



City of Richmond

Report to Committee

TO CS-CR-10 2012

To: Community Safety Committee

Date: September 19, 2012

From: Phyllis L. Carlyle
General Manager

File: 09-5126-01/2012-Vol
01

Re: Virtual Emergency Operations Centre (EOC) Proposal

Staff Recommendation

That Council endorse the submission of a grant proposal seeking approximately \$750,000 (to be shared amongst the partners for their project expenses) to the Canadian Safety and Security Program for a virtual Emergency Operations Centre (EOC) project.

If the City is successful in receiving this grant, that

1. Council authorize the City to enter a Memorandum of Agreement with Public Works and Government Services Canada and Defence Research and Development Canada Centre for Security Science.
2. The Chief Administrative Officer and the General Manager, Law and Community Safety be authorized to execute the Memorandum of Agreement.

Phyllis L. Carlyle
General Manager
(604-276-4104)

| | |
|---|----------------------|
| REPORT CONCURRENCE | |
| CONCURRENCE OF GENERAL MANAGER | |
| REVIEWED BY SMT SUBCOMMITTEE | INITIALS: |
| REVIEWED BY CAO | INITIALS: |

Staff Report

Origin

In a major emergency or disaster, it may be difficult for decision makers to respond to or communicate with the Emergency Operations Centre (EOC) as a result of infrastructure damage, inability to access bridges, tunnel failures, or traffic congestion. There is an opportunity for a grant to develop and demonstrate the technology for a virtual EOC environment that would allow for remote user participation and additional information sources to provide improved situational awareness.

Council's Term Goal of Community Safety is a high priority and strives to ensure public safety services, measures, service delivery models, and resources are effectively targeted to the City's specific needs and priorities.

Background

The Centre for Security Science is a joint endeavor of Defence Research and Development Canada and Public Safety Canada. Its primary responsibility is to lead the Canadian Safety and Security Program, a federally-funded program to strengthen Canada's ability to anticipate, prevent/mitigate, prepare for, respond to, and recover from natural disasters, serious accidents, crime and terrorism through the convergence of science and technology with policy, operations and intelligence.

The Canadian Safety and Security Program is requesting submissions for project proposals that address identified public safety and security capability priorities. \$15 million will be available for new projects under the current call for proposal, with selected projects announced by March 2013.

Analysis

The submission of a grant proposal is recommended to develop and demonstrate an operational virtual EOC environment where data inputs from the Geographic Information System (GIS), sensor information, video and other sources provide improved situational awareness within the EOC and to remote user participants. Confirmed project partners include Simon Fraser University, Emergency Management BC and the Corporation of Delta. This is a three year project that is expected to be completed March 31, 2016.

The project proposal is for the development of new technology for a virtual EOC through to the technology demonstration stage. A technology demonstration project transitions into system-level prototypes that can be used in an operational setting to demonstrate their impact and utility to operational communities. The results of this stage would see proof of technological feasibility and assessment of science and technology suitability for use. It is hoped that the resulting product from this project could be used by staff in emergency response.

The City's participation in a virtual EOC project would be considered through a competitive process. As an island community with an international airport, connected to other communities by bridges and a tunnel, the City is well positioned, by these unique factors, to be a successful

candidate. The City is in a geographical location where a virtual EOC would be a tool that would significantly contribute to the success of a response to an emergency.

Decision makers require good information to make informed decisions. With a virtual EOC, data such as maps, weather, resources allocated, situational awareness, and operational readiness could all be easily transmitted to all participants simultaneously. Decisions could be made in collaboration with other subject matter experts in a timely fashion, thus allowing responders to do so in an efficient and effective manner. This tool would prove priceless during an emergency but can also be used as a planning tool and for situational awareness during other large scale activities or events within the City.

In times of crisis, a virtual EOC would enable the exchange of information and ideas; assist in the creation of plans and permit greater understanding of the situation when the need is the greatest. Having up-to-date information readily available would permit the responders and agencies to do their jobs assisting the community, the businesses and stakeholders effectively.

Financial Impact

None

Conclusion

This project presents an opportunity for the City to leverage grant funding to develop and implement a virtual EOC that can be operationalized during an emergency so that remote users can participate in the decision-making within the EOC and provide enhanced situational awareness through additional data sources.



Deborah Procter
Manager, Emergency Programs
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DP:dp

Virtual EOC Grant Funding

| | Year 1 | Year 2 | Year 3 | Total |
|---|------------------|------------------|------------------|------------------|
| CSSP Funding to be Distributed as Follows: | | | | |
| SFU | \$139,688 | \$160,600 | \$141,150 | \$441,438 |
| Richmond | \$83,008 | \$56,122 | \$64,048 | \$203,177 |
| EMBC and Delta | \$14,220 | \$14,220 | \$14,220 | \$42,660 |
| Equipment | \$20,000 | \$20,000 | \$20,000 | \$60,000 |
| CSSP Funding | \$256,915 | \$250,942 | \$239,418 | \$747,274 |
| In-kind Contributions (Staff Time) | | | | |
| SFU | \$48,891 | \$56,210 | \$49,403 | \$154,503 |
| Richmond | \$29,053 | \$19,643 | \$22,417 | \$71,112 |
| EMBC and Delta | \$4,977 | \$4,977 | \$4,977 | \$14,931 |
| In-kind Contributions | \$82,920 | \$80,830 | \$76,796 | \$240,546 |
| Total | \$339,835 | \$331,771 | \$316,214 | \$987,820 |