

NENA

NEXT GENERATION

E9-1-1

PARTNERSHIP

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Technical Roundtable #2 Summary

June 26, 2005

Roundtable Details

On June 26, 2005, the second meeting of the Next Generation (NG) E9-1-1 Technical Roundtable convened in Long Beach, California. The technical discussion was moderated by Billy Ragsdale, NENA Technical Committee chair/liaison, and by Roger Hixson, NENA's Technical Issues director. There were 15 Partner representatives.

Attendees

Roger Hixson	NENA
Billy Ragsdale	NENA
Jake Knight	RedFlash/NENA
Rich Becker	RedFlash/NENA
Rob Martin	NENA
Mark Dahlen	Neustar (filling in for Barry Bishop)
John Metzler	Rosum
Martin Williams	Level 3
Chris Oesterling	Onstar
Dan Mitchell	TCS
Brian St. Jen	MapInfo (filling in for Guy Roe)
Chris Robinson	TCI (filling in for Jeff Robertson)
Jim Shepherd	HBF
Maureen Napolitano	Verizon
Lori Bush	Cisco
Tim Berry	AT&T
David Fronenberger	MCI
Tom Hicks	Intrado
Kevin Dopart	NHTSA
Brian Rosen	Neustar

Highlighted Discussion Points Raised (Excluding Action Points)

- Migratory has to be viewed as a business opportunity for the industry before the industry will accept the responsibility of investing in a Migratory solution. The industry would rather invest in i3 and final NG9-1-1 than any Migratory process, especially if they feel the Migratory process will not necessarily meet final i3 standards.
- There was also a general consensus that the Tech Roundtable should prioritize its objectives. It was pointed out this was especially important because in addition to NG9-1-1, there is a natural segue for the group to be

interested in the Migratory i2 solution because the evolution of the system and the NG9-1-1 design must be moving in the same direction.

- There is general consensus that the technology exists to develop NG9-1-1 with i3 architecture, which includes all users (VoIP, wireless, and wireline systems), but the industry has not established which technology provides the greatest capacity or how to meet the needs of specific service providers.
- There was clarification that the Technical Roundtable was not brought together to develop technical standards, but brought together in order to agree on what is being done on i2 and i3 and the process in which it is being accomplished. Specifically, the trials and proof-of-concepts. An opportunity seems to have come to fruition. There seems to be an interest in moving from i1 to i3.
- There is concern on the specific technological limitations of PSAPs. Reasons include: PSAPs in rural areas may not have the necessary funding or resources to upgrade their technology, and some PSAPs have recently upgraded their technology to accommodate wireless, and will be reluctant to upgrade again. There are several areas throughout the country with very special and specific needs.
- While some expressed an interest in researching and categorizing potential PSAP limitations, a prevailing view that evolved seemed to be to develop a transition plan that allows PSAPs to sign onto the NG9-1-1 system whenever they are ready. In the interim, calls made to PSAPs that were not on the system would be routed with the same solution that is being developed for backup situations, so that ineffective transition paths at undue cost can be avoided.
- The challenges faced by simultaneously developing a Migratory (interim) approach and the NG9-1-1 system are similar to challenges faced by the three roundtables: they all have different objectives but one long-term goal. The question is what can we do as an industry to move the evolution forward, more quickly, and in a coordinated approach. There are several interests to consider, including commercial and service interests, and FCC migratory approaches.

[side note: to compliment the existing management board, it seems the creation of an Executive Roundtable (similar to an executive board with one or two representatives from each roundtable) could help coordinate the efforts of all three roundtables and ensure they have a more coordinated approach. This would also help streamline discussions and updates between the three roundtables.]

- There was reinforcement on the importance of NG9-1-1 trials, demonstrations, and applications as well as the standards that may need to be developed in order to identify, verify, and determine whether a trial is valid and could be a candidate for funding. Additional standards may need to be developed to determine whether or not a trial is a success.
- The discussion of PSAPs' need for the Migratory approach for VoIP led to realization that various service providers may have different IDs and shell record content. Possible solutions included adapting the same company ID that they use for NENA (and perhaps assigning new NENA Company IDs). There may be a need to standardize how providers or routers provide information.



- Another PSAP issue discussed, which was suggested to be even more important, was delivery of the calls to the right PSAP.
- There was discussion about the feasibility of LERG 15 and it was suggested that the issue be taken to the operations group. According to one participant, 85-90 percent of selective routers are already in the database, all major routers and many smaller routers. This also led to the action item: develop LERG content list of selective routers from current NENA database.
- As additional background of the NG E9-1-1 program, IP seems to drive so much of the direction as a more effective and less expensive system for the future.
- There was clarification that while the service providers must provide E9-1-1 service capabilities, the FCC does not have jurisdiction over the PSAP, which could mean that they are under no obligation to upgrade their systems until they are ready and funded to do so.
- Since the technology exists to implement i3 and NG9-1-1, Migratory solutions must always keep i3 and NG9-1-1 in mind. The general feeling is that most companies would rather invest in i3 than i2 now and later i3.
- There is a need to clarify the existing standard and make it understandable to everyone across the industry, regardless of how shell information is currently stored. The question is if VPC servers and VoIP carriers were pooled, and it requires the allocation of an ESQN for each of its calls, perhaps one ERSN for each county, then who will be responsible for the allocation of the ESQK.

Additional comments:

- There was note that the three roundtables might be better served if they were hosted at different times. Some partners were forced to split their time between two roundtables, which seems to coincide with concerns that the structure of the roundtables could inadvertently stretch limited partners' resources.
 - The roundtable would benefit from having access to more information about the Texas/Virginia/NENA VoIP i3 project. It may have been beneficial to this group to consider some of the technology solutions being implemented. It defined Migratory as being able to accommodate only some nomadic and limited devices, eg. no TDD, etc.
 - Another item discussed was to distinguish use of various codes – CoID, ESQK, ESRNs, and standard methods and responsible party. Along with this, it might be beneficial for NENA to consider developing a glossary or primer of terms. On some occasions, different language was used to describe similar processes, which occasionally led to a breakdown in communication.
- In regard to the Migratory solutions, there is a need to determine acceptable minimum requirements for Migratory compliance and how to accomplish the tracking of Migratory compliance. This is one of several points that need to be clarified with the FCC.
- It may be worthwhile to compile current limitations and efficiencies to provide a countrywide situation analysis (where we are) and then define the NG9-1-1 (i3) standards. The Migratory approach, i2, could then be defined as the mid-point, enough to

meet FCC ruling with minimal changes and ensure its evolution does not veer too far away from the final objective, which is NG9-1-1.

Action Items

1. Prioritize the Tech Roundtable objectives
2. Identify the roadblocks, obstacles, timeline and how to solve them. Also provide to the FCC. (re: the 120 day time limit).
3. Develop LERG content list of selective routers from current NENA database. Identify current NENA workgroup schedule.
4. Distinguish use of various codes – CoID, ESQK, ESRNs, and standard methods and responsible party. May be in current standard. Document as guideline paper. Need to define by network protocol MF, SS7, etc. Code administration question.
5. Wireless infrastructure applications for VoIP – NCAS versus Hybrid impacts for PSAP and SSPs
6. Identify preferred transition plan noting use of default backup methods until full infrastructure is in place.
7. Development of implementation details vs. varying current systems design.
8. Criteria to evaluate service provider compliance for Migratory and NG9-1-1 solutions. How do we accomplish tracking of Migratory compliance.
9. What are the acceptable minimum capabilities for solutions that do not initially meet Migratory solution requirements
10. What type of work groups do we need to establish to research and develop answers (joint tech/ops committees?)
11. Acceptability of PSAP 10-digit numbers for outage condition backup?
12. Is it acceptable to use current wireless routing methods for non-wireless VoIP service?

Referral Items

1. Can we use existing wireless VPC datalinks for VoIP?
- states where cost recovery limits use
2. Allocations of fees and surcharges, and cost recovery – impacts on providing the infrastructure or its use for VoIP application
3. Administration of pANI codes nationally and establishment of administrator.
Official support of ESIF issue
4. Identification of current e9-1-1 operation rules and validate which apply or don't apply to VoIP services.

