e-COMMUNIQUÉ

E-Comm 9-1-1
Helping to Save Lives and Protect Property

Enhanced Fire Dispatch and Response
New Computer-Aided Dispatch and Fire-Hall Alerting Systems

On November 26, E-Comm transitioned the 12 fire departments it provides dispatch for to a new computer-aided dispatch (CAD) system, which dramatically enhances fire response. A special thank you to all agency representatives who helped make the transition a success.

Moving to the new computer-aided dispatch system, Intergraph CAD (i/CAD), was the largest single transition ever undertaken by E-Comm. Intergraph CAD requires fewer actions by a dispatcher to create a dispatched call, allowing fire agencies to be dispatched faster—critical to fire suppression. Intergraph CAD not only helps to increase fire response times but it also enhances the information available to fire dispatchers. The system provides detailed street

John Wilson, communications trainer for Vancouver firefighters, uses the new i/CAD mobile workstation. Laptops provide firefighters with a GPS location system, direct access to a record management system and real-time updates of events in progress.

maps, municipal-specific information, images of floor plans, pre-plan information, hazards and chemical storage data, geo-referenced locations of fire hydrants (indicating water pressure), and provides the GPS locations of fire apparatus; all of which is invaluable information for both dispatchers and firefighters on scene.

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In addition, fire halls in New Westminster, Vancouver, Richmond, Delta and Port Moody are now using a fire-hall alerting system that streamlines the dispatch process even further by directly interfacing with i/CAD. This interface cuts the number of steps a dispatcher needs to undertake to dispatch fire response by more than half. The most important benefit of the fire-hall alerting system is its ability to dispatch calls to multiple or single agencies with virtually no delay. Dispatchers oversee the event at all times including ongoing communication with firefighters en route and on scene over the radio. They no longer have to queue dispatch calls if more than one call must be delivered at the same time.

Sunshine Coast, Whistler and Squamish firefighters are also benefiting from the transition to i/CAD for dispatch. For firefighters in these areas, this transition means that they receive printed information at the same time they receive the voice alert. The printout shows the location of the event, any hazards or history at that location and what other apparatus is responding, which is then taken on the road to the call.

Wireless technician Craig Hayman installs a Locution lead box as part of the new fire-hall alerting system.

E-Comm provides dispatch for the following fire departments:

- Vancouver
- Richmond
- New Westminster
- Delta
- Port Moody
- Sunshine Coast
  (five departments)
- Squamish
- Whistler

Fire dispatcher Margaret MacDonald using Intergraph CAD at E-Comm.

Award For New Emergency Event Map Application

Congratulations to IT's Dave Hamilton, Robert Darts, Tammy Gorse, Robert Warren and Mircea Ungurean, who received an award of excellence from ESRI Canada for the development of a unique public safety and emergency response application – The Emergency Event Map Viewer (E²MV).

From left to right, Robert Darts, Daphne Corbett (Board Chair), Dave Hamilton, Glen Miller, Mircea Ungurean and Ken Shymanski (President & CEO). Missing: Tammy Gorse and Robert Warren.

ESRI Canada (a worldwide Geographic Information System supplier and distributor) has recently recognized E-Comm with an *Award of Excellence* for the development of a unique public safety and emergency response application – The Emergency Event Map Viewer (E²MV). E²MV facilitates information-sharing across multiple dispatch centres so they can manage and respond to incidents more effectively.

The idea for the application was born from a brainstorming session within E-Comm's Geographic Information System (GIS) team two years ago. Not only will this application facilitate the transfer of information, this multifunctional tool can also serve as an address verifier for 9-1-1 call-takers and an effective back-up tool should a main Computer-Aided Dispatch (CAD) system malfunction.

"E-Comm took the initiative to develop a web application that will significantly streamline emergency response across the lower mainland of B.C., which will likely serve as a model for other provincial and large municipal agencies," says ESRI Canada in their news release announcing the award.

The new system is expected to be ready for trial in the summer of 2009.

A Step Toward Location Information From Cellular Phones

CRTC Announces Change to Wireless 9-1-1 Services

If we can't find you, we can't help you.
If you call 9-1-1 from a cell phone, please be prepared to give us your exact location. Unlike landlines, cell phones don't provide this information to our call-takers. The home or building address is the most helpful piece of information you can give us. Or if you're on the road, be aware of highway exits, cross streets, landmarks and anything else that will help locate you. ecomm911.ca E-Comm 9-1-1 *Help us help.*

Wireless Phase II will provide a wireless phone number and general location information. It will still be important for callers to provide location information.

On February 2, 2009, the CRTC announced that it was giving Canadian wireless service providers a one year deadline to implement Wireless Phase II (location information from cell phones). By February 1, 2010 at the latest, emergency responders must be able to determine the general location of a person using a cellphone. Public Safety Answer Points (PSAPs) and Secondary Safety Answer Points (SSAPs) will also be required to be ready.

At present, PSAPs only receive caller phone number and the address of the cell tower which is transmitting the call. The location of the tower is of little use in identifying the caller's location as the tower could be located many kilometres away from the emergency or even in a different municipality all together. In Canada, six million calls per year are made to 9-1-1 or ten-digit emergency numbers using a wireless phone. Last year, 51% of 9-1-1 calls to E-Comm originated from wireless phones (513,179 calls).

Wireless Phase II allows call-takers to receive both the caller's wireless phone number and their general location information. The new E911 features to be implemented over the next 12 months will use wireless–location technology to locate a person using a cellphone to call 9-1-1. For example, wireless service providers can use Global Positioning System (GPS) or triangulation technology and then automatically transmit the caller's location to E-Comm. This will allow us to determine a caller's location generally within a radius of 10 to 300 metres from the cell phone.

The introduction of Wireless Phase II represents a major advancement for 9-1-1 in Canada, although it will also require computer and mapping upgrades at PSAPs and the development of policies and procedures for emergency response.

E-Comm Staff Give Back

Vanessa Robinson, Fong Lam and Betty McMullen prepare E-Comm's donation for the Vancouver Food Bank.

In support of our corporate sustainability goals, E-Comm has joined BC Hydro's Power Smart Partner Program. As part of this program E-Comm receives a comprehensive energy review of our facility's energy use at no cost, with detailed recommendations on areas for improvement. E-Comm has also created an environmental "green" committee to help the organization reduce its carbon footprint throughout all departments. The committee has implemented several different recycling programs throughout the organization to reduce and reuse waste.

Giving back through community donations is also important to E-Comm and its staff. In the past year E-Comm employees have personally raised $1,050 for the Cops for Cancer Tour de Coast, $4,736.85 for the Easter Seals 24hr Relay, and over $1,000 for the Vancouver Food Bank, along with donations of 24 boxes of canned goods and food.

New 9-1-1 Association for B.C.

Director of Information Technology, Glen Miller

E-Comm has taken a lead role in the establishment of a provincial 9-1-1 association comprised of those responsible for the delivery of 9-1-1 service across the province of B.C. The association includes members from the regional and municipal governments, Public Safety Answer Point (PSAP) personnel and emergency response agencies such as BC Ambulance Service, and police and fire departments.

The purpose of the 9-1-1 Providers Association of B.C. is to educate members about the current state and future evolution of 9-1-1 service from an operational and technical perspective. It also works with various levels of government and suppliers for changes to current technology, enhancing the delivery of 9-1-1 service to the public.

The association is collaborating on a number of key issues including Wireless Phase II, Reverse 9-1-1, text messaging and Voice over Internet (VoIP) phones.

E-Comm's director of Information Technology, Glen Miller, is currently serving as the association's Chair. For more information contact Glen at glen.miller@ecomm911.ca or 604-215-5003.

Renewing E-Comm's Radio System

E-Comm's Wireless department is developing a plan for potential expansion and replacement of the current mobile radio system, as the planned end-of-life and maximum capacity is expected between 2010 and 2015.

A feasibility study is being conducted to address radio replacement issues and the viability of a potential expansion of the Wide-Area Radio service coverage area and membership. Existing and prospective agencies have designated representatives to participate on three committees (governance, finance, and customer-user). These committees have been struck to examine various aspects of the replacement plan.

For more information contact **Natasha Pekic, Wireless Engineering Manager**, at natasha.pekic@ecomm911.ca or 604-215-5050.

Countdown to 2010

The Integrated Security Unit hosted a table top exercise called *Exercise Bronze* in November in which E-Comm participated, along with 70 other organizations.

Exercise Bronze provided an opportunity for federal, provincial and municipal partners, as well as private industries, to discuss potential incidents such as transportation, health, or weather-related situations that could occur during the 2010 Olympic Winter Games.

"It was a great opportunity to bring public safety partners together to share ideas and identify gaps in plans and processes," says Cindy Defazio, E-Comm Operations Manager. Cindy also notes that *Exercise Bronze* and planning for 2010 is more than just preparing for the Olympic Games. It is also creating a legacy of stronger relationships and connections between local, regional and national safety and security personnel.

Exercise Silver, the first major "live" security exercise, occurred from February 3 – 13, 2009 with events happening in and around Vancouver and Whistler. *Exercise Gold* will conclude the series, taking place in the fall of 2009.

Wide-Area Radio System

System Grade of Service and Availability

	September	October	November	December
System Queuing	0.03%	0.02%	0.07%	0.03%
System Availability	99.995%	99.996%	99.994%	99.997%

System Grade of Service Average* for September – December 2008

Target: <3.00%   **Actual: 0.04%**

Grade of service represents the ability of the radio system to handle radio traffic volume. Industry Canada sets the standard for the public safety community, which is 3%. This means at the radio system's busiest times, there cannot be more than 3% queuing (responders waiting to speak). The E-Comm radio system is well within this standard.

System availability average for September – December 2008

Target: 99.99%   **Actual: 99.996%**

Wide-Area Radio System System Transmissions

September	
System Air Time (s)	33,393,747
Transmissions (#)	8,695,696

October	
System Air Time (s)	33,359,176
Transmissions (#)	8,741,696

November	
System Air Time (s)	32,549,261
Transmissions (#)	8,464,464

December	
System Air Time (s)	30,872,310
Transmissions (#)	8,078,374

(s) Amount of airtime in seconds
(#) Number of times a repeater transmitted in response to a member talking on a radio

9-1-1 Service Levels

|	911 Calls Placed to E-Comm	Service Level*
September	84,705	98%
October	84,408	97%
November	80,174	97%
December	83,510	98%
Total	**332,797**	**97.5%**

Service Level Target: 95% of all 9-1-1 calls answered in five seconds or less.

Technology (September – December 2008)

Telephony (9-1-1) Uptime:	100%
Altaris CAD Uptime:**	99.99%

**Computer-Aided Dispatch

9-1-1 Calls Directed to Police, Fire and Ambulance
(September – December 2008)

Police	67%
Ambulance	28%
Fire	5%
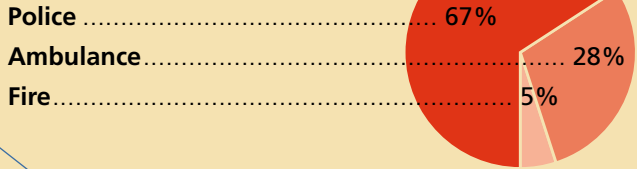
Number of Landline vs. Cell Phone 9-1-1 Calls Received

	Landline Telephones		Cellular Telephones	
September	48%	40,443 calls	52%	44,262 calls
October	52%	43,632 calls	48%	40,776 calls
November	48%	38,817 calls	52%	41,357 calls
December	49%	40,700 calls	51%	42,810 calls
Total	**49%**	**163,592 calls**	**51%**	**169,205 calls**
2008 Total	**49%**	**500,708 calls**	**51%**	**513,179 calls**

9-1-1 Service Level for 2008 = 98%
2008 Total = 1,013,887
Includes abandoned calls

Peak Volumes *Halloween 2008 was a very busy night for E-Comm and the police and fire agencies we dispatch for. Our total call volume for that day was 3,337 calls, one thousand more calls than the previous day.*

E-Comm 9-1-1
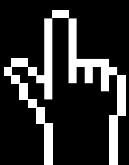Helping to Save Lives and Protect Property

E-Comm Mission
To provide emergency personnel and the public with exceptional communication services that help save lives and protect property.

E-Comm Values
Respect, Accountability, Integrity, Service, Collaboration

Visit our Web site:
ecomm911.ca

This newsletter is produced by E-Comm Corporate Communications. For more information on E-Comm or to comment on a story featured in this newsletter, contact Amanda Brkich at: **amanda.brkich@ecomm911.ca**

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