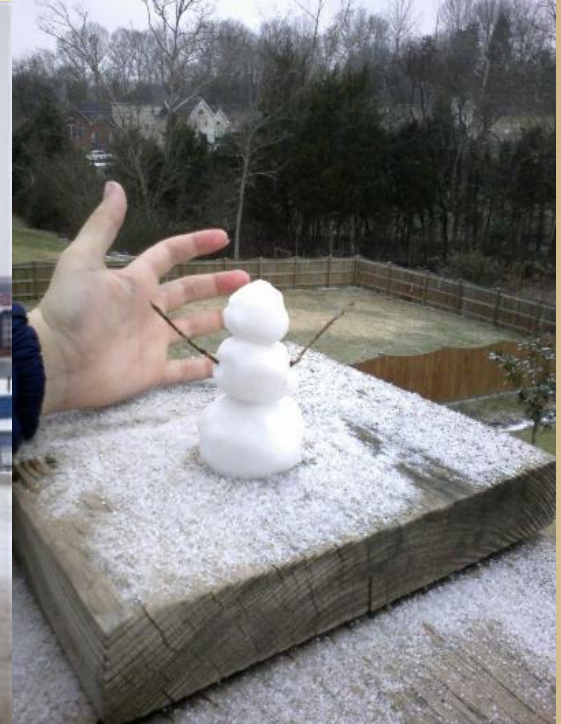


2010 NENA TDC/ODC Summary



Yes, it snows in Nashville!



Schedule

- First Day
 - Summary/Status of Various NG9-1-1 Implementations
 - Summary of Technical Development Committee work
 - Summary of Operational Development Committee work
- Second and Third Days
 - Committee Break-Out Sessions

Last year's break-out sessions were organized into working group, get-down-to-business, sessions. This year the break-out sessions were organized around topics to make it easy for newcomers to get accustomed to the work being done as well as to bring separate working groups together to discuss similar items.

NG9-1-1 Implementations

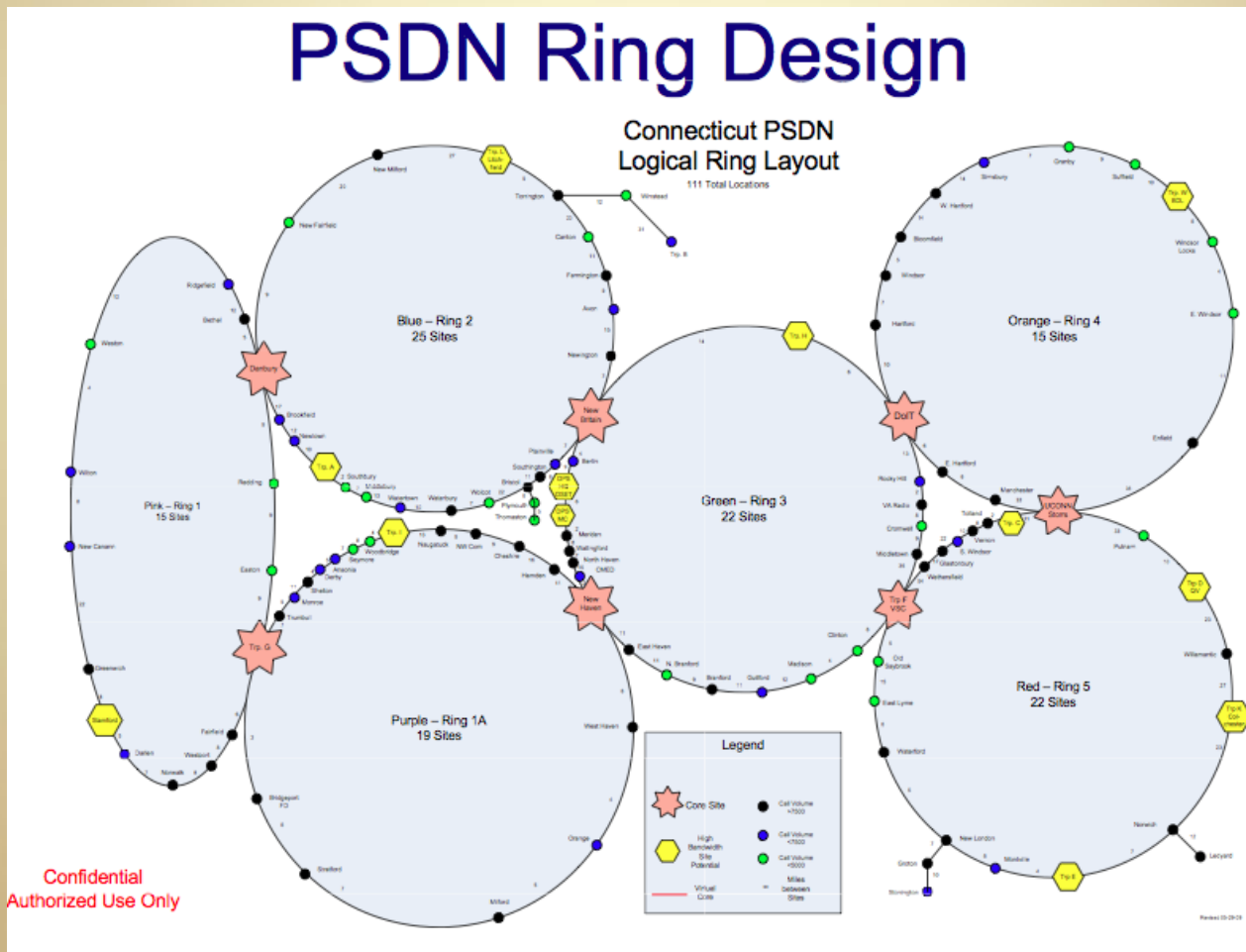
- Alabama Next Generation Emergency Network (ANGEN)
 - Statewide NG9-1-1 system
 - Projected cost of \$1.9M
 - Received \$950,000 NHTSA Grant
 - Implementation will begin with wireless and then continue with wireline
 - RFP will be issued soon for transport equipment

NG9-1-1 Implementations (cont.)

- Connecticut Department of Public Safety
 - State has centralized funding and management of 107 PSAPS
 - Priority placed on building a redundant synchronous state-owned fiber network for carrier-class connectivity between all PSAPS
 - Backup connectivity via VSAT (dish)
 - Provide NG9-1-1, P25 Interoperability, LEIN/NCIC/AFIS services
 - Essentially becoming their own LEC
 - **Reliability and Monitory** are the key to success – they must have LEC levels of serviceability in or to be successful

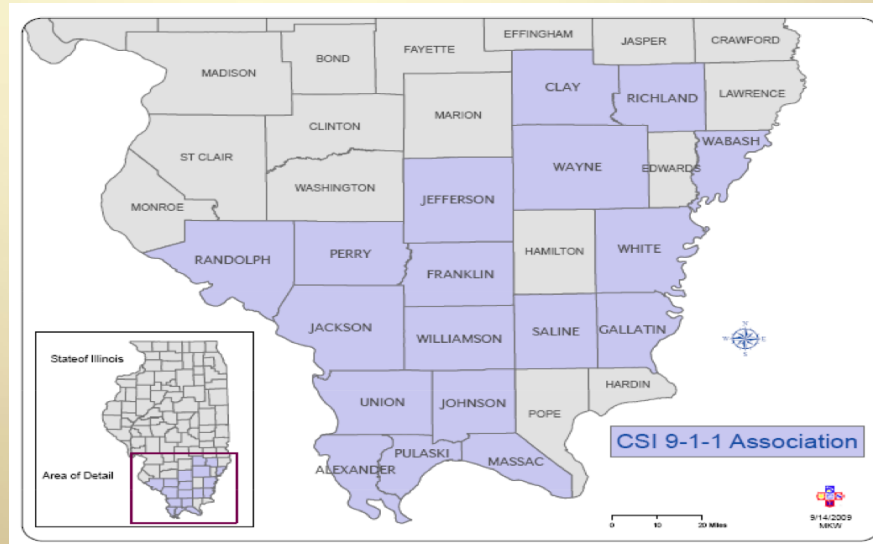
NG9-1-1 Implementations (cont.)

- Connecticut Department of Public Safety (cont.)



NG9-1-1 Implementations (cont.)

- Counties of Southern Illinois (CSI) 9-1-1
 - 18 counties participating from two southern regions
 - 9-1-1 is regulated by Utility Commission but with no State 9-1-1 Coordinating Agency
 - Found NG9-1-1 required a new skill-set for planning and implementation
 - Communications Plan and Intergovernmental Agreements are necessary



NG9-1-1 Implementations (cont.)

- Counties of Southern Illinois (CSI) 9-1-1 (cont.)
 - They feel that their regulating body is burdensome to their progress
 - Asked for Regional control of 9-1-1 (don't believe that will happen)
 - Asked for legislation to identify themselves as a separate 9-1-1 authority (hopeful for success of this endeavor)
 - Establishing themselves as a Limited Liability Not-for-Profit Corporation
 - Hopeful of initial installation Q4 2010

NG9-1-1 Implementations (cont.)

- State of Indiana (INdigital)
 - Have had a digital network for 5 years (not end-to-end i3 NG9-1-1)
 - Routing changes are made from web-browser rather than NOC
 - Data Mining Capabilities
 - PSAP Toolkit for quick reporting
 - Map call location for reports (i.e. find concentrated locations of NSI handsets)
 - Currently working on acceptance of text messages
 - Using XMPP as a standard protocol (formerly jabber)

NG9-1-1 Implementations (cont.)

- State of Minnesota
 - Have established a NG9-1-1 Advisory Committee
 - Goal: To build a statewide NG9-1-1/LMR/CJIS network
 - Use existing LMR network for backup to ESInet

NG9-1-1 Implementations (cont.)

- Minneapolis/St. Paul Eight County Metro Area
 - Using TCS as 9-1-1 service provider
 - Using MN Office of Enterprise Technology as network provider
 - Metropolitan Emergency Services Board (MESB) is acting as the NG9-1-1 Systems Integrator/Administrator
 - Questions??
 - Who should own it?
 - Who should pay for it?
 - Who should manage it?
 - Where should it be located?
 - 9-1-1 Network Analogy
 - E9-1-1 = Henry Ford (any color as long as it's black)
 - NG9-1-1 = Auto Mall of today (any number of options and features)

NG9-1-1 Implementations (cont.)

- Texas Commission on State Emergency Comm.
 - Developing a State-**Level** ESInet
 - To facilitate communication between regional ESInets
 - NOT developing a State-**Wide** ESInet
 - Will not run the ESInet
 - Developed plans and reports
 - <http://www.911.state.tx.us>

Committee Status

- Transition Planning
 - Both top-down and bottom-up are appropriate transition paths
 - Each have their own means of transition from Eg-1-1 to NG9-1-1
 - Planning documents
 - http://www.its.dot.gov/ng911/ng911_bups.htm

Committee Status (cont.)

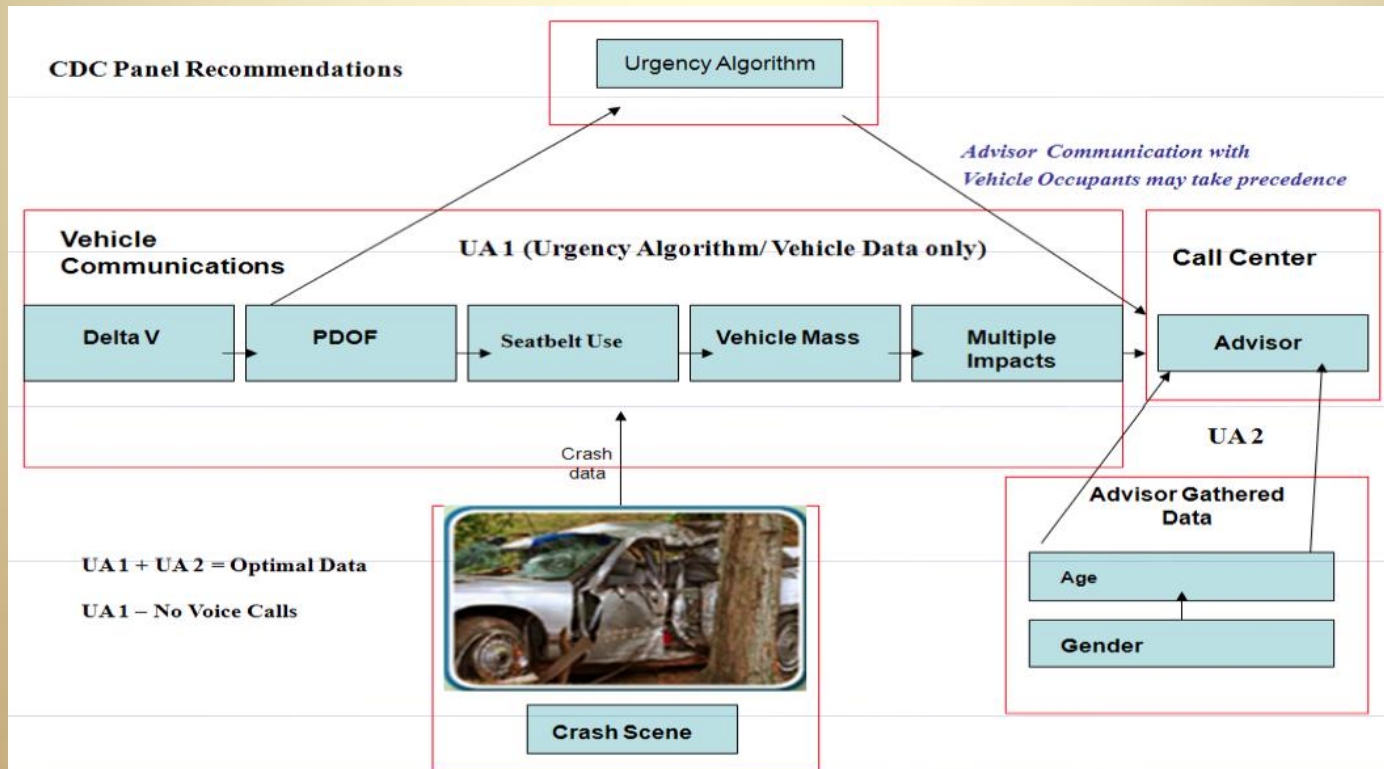
- Next Generation Safety Consortium
 - Formed to address effective access to and use of technology for emergency response
 - Focus on “Emergency Response Enterprise” not just 9-1-1
 - Many partners in academia
 - Moving beyond the status of an affiliation into a form org
 - <http://www.nextgensafety.org>

Committee Status (cont.)

- Next Generation Security (NGSec)
 - First comprehensive cyber-security standard for NG9-1-1
 - Not just technical but policy based standard for security
 - Having been developed to an IT standard, it is now coming to committee for practical application

Telematics Update

- OnStar
 - Developing an industry standard urgency algorithm to assist PSAPS with severity of crash information
 - This should help PSAPS to better respond to incidents



Telematics Update (cont.)

- Ford SYNC
 - Call setup occurs in approximately 45 seconds
 - All Sync vehicles sold today are inclusive of on-board GPS
 - Addition of spoken GPS information (PSAP must press “1”)
 - New implementations of SYNC include graphical displays for vehicles – display current location so that the driver can relay location information to PSAP

NG Data Update

- Datasets
 - Development of data (including geospatial data) differs at differing levels of ESInet deployment
 - vCard will be the data delivered with calling information
- Emergency Call Routing Function (ECRF)/
Location Validation Function (LVF)
 - Continued discussion about data types (points, polygons, lines)
 - Resolution to one geographic object for each civic address
 - Use of qualifiers such as suite, floor, room, etc.

Policy Routing Update

- The Policy Routing Function (PRF) facilitates policy-based rules to determine routing at each point in the ESInet
 - Hours of Operation – different PSAP at different hours
 - 8a-5p calls go to PSAP1
 - 5p-8a calls go to PSAP2
 - Call delivery to a specific call-taker
 - Spanish speaking caller reaches a Spanish speaking call-taker
 - Specially trained call-taker receives calls based that relate to training
 - Load Distribution
 - Call volume and current staffing can determine “overflow” behavior

Policy Routing Update (cont.)

- Policy Editor
 - Intuitive tool available to PSAP administration
 - No programming or semantics knowledge needed
 - Accessible for quickly changing policies based upon situation

Femtocell Update

- AT&T 3G Microcell
 - WPH2
- T-Mobile @Home
 - VOIP
- MagicJack Femtocell
 - Met with Gregg Wood, CTO of YMAX Communications Corp.
 - Currently developing a MagicJack femtocell
 - GSM Only
 - Not currently available – under development
 - Dual capability of using closest tower or Internet (BDA/Femtocell)



Femtocell Update (cont.)

- MagicJack Femtocell (cont.)
 - Emulate the lowest cellular signal found (BDA)
 - Monitoring a paging channel and releasing the handset - then the handset re-affiliates with the cell tower
 - Plan to have mesh capabilities within 6 months after product launch
 - Registered address must be input/changed at the softphone (Intrado)
 - Testing has shown this call delivers as Phase I
 - Delivery of lat/lon will take cooperation from the carrier
 - Currently working on a triangulation of the three closest towers to determine lat/lon (within 3 ft) and send it with the call
 - Have not yet determined which number to deliver – MagicJack or Cellular

Femtocell Update (cont.)

- Original MagicJack
 - Call-around feature lets users call from a cell phone to their MagicJack and then on to an international call
 - Nothing prevents users from this same practice for domestic calls
 - 30% of MagicJack devices are registered outside the US but have US numbers

Femtocell Update (cont.)

- Femtocell Working Group
 - Working Group organizing to develop standard recommendations for Femtocell call/data delivery
 - Formed under the Non-Traditional Technical Committee

TDC/ODC Presentations

<http://www.nena.org/TDCODC2010-Documents>

Thank You

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