requests include police investigation, accidents investigation, on-board incidents, vandalism, criminal activity and passenger claims.

Of the total fleet of YRT/Viva buses, 426 require to be upgraded with the next generation of on-board security camera system

The upgrade is required as the existing system was installed in 2007 and due to the age of the components, is difficult to operate and maintain.

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New buses purchased through Metrolinx joint procurement initiative since 2011 have been installed with the new cameras and the next generation of on-board security camera system and therefore do not require to be upgraded. The remaining 426 require upgrading, which provide the following benefits:

- Video from the buses can be downloaded to a computer at the garage without manual intervention. This saves staff time and the buses do not have to be held from service for video download
- Built-in Global Positioning System allows videos to be searched based on time and location
- Improved video and picture quality due to high definition cameras and built-in infra-red lighting allows better illumination during the night
- Capability to add extra cameras when needed
- Enhanced video management software allows remote configuration, system health reporting and user-friendly interface
- Availability of spare parts and support from the vendor

The Region will save significant costs by upgrading the on-board security camera system

Each video download costs the Region approximately \$140. This cost includes staff time, bus downtime, staff travel time and Regional vehicle costs for travel to the garages. In 2014, staff downloaded approximately 2,400 videos for different requests. Considering requests for video download have been increasing approximately 15 per cent annually, and the reduced costs in video download using the upgraded system plus savings in staff time, it is estimated that the Region will recover the cost of the upgrade in the next three to four years.

Given the benefits of the next generation on-board security camera system staff recommend the upgrade by SEON Design Inc., as a direct purchase

The following lists benefits of having SEON Design Inc. upgrade the on-board security camera system:

- Continuity in the system, as some of the newer buses procured through the Metrolinx joint procurement initiative have the next generation on-board security camera system supplied by SEON Design Inc.

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- Compatibility with the existing next generation on-board security camera system (newer buses procured through the Metrolinx joint procurement) is the paramount consideration
- Staff will not have to maintain two sets of spare parts if the upgrade is done by SEON Design Inc
- One central system and software will save cost towards operations and maintenance
- Having the existing vendor perform the upgrade will provide continuity and a single point of responsibility
- Repair of damaged parts or replacement of defective parts, which involve the use of specialized tools and employment of specialized skills, will continued to be supplied by SEON Design Inc

Link to key Council-approved plans

Continued use and support of the existing system aligns with the 2015-2019 Strategic Plan goals to continue to deliver and sustain critical infrastructure through applications used to collect data and model systems.

Vision 2051 includes a goal relating to the development of infrastructure for a growing Region, which states that:

“A seamless network for mobility provides accessibility to all destinations using diverse transportation options for people in all communities, promotes active healthy living and safely and efficiently moves people and goods.”

The on-board security camera system supports this goal by improving reliability, safety and security of people and goods.

4. Financial Implications

The cost of upgrading the on-board security camera system on 426 buses is \$2,342,244, excluding taxes

Table 1 provides a summary of the equipment and installation costs to upgrade the on-board security camera system.

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Table 1
Equipment supply and installation costs

Description	Cost
On-board Equipment	\$1,920,259
Installation services	\$421,985
Total cost	\$2,342,244

Staff have reviewed the proposed contract pricing and confirm the average upgrade cost per bus is reasonable when compared to competitive costs from the current contract as well as prices for similar systems on new buses purchased since 2011.

The estimated software support and maintenance, spare parts and other services costs for the next five years is \$350,000, excluding taxes

Table 2 provides a summary of the estimated software support and maintenance, spare parts and other services costs to be paid from October 1, 2015 to September 30, 2020.

Table 2
Support and maintenance, spare parts and services costs

Description	Cost
Support and maintenance	\$100,000
Spare parts	\$200,000
Additional services	\$50,000
Total cost	\$350,000

Sufficient capital and operating budget is included in the 2015 and 2016 Business Plan and Budget for this project.

5. Local Municipal Impact

YRT/Viva will continue to provide York Region residents, operators and enforcement staff with a safe and secure transportation service by providing a reliable on-board security camera system.

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6. Conclusion

SEON Design Inc. has been providing satisfactory service to the Region since the initial installation in 2007.

It is recommended that the contract for the upgrade of York Region Transit (YRT/Viva) on-board security camera system be awarded to SEON Design Inc. for a total cost of \$2,342,244, excluding taxes.

It is also recommended that the Region pay SEON Design Inc. for annual software support and maintenance and spare parts an additional \$350,000, excluding taxes, for a term of five years, from July 1, 2015 to June 30, 2020.

For more information on this report, please contact Igor Zaslavsky, Acting Manager, Transit Management Systems at ext. 75646.

The Senior Management Group has reviewed this report.

May 21, 2015

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