Global View

Automakers Sign Up for Automated Crash Notification

Even as U.S. wireless communications carriers and emergency service providers struggle to meet a Federal Communications Commission mandate on enhanced 911 (E911) location reporting, interest is growing for another advance in emergency telematics — automated crash notification, or ACN.

Deaths at the crash scene before the arrival of emergency care providers have doubled in the last 20 years and now exceed 20,000 per year, according to the ComCARE Alliance, a nonprofit group of emergency medical personnel, telematics service providers, the wireless industry, and safety advocates. Many of these fatalities are in rural areas, where 20 percent of the nation's total annual crashes and 60 percent of the fatalities occur.

ACN with precise location reporting may prove especially important in these isolated regions, where no one else might be nearby to report an accident and local hospitals may not be equipped to treat the kinds of injuries sustained in severe crashes.

General Motors recently announced plans to begin adding an ACN system to vehicles equipped with OnStar, beginning with the 2004 model year. The current design of OnStar, an embedded in-vehicle safety and security communications system, automatically notifies a commercial call center within seconds when a subscriber's air bag deploys and provides the vehicle's GPS-derived location.

By linking the ACN system with OnStar, a call for help will automatically be sent if the vehicle is involved in a moderate to severe crash, regardless of air bag deployment. The new system also will provide crash severity information to OnStar call center advisors. In turn, the call center relays the information to 911 dispatchers at public safety answering points (PSAPs), helping them to quickly determine the appropriate combination of emergency personnel, equipment, and medical facilities needed.

With more than 2 million subscribers, OnStar currently receives about 500 air bag deployment notifications and 14,000 requests for roadside assistance per month. Meanwhile, Ford Motor Corporation, Intrado, Cross Country, SBC Communications Inc., and Veridian are taking part in tests with the Greater Harris County (GHC), Texas, 911 agency to demonstrate the practicality of directly linking automatic crash notification (ACN) to call centers, and the call centers directly to a region's 911 switch.

With a $1.5-million GHC commitment and financial assistance from Ford, the 911 agency installed crash sensors and telematics (GPS/cellular) units in 500 Harris County Crown Victoria police cars.

If a collision occurs, the telematics unit will generate a wireless phone call to the Cross Country Automotive Services national call center, where a speaker-phone connection is made with the car's occupants. The call is then transferred to the closest PSAP based on latitude-longitude data provided with the call and matched to Intrado's database of PSAP jurisdictions.