# 2010 NENA TDC/ODC Summary


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Roger Hixon speaking in the absence of an Alabama representative
Alabama ANGEN (Alabama Next Generation Emergency Network)
Received $950,000 NHTSA Grant
Statewide NG9-1-1
Implement Wireless first then wireline
Soon to be issuing RFPs

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Steve Erble, Director
Connecticut Department of Public Safety
Office of Statewide Emergency Telecommunications
Connecticut has all statewide 9-1-1 funding – single point of management
107 PSAPS throughout state
Building a state-owned fiber network that will connect all PSAPS
Carrier Class (Cisco ONS-15454) – 5-9s (DWDM, ROADM, start at 10Gbps, SONET)
Each vendor will have their own layer 2 access (through Xponder port)
Using VSAT (dish) that is available if SONET fails (standby with heartbeat– only pay when used)
On this SONET, Providing P25 Interop, NG9-1-1, LEIN/NCIC/AFIS services
Timeframe: Construction completed by summer and system acceptance Spring 2011
ILECS moving from 5Es to soft-switches – cost of ownership
They are becoming their own LEC
**Reliability and monitoring – are purchasing commercially provided NOC services (only SNMP traps) (replicating AT&T Resolution Center) – must be done to make it work and reliable!**

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Illinois CSI (Counties of Southern Illinois) 9-1-1
Patrick Lustig, Jackson County 9-1-1
Kenneth Smith, Williamson County 9-1-1
All of Region 7 – Southernmost Illinois
Part of Region 6
18 Counties participating in all
Regulated by Utility Commission but with no State 9-1-1 Coordination Agency
When reviewing needs of the network found that they needed help – must obtain different skill set – technologically – to establish and maintain the network and equipment
Communications Plan and Intergovernmental Agreements necessary
Current legislation prevents them from enabling NG9-1-1 ESINets
They feel that their regulating body is burdensome to their progress

- asked for Regional control of 9-1-1 (believe it won't happen)
- asked for legislation to identify themselves as separate 9-1-1 authority (hopeful)

Establishing themselves as a Limited Liability Not-for-Profit Corporation
Established Alliances with N11 agencies to expand service and assist other agencies with similar issues
They are a NENA Beta Test Site for deployment of NG9-1-1 (hopefully Q4 2010)

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State of Indiana
Mark Grady (INdigital) for Ken Lowden
Been in IP for 5 years
Use Pin-based call routing

- Routing changes can be made from a web browser

Data Mining

- Create a PSAP toolkit – like MIS
- Add call location, mapping reporting (specifically NSI handsets)

Text

- falling back to XMPP for standard acceptance (but not all devices use XMPP)
- Allows setting of language, etc.

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State of Minnesota
Emergency Communications Networks
Jackie
Department of Public Safety
Established a NG9-1-1 Advisory Committee
9-1-1 fees collected statewide and distributed after admin and technical operation costs
Also performing a build-out of statewide 800MHz Radio system
87 Counties, 115 PSAPS, 12 Selective Routers, two 9-1-1 Service Providers (IES & Qwest)
Goal is to build out a statewide NG9-1-1 with diversity and connections to Radio network and CJIS
First priority is to use ALI steering and media gateway to route to adjacent dissimilar 9-1-1 service provider county
Use Radio network as backup to NG9-1-1 ESINET **??**

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Pete Eggiman
Director of 911 services
Metropolitan Emergency Services Board
Minneapolis/St. Paul Eight County Metropolitan Area
NG 911 Pilot Project
Using TCS as 9-1-1 service provider (LVF, Datasets, etc.)
MN Office of Enterprise Technology (OET) will provide network
Made up of 3 metro area PSAPs (Washington, Ramsey, and Dakota Communications)
The Metropolitan Emergency Services Board (MESB) acts at the NG9-1-1 Systems Integrator/Administrator
Really creating a NG9-1-1 End-to-End Beta system
Important 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 its black)

NG9-1-1 = Auto Mall today

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Kelli Merriweather
Director
Texas Commission on State emergency Communications
Established Master Plan, Grant Projects, Data Projects (with local university), Geospatial Database Management Systems Pilot, Trying to find a tool to maintain Geospatial data
75 PSAPS in Texas
Developed many reports for developing plans and requesting funding

- http://www.911.state.tx.us

Created an ESInet Advisory Council Framework
Four Stage Migration Path
Developing a **State-Level ESInet; not a State-Wide ESInet** (not to run the ESInet but to allow for communications between regional ESInets)

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Transition Planning
Bob Sherry
Jim Goerke

http://www.its.dot.gov/ng911/ng911_pubs.htm

Top-down and bottom-up are both valid transitions but have different means of transitioning

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Next Generation Safety Consortium
Formed to address effective access to and use of broadband technology for emergency response.
Focus on "emergency response enterprise" – not just 9-1-1
Many academic partners
Moving beyond an affiliation of organizations into a formal organization
http://www.nextgensafety.org/

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NG-SEC
NG9-1-1 Security
Jeremy Smith, CSSP
NG-SEC is the first comprehensive cyber security standard for NG9-1-1
Not only technical but policy standards for security

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Sensors, alarms, telematics
Dave Acton
Steve Brooks
John Hunt – OnStar Public Policy Group
Don't make the call-taker interpret what they are getting. It should be presented in a standard way.
OnStar (along with the CDC) has developed a standard urgency algorithm to provide PSAPs additional data
Crash severity information is coming in on ALI in California through ATX already

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Ford Sync 911 Assist with GPS
Dave Hatton
Ed Pleet
Virtual Test Track Experience (VIRTTEX)
No call center
Call setup occurs in approximately 45 seconds
All vehicles with Sync now include an on-board GPS module
Call taker presses 0 for open line
Call taker presses 1 for GPS location and it is announced audibly
My Ford Touch & My Lincoln Touch

- Added graphical displays to show current location in case of crash (with Lat/Lon)

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NG Data
Development of data (including geospatial data) differs at the different levels of ESInet deployment
Emergency Call Routing Function (ECRF)/Location Validation Function (LVF) – Continued discussion of data types and civic/lat-lon transformation for routing
Each geographic location must have one civic address – this can be accomplished by the addition of qualifiers such as suite, floor, room, etc.

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Policy Routing Function (PRF)
Determine routing at each point in the ESInet
Route based upon:
Hours of operation
Type of call routed to call-take with specific training
Language of caller routed to call-taker that speaks that language
Load distribution – "overflow" based upon call volume and current staffing
Can be changed by using the Policy Editor – intuitive and changeable dynamically with the current situation

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Femtocells

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)
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 show up 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

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 Working Group
Working Group organizing to develop standard recommendations for Femtocell call/data delivery

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Presentations are available at:

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