



The Regional Municipality of Peel  
**POLICE SERVICES BOARD**  
10 PEEL CENTRE DR., BRAMPTON, ON L6T 4B9

TELEPHONE: 905-458-1340  
FACSIMILE: 905-458-7278  
www.peelpoliceboard.ca

June 01, 2020

**RECEIVED**

**June 1, 2020**

REGION OF PEEL  
OFFICE OF THE REGIONAL CLERK

Ms. A. Macintyre  
Deputy Regional Clerk  
Regional Municipality of Peel  
10 Peel Centre Drive  
Brampton, ON L6T 4B9

Dear Ms. Macintyre,

**RE: #05-05-20– 2020 VCOM Group Annual Report**

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On May 29, 2020 the Regional Municipality of Peel Police Services Board considered a report dated April 30<sup>th</sup>, 2020, from Deputy Chief R. Patrick, Corporate Services, providing the Board with the annual report on the activities of the VCOM group.

The following motion was passed by the Board:

**That the 2020 VCOM Group annual report be received;**

**And further, that the 2020 VCOM Group Annual Report be forwarded to Regional Council for information;**

**And further, that the 2020 VCOM Group Annual Report be forwarded to the Regional Fire Coordinator for information.**

In keeping with the Board's motion, I have enclosed a copy of the 2020 VCOM Group Annual Report for distribution.

Should you have any questions or concerns, please do not hesitate to contact the Board office.

Yours truly,

Robert Serpe  
Executive Director


REFERRAL TO \_\_\_\_\_  
RECOMMENDED \_\_\_\_\_  
DIRECTION REQUIRED \_\_\_\_\_  
RECEIPT RECOMMENDED  \_\_\_\_\_

Attach.



FORWARDED TO  
POLICE SERVICES BOARD

DATE MAY 5 2020



CHIEF OF POLICE

**REPORT**  
Police Services Board

For Information

File Class: 1-01-02-01

Cross-Reference File Class: \_\_\_\_\_

DATE: April 30, 2020

SUBJECT: **2020 VCOM GROUP ANNUAL REPORT**

FROM: Randy Patrick, Acting Deputy Chief, Corporate Services Command

**RECOMMENDATION**

**IT IS RECOMMENDED THAT the 2020 Vcom Group Annual Report be received by the Police Services Board for information**

**AND FURTHER THAT, the 2020 Vcom Group Annual Report be forwarded to Regional Council for information.**

**AND FURTHER THAT, the 2020 Vcom Group Annual Report be forwarded to the Regional Fire Coordinator for information.**

**REPORT HIGHLIGHTS**

- System Activities & Service Levels
- Financial Trend Summary
- Private Public Safety Broadband Network Project (PSBN)
- Vcom Interference from LTE operations in the 800 MHz band

**DISCUSSION**

**1. Background**

In accordance with the June 8, 1995 agreement between the Regional Municipality of Peel, the City of Brampton, the City of Mississauga, the Town of Caledon, and the Peel Police Services Board, a Vcom Group was formed in the summer of 1997 to manage the operation of the radio system. Section 6 of that agreement states in part:

*'The Vcom Group will be accountable to Regional Council through the Police Services Board and report annually in September of each year on its activities to Regional Council,*

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through the Chief of Police to the Police Services Board with an information report forwarded to the Regional Fire Coordinator.'

## 2. Findings

### Vcom Group Activities

The Vcom System entered its 23rd year of operation, functioning well to support 8 public-safety/public-service agencies within the Region of Peel. Since 2008 the Vcom System has delivered an average of one million minutes of airtime per year.

The following are noteworthy activities from the past year:

- **System Users:**

At present, the Vcom System supports a total system capacity of 5,514 radios at a Public-Safety Grade of Service. System loading to date is well within operational tolerances. Average Site Utilization during the past 12 months was 24.4%. Service levels remain acceptable during this reporting period.

Current users of the Vcom system along with the number of radios as of April 2020 are:

Peel Regional Police *	1867	34.2%
Brampton Fire & Emergency Services *	299	5.5%
Caledon Fire & Emergency Services *	187	3.4%
Mississauga Fire & Emergency Services *	384	7.0%
Region of Peel Works *	536	9.8%
<b>Total Vcom Group</b>	<b>3110</b>	<b>60.0%</b>
Alectra Brampton	139	2.5%
City of Mississauga Non-Emergency	1236	22.6%
Canada Border Services Agency (CBSA) – Toronto Pearson International Airport	810	14.8%
<b>Total Vcom Users</b>	<b>2184</b>	<b>40.0%</b>
<b>Grand Total of All VCOM System Users</b>	<b>5295</b>	<b>100.0%</b>

\* denotes Vcom Group member, others are Vcom Users.

## FINANCIAL IMPLICATIONS

Vcom operates on a not-for-profit business model. Users only pay for the services required to operate and maintain the Vcom System infrastructure. The P25 Vcom Infrastructure Operating Budget is based on a Public Safety Grade of Service (GOS) capacity of 5,514 radios. The 2020 per radio operating cost of \$451.06 is an increase of \$29.27 per radio from 2019. This value is based on a total gross operating budget of \$2,747,170 less expected tower revenues of \$260,000. The increase of 6.94% in operating costs was due to a rise in software maintenance, licence fees and wages. These expenses were partially offset by an



increase in tower revenues from contract renewals by cellular providers on Vcom tower sites.

- ***Private Public Safety LTE Project***

Vcom has initiated a pilot project to establish a private public safety LTE Broadband network within the Region of Peel. Vcom has identified 9 sites throughout the Region which will provide good coverage throughout the Region for the proof of concept. With the understanding during the proof of concept there will not be full coverage in the Region of Peel.

In late 2018, contracts with Motorola were finalized and the project officially began in 2019. To date, all equipment has been received, consulting engineers completed the Vcom site readiness design and installation of LTE mounting hardware and antennas began in March 2020. Vcom partner consultation for technical and functional configurations are progressing. With current scheduling, the LTE network is expected to be operational by September 2020.

In June 2019, the Federal Government issued a progress report on a National Public Safety Broadband Network, which had a mandate to develop options and recommendations for a PSBN for public safety and first responders across Canada. This report is an interim report which noted there are number of delivery models being considered for a national PSBN, and that there may be a number of different models required to ensure national coverage. The three options remain, a private dedicated model, one of which is the Halton Police Service/Peel Police deployment, a Public/Private model, an example is FirstNet in the US and a Commercial Network, fully owned by public commercial carriers as in the UK. The Federal Government continues to study the options and expects to have a policy paper presented to the Federal-Provincial-Territorial Ministers in charge of Emergency Management in 2020.

Peel Police, along with their PSBN Innovation Alliance members - which represents municipal First Responder agencies covering municipalities with a population of over 4 million people –continue to promote a Canadian Public Safety Broadband Network which would enable more efficient, reliable, secure, resilient and cost-effective communications for First Responders across Canada.

- ***Vcom Interference from LTE operations in the 800 MHz band***

In May 2018, Vcom received a complaint of coverage in what was known to be an area with good coverage. Upon investigation it was noted the Vcom control channel was being degraded to the point of being inoperable, the signal appeared to just disappear. It was noted that a cellular site was within close proximity to the area and was found to be a Rogers Wireless site.

Vcom reached out to Rogers and after a quick test with the Rogers interference specialist, Vcom's suspicion of interference was confirmed. Vcom learned that Rogers had begun their deployment of 850 MHz LTE. Vcom received more complaints of subscribers showing "out of range" on the radio display. Vcom and Rogers investigated each area and confirmed the same issue. The new LTE band was interfering with Vcom subscribers on both Motorola

and Tait user gear which poses a serious safety risk to public safety operations within the Region of Peel. Rogers immediately decreased its base station power level on a precautionary basis following the tests and Vcom service returned to normal levels immediately. Rogers will not increase the power to their base stations until the issue can be resolved.

In October 2018, Vcom submitted a report describing the results of these tests to the Federal Government Agency- Innovation, Science and Economic Development (ISED) who oversee radio telecommunications in Canada, describing the situation whereby the Rogers LTE base stations were causing desensitization of Vcom's mobile and portable radios. ISED in turn conducted in-field tests in collaboration with Vcom technologists and Rogers, over three days in March 2019.

In June 2019, ISED sent Vcom and Rogers their findings, which did confirm signal loss but were not able to make a determination on how to proceed. They have requested that continued testing and information gathering continue while the Rogers signal must still remain at the decreased level.

Over the course of June 2019 through December 2019, ISED continued to examine their findings. Unable to arrive at a workable solution, ISED has returned to work with Vcom and Rogers and plan to conduct additional testing with our Region. Tests scheduled to begin in late March/early April 2020 have been placed on hold by ISED in light of the current Covid19 pandemic.

Although Vcom was the one of the first to experience the interference from the Rogers LTE deployment, we are now not the only ones in the GTHA who are experiencing these difficulties, which was Vcom's concern in 2019. Concern still exists this could then be felt on a national level to other Public Service agencies. ISED has noted they must study the aggregate impact that Cellular LTE emissions have on the network coverage of public safety networks; and study the impact of that Cellular base stations operating multiple carriers have on land mobile receivers.

At this time, Rogers is transmitting at a low power level, so Vcom is not experiencing any interference from their deployments.

- ***Mississauga City Center – Building Density***

Increasing building density across the Region is causing instances of interrupted radio communications. The Mississauga City Center core is especially problematic and requires coverage enhancement to improve communications reliability. Coverage enhancement systems are very expensive and easily run into hundreds of thousands of dollars. New construction activity will likely further detrimentally affect radio communications in the area.

A Regional policy that requires new construction to include Vcom radio coverage enhancement would address this growing issue in a cost effective manner.

**CONCLUSION**

The Vcom Group is pleased to report that the Vcom System continues to serve the needs of our member municipalities and partner agencies with reliable and cost effective communications.

**Approved for Submission:**



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Randy Patrick, Acting Deputy Chief, Corporate Services

*For further information regarding this report, please contact Acting Deputy Chief Randy Patrick at extension 4100 or via email at [randy.patrick@peelpolice.ca](mailto:randy.patrick@peelpolice.ca)*

*Authored By: Susan Payne, Vcom and Support Services Manager, ext. 4943.*