

Report of the Next Generation Radio Committee of County Council

*RECOMMENDATIONS FOR
IMPLEMENTATION AND FUNDING*

February, 2015

Committee Members



**Dr. Kyle Foust,
Chairman**

Phil Fatica

Carol Loll

Joseph Maloney,
CPA

James Sparber

John Grappy

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FORWARD

In September, 2014, MCM Consulting submitted their Next Generation Radio System Needs Assessment and Strategic Plan Report to the County. The following are the recommendations from MCM Consulting:

“It is recommended that steps be taken to replace the current radio, microwave and radio console equipment/systems/network as soon as possible since it serves as the “back bone” for communications within the county for the public safety departments within Erie County. A failure in these vital systems cannot be tolerated.

MCM Consulting Group, Inc. is recommending based on the availability of UHF frequency pairs, unify the radio communications of all “County responsible” entities onto one “platform” or radio frequency band with by suggesting a UHF, IP based, P25 phase II (for spectrum capacity) “trunked” (for spectrum efficiency) and a multi zone “simulcast” (for coverage)” configuration.

UHF can be justified as it is already in use by the City of Erie, one of the largest communicators in the county, so integration would be less upsetting for that entity. Colleges, universities and neighboring Crawford County also use UHF. Erie County is already FCC licensed for five UHF pairs and finding additional radio frequency “pairs” may be easier in the UHF band.

Preliminary frequency searches indicate possible channels are available. The paired frequencies lend themselves well to repeater type systems and make transmitter combiner designs somewhat easier. The VHF frequencies are not paired.

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MCM also recommends that the current Canopy microwave system be replaced with a digital Multiprotocol Label Switching (MPLS) microwave "ring" system with ring protection would be required to link the operational zones. The system must be Ethernet capable and have a minimum bandwidth of 150 mbps for the new system. The selected vendor for this project would be responsible for a complete "turnkey" job to include path surveys, equipment selections and FCC licensing.

Finally, MCM recommends that the current Catalyst radio console system be replaced with a new system that is recommended and warrantied to be compatible with the new radio system equipment."

At the January 8, 2015, Erie County Council Reorganization Meeting, Council nominated and approved Mr. Fiore Leone as Chairman for 2015. At that time, Mr. Leone stated, "We need to set our priorities this year. Obviously, the very first is to decide how to go forward with the 911 services and communications system recommended. We seem to be in agreement that this is a necessity and the time has come. In an effort to speed this process and accomplish the goals we have projected, I am appointing Joe Maloney, our CPA, Councilman Dr. Foust as Chair of this committee, along with Carol Loll and Phil Fatica."

As Chair of this committee, I am pleased to present the following Report of the Next Generation Radio Committee of County Council.

Dr. Kyle Foust,
Chairman, NGR Committee

Report of the Next Generation Radio Committee of County Council

RECOMMENDATIONS FOR IMPLEMENTATION AND FUNDING

IMPLEMENTATION:

1. Proceed immediately with implementation of the Next Generation Radio System as designed in the MCM Consulting Plan submitted to the County of Erie.
2. Erie County should fund 100% of the costs for the infrastructure and equipment necessary to operate the system as detailed in the MCM Report.

FUNDING FOR NGR SYSTEM:

1. Transfer \$10 million of the current unrestricted fund balance to a line item dedicated as unrestricted committed fund balance to fund initial start of the system.
2. Take out a bond to cover the remaining balance to fully implement the NGR system.
3. As Erie County is covering 100% of end user equipment costs, all local fire, police, local emergency management, and EMS agencies should collectively apply for Federal Assistance to Firefighters, COPS More Technology, and other grant funds available. Any grant funds received are to be returned to the County to offset the costs of infrastructure hardware, software and end user equipment.

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FUNDING FOR NGR SYSTEM (cont'd):

4. Yearly costs for MCM Consulting:

2015 – \$404,824.75
2016 – \$441,627.00
2017 – \$441,627.00
2018 – \$ 36,802.55 (project closeout)

Total = \$1,324,881.22

5. Capital Equipment Cost (Radio / Microwave System)

2015 (5%) \$674,277.65
2016 (85%)\$11,462,720.09
2017 (10%)\$1,348,555.30

Total: \$13,485,553.04

6. Towers / Shelters / Construction

2015 (10%)\$462,000.00
2016 (80%)\$3,696,000.00
2017 (10%)\$462,000.00

Total: \$4,620,000.00

7. Subscriber Units (Mobiles / Portables / Pagers / Base)

2017 (90%)\$5,796,813.60
2018 (10%)\$644,090.40

Total: \$6,440,904.00

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FUNDING FOR NGR SYSTEM (cont'd):

8. Contingency

2018 (100%) \$674,249.70

Total: \$674,249.70

TOTAL PROJECT COST: \$26,545,587.96

STIPULATIONS:

1. Any police, fire, local emergency management, and EMS organization designated by the local municipality as their emergency service provider, choosing to "opt in" to the Next Generation Radio project, will be required to sign a Memorandum of Understanding (MOU) Agreement with the County of Erie by June 1, 2015. Any police, fire, local emergency management, and EMS organization choosing to "opt out" of the Next Generation Radio project will be responsible for 100% of the costs associated with purchasing the equipment necessary to interface with the Next Generation Radio system.
2. Erie County is covering 100% of end user equipment costs based on the pre-determined quantity as defined in the final report and recommendation by MCM Consulting Group. Any additional equipment requested by any police, fire, local emergency management, and EMS organizations not outlined in the report of the MCM Consulting Group's study will be the sole financial responsibility of the respective organization.
3. The current "Remote Dispatch Points" (East County, Emergycare, Millcreek Township and the PA State Police) will be responsible for 100% of the costs associated with purchasing the equipment necessary to interface with the Next Generation Radio system.
4. Any funding for maintenance, repair or replacement of end user equipment costs outside the manufacturer's warranty period will be the sole responsibility of the police, fire, local emergency management, and EMS organization.