



## **The National Mayday Readiness Initiative – Summary of the Issues and Recommendations**

### **Background**

Automobile companies are rapidly deploying millions of vehicles with increasingly advanced abilities to detect, collect and wirelessly transmit crisis-related voice and crash data at the push of a button or the deployment of an airbag. The next generation will use increasingly sophisticated crash data to predict the severity of injury and thus assist emergency responders in sending the appropriate care, as well as reducing response times. This will save lives and reduce severe permanent injuries. But the technologies present a challenge for public emergency response agencies, and now is the time to prepare. Private sector call centers (which initially receive the calls and data from these “Mayday” devices) and the nation’s 6,000+ 9-1-1 Public Safety Answering Points and other responders must be capable of communicating quickly and efficiently with one another.

The National Mayday Readiness Initiative (NMRI) is a public-private partnership of more than twenty national organizations which have been meeting since May to develop and address the primary issues that arise in the dealings between private Mayday “telematics service providers” (or “TSPs”, such as OnStar, ATX Technologies, AAA Response) and the nation's public emergency response agencies. The Initiative is co-sponsored by the United States Department of Transportation and the ComCARE Alliance, and is supported by DOT funds and a grant from General Motors/OnStar.

### **What Are the Issues?**

Several key issues resulted in or emerged from the NMRI process. First, when citizens dial 9-1-1, or have a crash or push the Mayday button in a telematics-equipped vehicle, they expect appropriate, rapid response. Our top priority is efficient, fast and accurate communications in emergency situations between the public, TSPs and public emergency response agencies, so that the appropriate emergency response can be rapidly dispatched. All of the issues affected or contributed to that basic goal in some way; many affected the intersection between these public and private entities, which should be transparent to the public.

Second is training. It is critical that private call center operators be trained properly, including familiarity with the operating procedures of the emergency response community and the standards created and adopted in the nation’s 9-1-1 centers. Similarly, the public safety community needs to be educated about how Mayday works (and how more sophisticated Automatic Crash Notification will work in the future). Private and public responders need to be able to effectively communicate with one another by speaking the same language. Standard operating procedures need to be developed for different situations they will face together.

Third, all private call centers, 9-1-1 centers and other emergency response agencies at the local,

state, and federal level need to be able to communicate easily with one another, for both voice and data. Currently, this is not always the case for voice, and almost never the case with data. The service providers have each tried to develop their own data base of 9-1-1 agency 10 digit telephone numbers. Both 9-1-1 and non-9-1-1 agencies (e.g. hospitals) want data notification of severe crashes when they occur. But there is no national emergency contact database from which any appropriate public safety agency can obtain the correct phone number, email, URL and other pertinent information about other such agencies in America, including 9-1-1 centers, trauma centers and hospitals, law enforcement and transportation agencies, and others. And there is no clear process by which these agencies can register on such a data base to be alerted of various events to which they may need to respond.

Fourth, our emergency response agencies are too often operating with outdated technology. Many lack intelligent workstations, high speed data communications links, and access to the Internet. Our response agencies are ending up on the wrong side of a digital divide. A major effort needs to be undertaken at all levels of government to provide them with 21<sup>st</sup> Century capabilities.

Fifth, TSPs need to describe properly how their Mayday devices work in conjunction with wireless systems and the emergency response community. Ambulances are not “automatically dispatched”, and an automatic crash notification cannot occur without a wireless connection from the car.

Sixth, automobiles are capable of producing increasingly sophisticated crash data, from which emergency medical experts believe the probability of severe crash injuries can be predicted. (More sophisticated crash detection systems are called “automatic crash notification” or ACN). However, there has not been a process in which the parties can agree on what types of ACN data can be reasonably captured and transferred to PSAPs and other appropriate entities (transportation entities, EMS and trauma facilities), now and in the future. Nor is there a technical standards coordination process involving all the relevant parties.

Finally, these disparate parties identified the absence of a national forum for education and issue resolution between them, now and over time as the technologies rapidly change.

### **Key NMRI Recommendations**

1. We support a new emergency telecommunicator training standard reflecting Mayday and ACN. Public or private training programs used by TSPs should comply with it, as part of an accreditation program. Training will ensure a common language between private call center staff and the emergency response community. A training module reflecting the advent of Mayday and Automatic Crash Notification (ACN) will be developed and offered as an addition to existing training programs for PSAPs. Over time it is expected that standard operating procedures, “scripts” and checklists will be developed for use between the public and private call takers.
2. We need a national program to create an up-to-date set of linked electronic emergency contact directories, containing full contact information for all public and private emergency response agencies in the United States. A critical element will be the database of telephone

numbers for 9-1-1 dispatch centers, but our recommendation is much broader. The program should also include telephone/fax numbers, addresses, email and URLs of all other emergency response and related agencies: hospitals, law enforcement and transportation agencies, FEMA, telephone carriers, Mayday providers, and the like. It will allow, for the first time, the notification of all emergency responders in a small or large area of individual or mass disasters.

- Contact information will be available on a “need to know” basis only to appropriate agencies, and certified private call centers, not the general public.
  - Decisions on what agencies should be listed and automatically contacted in various circumstances will be made at the appropriate federal, state or local level; those agencies will have the primary responsibility to keep the database up-to-date.
  - The database will be supported by user fees and government grants.
3. Call centers (or any other similar actor) must be able to manually or automatically transfer voice and a package of data (e.g. crash description, location coordinates or map, victim’s phone number, personal medical data, URL for more complete data) to any 9-1-1 agency in North America, and to send copies of some or all of that information in real time to other relevant agencies (e.g. trauma center; traffic operations center; State Police). Short and medium term improvements should be studied and implemented by expert organizations.
  4. We recommend a campaign to educate the media, government, and the public about the challenges facing emergency response, and the role and benefits of emerging Mayday and ACN systems. These benefits cannot be achieved without wireless service, so we recommend as part of this campaign, a cooperative effort between government, the wireless industry and safety groups to address barriers to full wireless coverage.
  5. Guidelines for accurate advertising and marketing of telematics services should be established and enforced along the lines we recommend.
  6. Continuing working groups of law enforcement, transportation and TSP representatives will develop guidelines for handling non-life threatening information dissemination, and for other incidents involving law enforcement such as stolen vehicles where appropriate use of the technology could provide significant public safety or property recovery benefits.
  7. Similarly NMRI’s Sophisticated ACN Committee will continue its efforts to determine what types of crash data can be reasonably captured and transferred to PSAPs and other entities (transportation, EMS), now and in the future, and how an accurate urgency algorithm can be developed and kept up to date.
  8. The nature of Mayday and ACN is that a wide variety of parties are involved in developing, sharing and using crash and related data. A technical standards coordination effort should be initiated so that all the appropriate stakeholders are involved in relevant standards which affect their responsibility. This should be led by an organization such as ITS America or US DOT and should include contacting the standards leaders in the relevant bodies (i.e. SAE,

ITE, IEEE, TIA, NENA, APCO, ASTM) to insure coordination and inclusion of groups which typically would not participate in technical standard setting, such as leaders in emergency medicine.

9. The NMRI process should be institutionalized in a non-profit consortium, with equal public and private representation by the key stakeholder organizations.
  - The Mayday Consortium will carry out the NMRI recommendations directly and in cooperation with others, and provide a forum for resolving unfinished issues and new ones as they arise in the future.
  - It will accredit TSPs based on training, operations, and advertising practices, and widely advertise to the emergency response community and the general media and public which companies have received accreditation.
  - It will provide the coordination and leadership to develop an emergency contact database, and govern access to it by private entities.
  - Before commencing, a detailed plan will be developed for the Consortium by all the stakeholders, including a business model, bylaws, Board structure, membership and terms, and details of the other matters discussed here. The stakeholders will review existing channels of communication and public/private processes to coordinate among governmental and private interests.

-- October 23, 2000