



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

RECEIVED
June 28, 2021
REGION OF PEEL
OFFICE OF THE REGIONAL CLERK
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www.peelpoliceboard.ca

June 25, 2021

Ms. Kathryn Lockyer
Regional Clerk
Regional Municipality of Peel
10 Peel Centre Drive
Brampton, ON L6T 4B9

Dear Ms. Lockyer,

RE: #03-06-21– 2021 VCOM Group Annual Report

On June 25, 2021 the Regional Municipality of Peel Police Services Board considered a report dated May 14th, 2021, from Deputy Chief A. Odoardi, Innovation and Technology Command, providing the Board with the annual report on the activities of the VCOM group.

The following motion was passed by the Board:

That the 2021 VCOM Group annual report be received;

And further, that the 2021 VCOM Group Annual Report be forwarded to Regional Council for information;

And further, that the 2021 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 2021 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.

03-06-21



REPORT
Police Services Board

For Information

File Class: 1-01-02-01

PSB REC: MAY 18 21
LOG# 29-21
FILE CLASS: V04

Cross-Reference File Class: _____

DATE: May 14, 2021
SUBJECT: **2021 VCOM GROUP ANNUAL REPORT**
FROM: Anthony Odoardi, Deputy Chief, Innovation and Technology Command

RECOMMENDATION

IT IS RECOMMENDED THAT the 2021 Vcom Group Annual Report be received by the Police Services Board for information

AND FURTHER THAT, the 2021 Vcom Group Annual Report be forwarded to Regional Council for information.

AND FURTHER THAT, the 2021 Vcom Group Annual Report be forwarded to the Regional Fire Coordinator for information.

REPORT HIGHLIGHTS

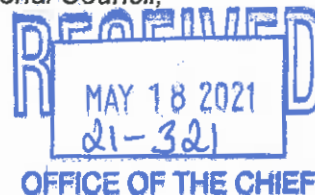
- System Activities & Service Levels
- Financial Trend Summary
- Private Public Safety Broadband Network Project (PSBN)
- Vcom Interference from LTE operations in the 800 MHz band

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,



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 24th 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 23%. Service levels remain acceptable during this reporting period.

Current users of the Vcom system along with the number of radios as of April 2021 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%
Total Vcom Group	3110	60.0%
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%
Total Vcom Users	2184	40.0%
Grand Total of All Vcom System Users	5295	100.0%

* denotes Vcom Group member, others are Vcom Users.

3. Organizational Wellness / Occupational Health and Safety / Risk Management

- **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 2020, the PSBN LTE network was operationalized and available for Vcom partner use. Vcom is currently working with all interested partners in piloting the LTE network for their individual needs. The pilot project will run until October 2022.

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 interim report noted there are number of delivery models being considered for a national PSBN, and there may be a number of different models required ensuring 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 mid 2021.

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 Vcom found the control channel was degraded to the point of being inoperable, the signal appeared to just disappear. Vcom observed a Rogers Wireless cellular site was within close proximity to the area.

Vcom reached out to Rogers and after a quick test with the Rogers interference specialist, confirmed Vcom's suspicion of interference. 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 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 were delayed ISED in light of the Covid19 pandemic.

In June of 2020, Vcom and Rogers did extensive testing in a lab environment to collect data. Testing was done to see if a filter could be installed to resolve the interference problem. The lab results showed promise using a filter; Vcom was less impacted when Rogers used filters on their transmitters. During Fall 2020, the testing was taken to the field and the filters were installed on select sites for field verification. The testing did not yield the same results in the lab.

In early 2021 a new approach was taken for the testing, the findings showed that while the Rogers signal did have an impact on Vcom, the Vcom signal is strong enough and posed no major concerns to the performance of user equipment.

Vcom is waiting for the final report from ISED, which will propose a phased turn up of the Rogers sites. This will ensure Vcom can monitor any issues and keep them localized. The original issue can be attributed to a technician error turning the power up more than twice for which Rogers is licensed. This increased power overpowered the front RF components of the user gear, resulting in what appeared to be "dead areas" for the users.

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

ORGANIZATIONAL IMPACTS

Financial

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 2021 per radio operating cost of \$485.66 is an increase of \$34.60 per radio from 2020. This value is based on a total gross operating budget of \$2,959,850 less expected tower revenues of \$281,900. The increase of 7.67% in operating costs was due to a rise in software maintenance, licence fees, wages and Regional chargebacks. These expenses were partially offset by an increase in tower revenues on Vcom tower sites.

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:



Anthony Odoardi, Deputy Chief, Innovation and Technology Command

For further information regarding this report, please contact Deputy Chief Anthony Odoardi at extension 4060 or via email at anthony.odoardi@peelpolice.ca

Authored By: Susan Payne, Manager - VCOM and Support Services, ext. 4943.