

Dear Wireless Colleague:

Welcome to the Winter/Spring issue of the Wireless RERC's industry newsletter, our quarterly roundup of the most important updates to our projects. We've had an extremely busy winter, seeing many exciting advancements to our projects.

- *As always, feel free to distribute this newsletter within your organization.*

Deaf 911 - Ensuring Access to Emergency Assistance

Actually slated for development in year four (2010) of our funding cycle, the Deaf 911 project has made considerable progress in developing a prototype on a variety of Smartphone platforms supporting Symbian C++, such as the Nokia 6682 and Panasonic x700.

The Deaf 911 project has developed software that emulates a TTY, so that a hearing impaired user can communicate during an emergency with the 911 Public Safety Answering Point's TTY systems. In an emergency the deaf user initiates Deaf 911 from their phone's menu.



The software then sends out a continuous TTY default message to let the 911 operator know that it's a TTY

call. The user is then free to type a message, similar to a typical SMS, that is encoded and sent to the 911 operator. The operator then types back, and the phone records the incoming TTY signal, decodes that signal and displays the response as a text message.

- *The team is pursuing different opportunities for deployment of this technology into mainstream wireless devices. If you are interested in learning more about the project, please contact us.*

Wireless Emergency Communications Field Trial

Cingular's 3125 Smartphone and the Window's Mobile OS have proven to be effective prototype development environments for the Wireless RERC's research project on wireless emergency communications (WEC). In February 2008, the WEC team held its first full technical field trial at the Georgia Reading Radio Service (GARRS) headquarters.

Participants who were either blind, visually impaired or sighted, took part in a full-day study to gauge the effectiveness and accessibility of the WEC prototype emergency alerting system. During this test, three separate weather alerts of increasing intensity were issued to participants over a period of time. Alerts were presented on the 3125's in a variety of accessible formats:

- Auditory: in the form of an EBS tone, along with a synthetic speech program capable of reading the alert.
- Visual: on the phone's screen as the text of the SMS message.

Data gathered from this test will prove to be invaluable in helping the team further develop the software of the system. These data will also help in streamlining future field trials scheduled at Public Broadcasting of Atlanta, the National Technical Institute for the Deaf and WGBH in Boston. The WEC team is indebted to AT&T for providing both the phones and airtime, and to all of the GARRS staff for hosting this important first trial.

Wireless Emergency Communications Weather Service Alerts

The WEC research project has developed an alerting system that monitors the National Weather Service's CAP messages. A cell phone user must subscribe to the system via their zip code. When a severe weather alert is issued that matches a subscriber's zip code, an SMS message is sent to that subscriber's wireless device highlighting the weather emergency and other pertinent emergency information.



- ***We encourage carriers and manufacturers to participate in this project. Participation would include supplying handsets or airtime to test during the next three field trials held throughout 2008.***

Analysis of Survey of User Needs

Our Survey of User Needs (SUN) has been a popular resource for our industry partners in understanding wireless use by persons

with disabilities. In 2007 we revised the SUN with input from industry and have since then received over 1200 new responses. This new data has been analyzed and summarized in a report released in January. In this report we also compare findings from our initial SUN (2001-2006) with those of the 2007 survey. For example,

- 85% of 2001-2006 SUN respondents stated they don't have the sight or hearing to use a mobile phone.
- 2007 data shows that 31% of surveyed respondents don't have the sight or hearing to use a wireless device.
- 2001-2006 data showed that 90% viewed cost as a barrier to using a mobile phone.
- Now, only 40% of 2007 respondents view cost as a significant barrier to use of wireless devices.

The SUN data indicates wireless use is on the rise among people with disabilities. While the data points to areas where barriers still remain to equal access for all, progress is apparent.

The full report can be viewed on our website, www.wirelesrerc.org, or contact us for a copy.

- ***We also invite wireless carriers and manufacturers to request more detailed findings from the SUN. If the data you request is not available we have the ability to draft additional questions to present to our 800 member Consumer Advisory Network.***

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