



SUBJECT: 001-S-16 Joint Radio Operating System

PREPARED BY: Phil Alexander, Deputy Fire Chief, Ext. 5960
Patti Malone, Senior Buyer, Ext. 2239

RECOMMENDATION:

- 1) THAT the report entitled “001-S-16 Joint Radio Operating System” be received;
- 2) AND THAT the contract 001-S-16 for a joint radio operating system be awarded through the Region of York to the highest ranked, lowest priced supplier, Motorola Solutions Canada Inc. in the total amount of \$483,833.90, inclusive of HST for nine years (2016-2024);

2016 – \$26,212.66
2017 – \$54,580.52
2018 – \$54,648.21
2019 – \$65,555.18
2020 – \$65,702.78
2021 – \$55,091.37
2022 – \$55,254.29
2023 – \$55,425.46
<u>2024 – \$51,363.42</u>
Total - \$483,833.90

- 3) AND THAT the contract for the joint radio operating system be shared among the nine Regional Municipality of York participants;
- 4) AND THAT a purchase order in the amount of \$483,833.90 inclusive of HST be issued to the Regional Municipality of York to cover the City’s contribution to the joint radio operating system;
- 5) AND THAT the award be funded from Fire Department operating account 420 785 5354 York Regional Radio System;
- 6) AND THAT Staff be authorized to amend the purchase order amount in each year of the contract to reflect changes to the Fire Departments Operating budget accounts based on the City’s proportionate share of the total equipment across the nine participants;
- 7) AND THAT Staff be authorized and directed to do all things necessary to give effect to this resolution.

PURPOSE:

To obtain approval to award the City's cost share for the operation and maintenance of the radio system for nine years.

BACKGROUND:

The previous system was owned by York Regional Police; and is now obsolete. Given the system had reached the end of its life cycle, York Regional Police prepared an agreement for approval by the nine municipal partners who use the existing system to collaborate on the acquisition of a new system that would provide users with a voice secure system for first responders. The project implemented four new towers to improve reliability throughout the Region. The York Regional Police would own the system and eight other participants would share in the cost of using the system.

The agreement is that York Regional Police would pay the full capital costs for the radio infrastructure and the nine participants will split the operating costs in accordance with their share of the equipment on the system. The nine participants are as follows: York Regional Police, Central York Fire Services, King Fire and Emergency Services, East Gwillimbury Emergency Services, Richmond Hill Fire Department, Vaughan Fire and Rescue Services, Whitchurch-Stouffville Fire and Emergency Services, Georgina Fire and Emergency Services and Markham Fire and Emergency Services.

The system currently serves over 2,100 pieces of equipment (portable radios, mobile radios, and dispatch consoles) of which Markham's share is 5.59%. The operating costs include restoration costs, system licenses, and all tower leases. The City's percentage could change over the 9 year period, depending on the City's percentage of the equipment being used as compared to the total amount of equipment among the 9 participants.

PROCUREMENT PROCESS:

The York Regional Police issued a proposal to the market for Supply, Delivery, Installation and Maintenance of P25 Voice Radio Communication. Four bid submissions were received but one bidder was disqualified for not submitting the mandatory "Undertaking to Bond". The proposal evaluation results were as follows: Motorola Solutions Canada Inc. 87.7, Harris Canada Systems, Inc. 78.2 and Glentel Inc. 44.9.

FINANCIAL CONSIDERATIONS AND TEMPLATE: (external link)

In 2016, budget was reallocated within the fire department operating budget in the amount of \$45,000 to operating account 420-785-5354, "York Regional Radio System." The 2016 budget amount of \$45,000 was based on a preliminary estimate at the time of the budget process. The Region will be invoicing the City for approximately \$30,000 in 2016, but as costs ramp-up, the cost per year will increase.

Markham's share of the total cost of the York Regional Radio System, by year, is as follows:

2016 – \$26,212.66
2017 – \$54,580.52
2018 – \$54,648.21
2019 – \$65,555.18
2020 – \$65,702.78
2021 – \$55,091.37
2022 – \$55,254.29
2023 – \$55,425.46
2024 – \$51,363.42
Total - \$483,833.90

The radio system award includes the following four components:

- 1) Restoration Operating costs,
- 2) License Fee,
- 3) System Fee and
- 4) Tower Lease Costs.

For items 1), 3) and 4), Markham's cost is based on a proportionate share of the total cost. The cost allocation is based on each municipality's total number of units as a percentage of the total number of units across the entire radio network shared by the 8 participating municipalities and York Regional Police. Currently, Markham inventory is based on 119 units which represent 5.59% of the network. Therefore, Markham's portion is 5.59% of the total cost.

For item 2), the cost is calculated by multiplying the number of units in Markham's inventory by \$42/unit.

Item # 1 – Restoration Operating Costs

Restoration operating cost is an annual contribution for the replacement of the hardware and software. The annual cost is \$42,781.80; however, in the first and last year of the contract, York Region received a reduced rate during negotiations. Subsequently, in 2019/20 there is a price increase due to infrastructure upgrades that will be required during this period and as per the agreement between Motorola and YRP. The total cost is \$6,695,564.79, of which Markham pays its proportionate share of the total cost in the amount of \$374,071.46. (See Appendix "A")

Item # 2 – License Fee

The License Fee is an individual license cost that has fixed prices over the period of this contract. Markham's share is calculated by multiplying the number of units in Markham's inventory by \$42/unit. The annual cost is \$4,998. (See Appendix "A")

Item # 3 – System Fee

The system fee is a maintenance agreement with fixed prices over the period of this contract. The total cost is \$654,404.80 of which Markham pays its proportionate share of \$36,839.97. (See Appendix "A")

Item # 4 – Tower Lease Costs

Tower lease costs are paid for use of the Regional tower network and have a 2.5% price escalation each year. These costs total \$500,110.91, of which Markham pays \$27,940.47. (See Appendix “A”)

In each respective year (2016-2024), Markham’s share of the cost is subject to change. This is because municipalities will be adding (or subtracting) equipment from their respective inventory over time, thereby changing the cost–share of each participant as a percentage of the total for the entire radio network. The estimated cost of \$483,833.90 from 2016-2024 is an estimate of Markham’s share based on the current inventory counts among all municipalities.

For each contract year, Staff will adjust the Operating budget, 420-785-5354 “York Regional Radio System” according to the assessed Markham share at the beginning of the year. As required, additional funding will be requested as part of the 2017-2024 Operating budget process, subject to Council approval.

HUMAN RESOURCES CONSIDERATIONS

Not applicable

ALIGNMENT WITH STRATEGIC PRIORITIES:

Not applicable

BUSINESS UNITS CONSULTED AND AFFECTED:

Not applicable

RECOMMENDED BY:

24/05/2016

24/05/2016

X 

Dave Decker
Fire Chief

X 

Brenda Librecz
Commissioner, Community and Fire Services

ATTACHMENTS:

Appendix “A”

Appendix “A”- The following charts provide a breakdown by component cost

Equipment Breakdown and Percentage Distribution

	YRP + 7 municipalities	Markham Fire & Emergency Services
Number of pieces of equipment	2011	119
% of equipment	94.41%	5.59%

Item # 1 Restoration Operating Costs

<u>Year</u>	<u>Total Contract Cost</u>	<u>Markham's Portion based on 5.59%</u>
2016	\$259,520.56	\$14,499.04
2017	\$765,758.25	\$42,781.80
2018	\$765,758.25	\$42,781.80
2019	\$958,469.30	\$53,548.28
2020	\$958,469.30	\$53,548.28
2021	\$765,758.25	\$42,781.80
2022	\$765,758.25	\$42,781.80
2023	\$765,758.25	\$42,781.80
2024	\$690,314.40	\$38,566.86
Total	\$6,695,564.79	\$374,071.46

Item # 2 License Fee

<u>Year</u>	<u>Number of equipment</u>	<u>\$42 x 119 (Number of units)</u>
2016	119	\$4,998.00
2017	119	\$4,998.00
2018	119	\$4,998.00
2019	119	\$4,998.00
2020	119	\$4,998.00
2021	119	\$4,998.00
2022	119	\$4,998.00
2023	119	\$4,998.00
2024	119	\$4,998.00
Total		\$44,982.00

Item # 3 System Fee

<u>Year</u>	<u>Total Contract Cost</u>	<u>Markham's Portion based on 5.59%</u>
2016	\$73,267.20	\$4,093.33
2017	\$73,267.20	\$4,093.33
2018	\$73,267.20	\$4,093.33
2019	\$73,267.20	\$4,093.33
2020	\$73,267.20	\$4,093.33
2021	\$73,267.20	\$4,093.33
2022	\$73,267.20	\$4,093.33
2023	\$73,267.20	\$4,093.33
2024	\$73,267.20	\$4,093.33
Total	\$659,404.80	\$36,839.97

Item # 4 Tower Lease Costs

<u>Year</u>	<u>Total Contract Cost</u>	<u>Markham's Portion based on 5.59%</u>
2016	\$46,936.80	\$2,622.29
2017	\$48,460.08	\$2,707.39
2018	\$49,671.58	\$2,775.08
2019	\$52,186.21	\$2,915.57
2020	\$54,828.13	\$3,063.17
2021	\$57,603.81	\$3,218.24
2022	\$60,520.00	\$3,381.16
2023	\$63,583.82	\$3,552.34
2024	\$66,320.47	\$3,705.23
Total	\$500,110.91	\$27,940.47

Total Cost

<u>Year</u>	<u>Markham's Portion based on 5.59%</u>
2016	\$26,212.66
2017	\$54,580.52
2018	\$54,648.21
2019	\$65,555.18
2020	\$65,702.78
2021	\$55,091.37
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