

Disaster Management and Emergency Services Workshop

Event: March 26, 2010; mail paper to disaster@sv.cmu.edu by March 12, 2010

Paper title: **Individual Emergency Report**

Name: Role/Title: **Gilles de Bordeaux / Idea Generator and Developer**

Organization: **none**

Preferred Contact: **gillesdebordeaux@hotmail.com**

How can new technologies and approaches improve outcomes, reduce costs and/or improve response times for an emergency?

When a catastrophe happens and during an emergency, there is a surge of communication attempts from people inside the impacted zone trying to reach friends and family inside and out of the zone, and from people outside trying to reach in and get status information. At the same time, the communication infrastructure is usually reduced, crippled, or even non-existent.

The idea is to keep people inside and outside of the crisis zone informed about your individual status, at the push of a few buttons, using your smart phone or from any available PC with internet connection. Individuals set up a response plan before the event and activate it during the event, adding a few real-time personal status cues before sending it to specific distribution lists. The messages send are very compact and do not tie the communication infrastructure.

If you were offered 10-15 minutes to give a short talk, what would it be?

A tool to keep individual status communication open in case of emergency, reducing stress for people inside and outside the crisis zone, and reducing pressure on officials to report on the status of individuals.

What are the most pressing business, process, organization, and technical issues?

Using any communication available at the time of crisis to reach the Individual Emergency Report web servers to dispatch the message to the distribution lists.

What is the role of university research in this area?

Not sure about that.

Do you want to propose and help run a new breakout group?

Not at this time.

What is the most important action the DMI can take?

Validate some of the assumptions. Here is my high-level design:

Before the event:

- Setup your response plan using the Web-based Alert Assistant:
 - o Create distribution lists for family, work, neighbors, associations, etc.
 - o Add people to each distribution list using their email, twitter, cell phone, land line phone, etc.
 - o Select the standard message to send; for example
“Alert: This message is from xx yy to keep you informed about my status. I am xxx. Others around me are xxx. The situation is xxx. Please xxx. You can acknowledge this message by following this link xxx.”

During the event:

- Activate your response plan:
 - o Select the distribution list
 - o Select the message to send and update your status:
 - I am: Ok, depressed, physically hurt, dying, etc.
 - Other around me are: Ok, depressed, physically hurt, dying, etc.
 - Situation: Under control, high risk, chaos, etc.
 - Please: Don't worry, help me, help others, etc.
 - Location: (from GPS, cell tower, zip code, etc.)
 - o Send your message
- Receive acknowledgement messages from your distributions list recipients

Emergency message format: At less than 30 bytes, the size of the messages is very small.

Emergency Message:

- o Application code: 8 bits
- o Date/Time: 32 bits
- o Originator ID: 64 bits
- o Distribution list: 8 bits
- o I am: 8 bits
- o Others are: 8 bits
- o Situation: 8 bits
- o Please: 8 bits
- o Location: 64 bits
- o Check sum: 8 bits

Acknowledgement Message:

- o Application code: 8 bits
- o Date/Time: 32 bits
- o Originator ID: 64 bits

- Responder ID: 64 bits
- Message: 8 bits
- Check sum: 8 bits