NRIC Council Meeting

Focus Group 1B

Generic Architectures to Support Video
and Advanced Services and
Transition Issues

October 19, 2005

Network Reliability and Interoperability Council *VII*

- Determine generic network architectures for E911 that can support the transmission of voice, pictures, data, location information, paging information, hazardous material messages, etc.

- Present a report that identifies the transition issues for the recommended generic network architectures and how the methods of accessing PSAPs should be modernized.

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9-1-1 Systems and Networks should:

– Be built on open architecture and compliant with national standards

– Employ and negotiate the highest quality of service for 911 calls to get the best audio, text and video available

– Provide end-to-end support for real time IP text with voice

– Facilitate the end-to-end interoperability of all services (e.g. voice, text, data, video, etc.) independent of the access network technology

– Identify 9-1-1 calls and treat them on a priority basis

– Provide support for intermediate call centers including telematics and relay services

– Transfer IP calls with data to a traditional 9-1-1 PSAP, to the extent the traditional 9-1-1 network supports connectivity

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PSAPs should be able to:

– Receive and reply to e-mail, SMS and store and forward messages

– Connect to the server providing streaming video upon being given the indication that streaming video is available (bank cameras, traffic cameras, etc.)

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Focus Group 1B agreed that handling of data critical to emergency services will need to evolve.

Examples of data that will be used in the future of 911 communications include:

- Location information
- Telematics information
- Hazmat information
- Streaming video
- Medical data

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Focus Group 1B supports NENA's Future Path Plan (FPP), which proposes three categories of data:

– *Tier 1 (Essential) -* data that supports call delivery and adequate response capability (e.g., location information)

– *Tier 2 (Supportive) -* beyond essential data that may support call handling and the dispatch (e.g., vehicle status)

– *Tier 3 (Supplemental) -* may supplement call handling and dispatch, but is not strictly necessary to complete the response (e.g., personal medical data)

This classification of data helps determine what type of data should be available at each point during the handling of an emergency

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Focus Group 1B believes the following critical issues need to be addressed in order to ensure a smooth transition to an advanced 9-1-1 network:

– PSAPs will increasingly need to be able to accept new types of data (e.g., video, interactive text, images, etc.) from new sources, such as VoIP and telematics call centers, using IP networks

– Legacy technologies will need to be supported during the transition to IP networks, to allow for interoperability with existing networks

– 9-1-1 data will need to be delivered in accordance with standards developed jointly by appropriate standards bodies and industry organizations, and in such a way as to allow for receipt by the call takers, dispatchers and responders

– 9-1-1 networks will need to allow for data updates as the incident progresses or as the PSAP requests supplemental information

Next Steps

Final Report to Council detailing:

- Previous recommendations regarding network properties and architectures

- Proposed resolutions to transition issues and associated time frames

- Advisability of a National/Regional PSAP and how PSAP structure should be altered

- Extending E911 to MLTS