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Technical Roundtable #1 Summary March 20, 2005

On March 20, 2005, the first meeting of the Next Generation (NG) E9-1-1 Technical Roundtable convened in San Jose, California. The technical discussion was moderated by Roger Hixson, NENA's Techical Issues Director, Billy Ragsdale, NENA's Technical Committee Chair, and Dr. Bob Cobb, NG E9-1-1 Project Manager for NENA. In attendance were 11 of the 12 representatives from partner organizations. A guest to the proceedings included Kevin Dopart of Mitretek representing the National Highway Traffic Safety Administration (NHTSA).

Background: NENA's NG E9-1-1 Partnership is a collaboration between public and private stakeholders. It was created to anticipate the impact of emerging telecommunications technologies on 9-1-1 services. The ultimate goal of NENA's initiative is to ensure that everyone has access to emergency services anytime, anywhere, from any device.

The Technical Roundtable is one of three convened by the management team of the NG E9-1-1 Partnership. The management team was created to provide strategic oversight for the program. The team establishes goals, timelines and the general process for reaching consensus and recommendations. The management team consists of senior executives from the participating partners along with top elected leadership and key staff support from NENA. The first meeting was held January 26, 2005.

Three working groups, or Roundtables, for the key areas of operations/education, technology and policy were confirmed at the meeting. Each will meet three times in 2005, dovetailing with other NENA planned events. The final product from the Roundtable will be a series of working papers that provide consensus guidance to the industry. The Technical Roundtable has been tasked with identifying and working with the Migratory and Long Term E9-1-1 Solutions architecture, monitoring future trials and demos, and creating standards and funding strategies.

March 20 Technical Roundtable Meeting: Acceleration of National Standards Work

Dr. Bob Cobb opened the meeting with a brief welcome and introduction to the partners and observers in the room. Billy Ragsdale followed by reading an excerpt from NENA's Statement of Implementation and Purpose for The National 9-1-1 Program Office, which was established recently by Congressional mandate under the Enhance 9-1-1 Act of 2004. Next, Roger Hixson provided an overview on the IP-based Enhanced 9-1-1 For All Users (Long-term) and the Migratory Working Paper for an I2 architecture. "The migratory solution supports VoIP devices and connects them to the current 9-1-1 calling system," Hixson emphasized.

[May 16 status: the migratory solution standard draft is being reviewed within NENA in May, and is expected to be available for external/public review around June 1. A history of the Future Path Plan and technical development process, and the current sequence of development summary from the NENA web site are attached to these notes]

Discussion points raised during the meeting, some of which are individual views:

- Wireless services will be replaced by IP services in the future, and this raises the issue of the quality of an IP-based call. If someone is using VoIP to make a 9-1-1 call, there needs to be a way for the calltaker at that PSAP to identify the VoIP user's address. Address validation is an issue. VoIP-based 9-1-1 calls need to work at the same level as calls made from wireline systems.
- The migratory approach for VoIP needs to address the location of the caller, and the nomadic options of the caller.
- We need to take into account global perspectives; we need to make sure that
 the U.S. national standards are consistent with the international worldwide IP
 process so we don't just take a North American approach. The emphasis on
 this to date has been through the IETF connection via members of the
 Technical Committee.
- I3 architecture is meant for all users, including those using VoIP, wireless, GPS, and wireline systems. The presumption is to use IP networks for 9-1-1, connecting with larger IP emergency services networks, as in the models being developed in NRIC 1D. On the PSAP side, equipment must be upgraded to meet this demand
- If we want to move 9-1-1 to the national platform, we need to get all states to buy into it, with a national 'top down' approach. Vendors need to be aware of this, so future implementations can be a smooth transition.
- There should be a 9-1-1-owned and operated list and master database with all different types of information in there; this might be operated on a state level where every state should be using the same format.
- Can't the policy and technical roundtables work together? We need to recommend to the policy roundtable that they get federal endorsements. If we



- don't get the buy-in from federal and state levels from a top-down perspective, we're not going to be as effective.
- What we have is a technical system that needs to take into account the psychological, jurisdictional, funding and educational issues. And we have to come up with an end result sooner rather than later. Some people would say it's too regulated, or too impossible to move forward, but we can make this happen. The problem is that everybody is doing their own thing right now. We need connections, and a convergent approach.
- I3 can be the solution. Is there a true definition of I3 yet? The Policy Roundtable needs to develop a policy perspective, and then the technical can come in to flesh it out. We need to change the architecture of 9-1-1—through the help of both traditional and non-traditional service providers; we need performance standards and requirements. The Long term requirements are expected to be done by second quarter. We should be setting the stage for replacement of 9-1-1 by the time the technical definition is approved. NHTSA and the ENHANCE 911 Act are related to a 3-5 year timeline.
- The NENA Board is seeing the same issues as NHTSA—there needs to be convergence of all groups, so there is one uniform standard and not X different groups attempting to do the same thing. We need to investigate what groups are most active, and contact them for participation in NG Program.
- The IP router runs at a lesser cost than the traditional router. I3 eliminates switches and trunks, and should save money overall, through shared infrastructure.
- There is no incentive for PSAPs to convert to IP for E9-1-1 interface; lots of consumers are not using it yet. We know it's evolving in this direction, but until you get top-down endorsement and money, you have to come up with reasons for PSAPs to be interested in IP. You need enough authority and critical mass to get this done. A critical piece is the synergy of 9-1-1 and overall emergency communications, which is also headed to an IP structure. The clearinghouse is the IP cloud companies sitting off the emergency services cloud can charge for sending specific information. There is enough money to go around as a business perspective.
- There should be a standardized database at the state level—rather than having a 9-1-1 national database, you have an infrastructure where you can go up and back down to get information. An opinion was stated that it should be owned by a national entity but operated by private agencies.
- For big corporations that made the investment in this new solution, you have to make sure that the mandates don't change every two years, because corporations will put lots of money in it, and they need something that will stay there.
- The standards are critical there are going to be little guys out there who are unaware of or not following the rules there has to be some guard regulations.



- A participant stated that pilot projects should operate on a cost-basis; people working on the pilot should be compensated for their time and work.
- Consider what's going to be built on this basic foundation. Disaster recovery systems haven't been talked about yet. What do you do when disaster happens and there's no more VoIP working? I believe true VoIP is a long way off.
- We need definitions as to what the architecture is, the terms, documentation; and have conference calls and what information is necessary, so businesses know what to do. It's been an avoidance process rather than moving forward. There has to be an educational process.
- We're all thinking we're doing the right trials, how do we know any of us are doing true trials? Need to set some expectations on what's going to be tested; that money and time is well spent if we put on trials.

 [Texas A&M trial first demo is May, GEHealth+ trial is Summer 2005]

Consensus Conclusions:

- Communications Subcommittee: Jeff Robertson of TCI is the new chair of the Technical Roundtable's Communications Subcommittee, which has the task of creating some "buzz" in the industry about this roundtable. Robertson will produce a press release with partner company logos. He will be sending a draft to all reps for review before it is made public. Should there be a Q&A piece to this?
- National Standards: There needs to be communication and consensus among the different groups that are working on E9-1-1 solutions (i.e. NENA, NRIC, ComCARE). National 9-1-1 Program Office optimally should identify groups and coordinate?
- **Funding/Coordination**: Funding must come from a top-down approach. Private companies need to be involved in creating and implementing new E9-1-1 solutions; however, the entire architecture needs to be overseen by government. Probably the point group is the newly legislated National 9-11-Program Office.
- **Policy and Technology**: The Policy Roundtable needs to communicate with the Technical Roundtable. Policy must be clear to drive technology changes.

Timeline

April ?- Draft press release from the Communications Subcommittee begins circulating among partner reps for review and feedback. Status Pending

????- Press release approved and is sent to industry organizations. Status Pending

May - Migratory definition completed.



May-June - Migratory standard reviewed within NENA, and released for public review

June 26- Second Technical Roundtable in Long Beach, CA (NENA Annual)

July earliest - Long term definition completed.

We need to develop a powerpoint-based timeline of events for this 'project'

Billy Ragsdale requested feedback from the group. What things can we improve?

- (Robert Shafer, MCI)- It's hard to get your arms around it all. We did a good job towards meeting our goal.
- (Tom Hicks, Intrado)- We know about timeline; laid out communications subgroup; good experience, right focus. Concerned that we want to do everything and not enough time to do everything.
- (Jasmin Jijina, OnStar)- valuable session; more scope around the end product, what is it we're going to accomplish, what is the end product and what are the stakeholders—just PSAPs, all emergency providers? Are we more NRIC 1b or 1d focus...(Hixson says it is more 1B focused) What are our plans to collaborate with other groups?
- (Deb Prather, Verizon)- agree with Tom, getting more focused on steps to get it rolled out.
- (Don Mitchell, TCS)- want to see deliverables defined. Concrete steps.
- (Jeff Robertson, TCI)- enjoyed frank business discussion.
- (Terry Ryan, TCI)- see more input from other committees with their work in process—some technical interfaces, more mechanical stuff.
- (Jim Shepard, HBF Group, Inc)- deliverables, how do we know we're successful. Hope to serve as focus point whether it's design or tech outside of NENA. As a vendor, trying to keep up with different policies—what is the goal of this group? We need to come up with action steps.
- (Phil Rotheram, Positron)- from policy roundtable, we said there should be things discussed in the tech roundtable. There should be communications between the roundtables. What is the liaison process for this? The whole NG E9-1-1 program including all roundtables should have a uniform timeline.
- (Guy Roe, MapInfo)- work as individual companies and come together with these solutions, the more viable the solution is. Communicate to industry, membership in more detail, goal of this group is to develop this. If your PSAP is looking to address some of these issues, come talk to us at NENA. We should have been able to take this to state of NY a year ago. Don't put effort into technology that was outdated 5 years ago. It's coming sooner than 2010.



- If you've got money, we want to get trials going, overseen by NENA. We need guinea pigs.
- (Barry Bishop, Neustar)-found it useful, the communication is important and key.
- (Tim Barry, AT&T)- not 100% sure about where we are going in terms of leadership, we need to tap our existing system and explore how we want to utilize this. We have to figure out the definitions of I3. Focus agenda more—what's the best way to utilize all the bullets. Overall it was a good meeting.
- Should there be an RFI approach for involvement in NENA coordinated Trials? What should the criteria for acceptance of a trail plan be?
- How do we bring the VON Coalition into the NG E9-1-1 Program?
- Should there be a more than yearly Report on the NG Program, to go to NENA Board, FCC, 9-1-1 Caucus, NARUC, etc? Status web site?

NG E9-1-1 Technical Roundtable:

*Primary Topic #1: Plans and Methods for Accelerating Standards*In discussing methods for accelerating national standards, the Technical Roundtable should further define and recommend the process by which the 'universal 9-1-1' standards are to be implemented and achieved from a technical perspective.

Primary Topic #2: Trials, Demonstrations and First Application
As the Technical Roundtable defines methods for coordinating trials, demonstrations and a national first application of next generation E9-1-1, state leadership and coordination should be a motivating factor.

Primary Topic #3: Technical Communication

Furthering the goals of improved technical communication with the multitude of technical, political and operational interests it's vital that funding methods and jurisdictional leadership follow a common national vision with clear technical definitions and plans to implement transitional and future E9-1-1 capabilities as well as the potential technical impacts if those same plans materialize



About NENA

A not-for-profit 501 © (3) organization, the National Emergency Number Association (NENA) is the only educational organization dedicated solely to the study, advancement and implementation of 9-1-1 as America's universal emergency number. Established in 1982 to integrate 9-1-1's "One Nation- One Number" into our community culture, NENA has more than 7,000 members organized into 46 chapters across the U.S. and Canada.

At <u>www.nena.org</u> you will find a wealth of additional information on the nation's 9-1-1 issues, including NENA's leadership role in other activities to increase the level of 9-1-1 service in each state and county of the United States, and links to other official documents.

Attachments:

A Brief History of the Future of E9-1-1 Systems and Service

Future Steps for the Evolution of E9-1-1: Immediate, Migratory, Long Term NG9-1-1 (I1, I2, I3)

