

Responding to the FCC's NG9-1-1 Call to Action

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Agenda



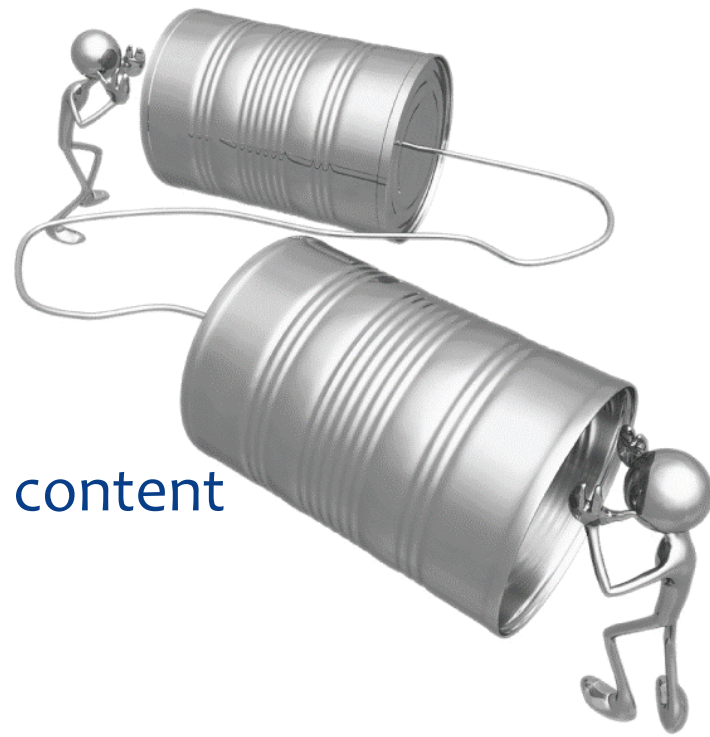
- * Challenges of Legacy 911 System
- * Goals of NG9-1-1
- * Entities Shaping the Evolution of NG9-1-1
- * FCC's 5-Step Action Plan
- * ESINet Explained
- * General Challenges
- * ECRF Considerations
- * Overview of NG9-1-1 Early Adopters



Challenges of Legacy 911 System



- * Geographically restricted/based
- * Failover and dynamic routing changes limited
- * Limited to static routing
- * Proprietary hardware-based
- * Not interoperable nationally
- * Unable to accept and deliver advanced content



Goals of NG9-1-1



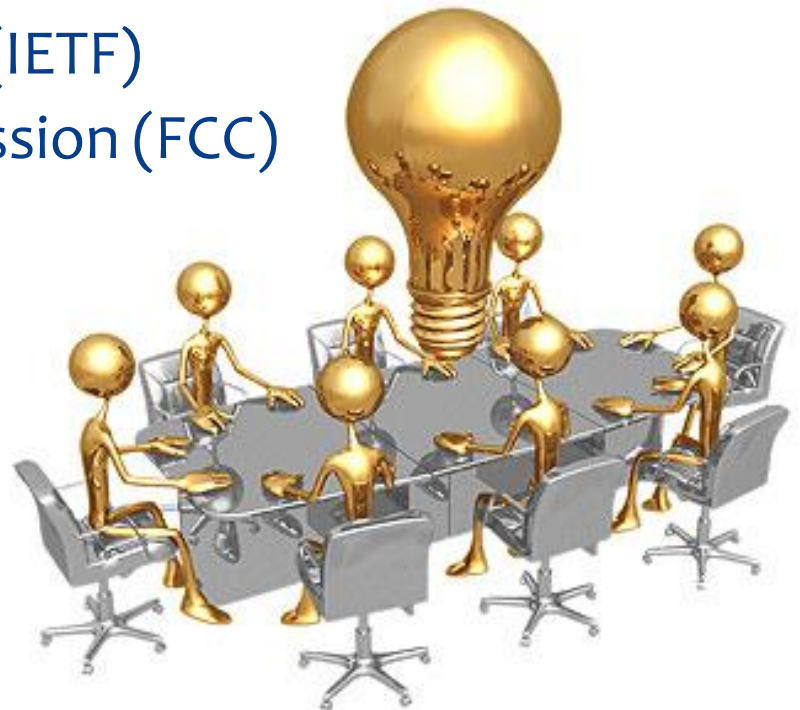
- * Provide more data to the Public Safety Answering Point (PSAP)
- * Allow for victim to responder data exchange
- * Additional paths for allowing data to flow downstream
- * Natively accepts more originating call devices
- * Accepts data and calls from other emergency origination services
- * Provide for rich content transfer from caller to first responders



Entities Shaping the Evolution



- * National Emergency Number Association (NENA)
- * Alliance for Telecommunications Industry Solutions (ATIS)
- * Internet Engineering Task Force (IETF)
- * Federal Communications Commission (FCC)
- * State governments
- * Local governments
- * Legacy carriers
- * Emerging technology carriers
- * Industry Solution Vendors



FCC's Call 5-Step Action Plan



Develop location accuracy mechanisms for NG9-1-1

“At the 2011 APCO Conference in Philadelphia August 10 , FCC Chairman Julius Genachowski announced his five step action plan to chart the transition to Next Generation 9-1-1 services.”



Facilitate the completion and implementation of NG9-1-1 technical standards



Develop an NG9-1-1 funding model

Enable consumers to send text, photos, and videos to PSAPs



Develop a NG9-1-1 governance framework



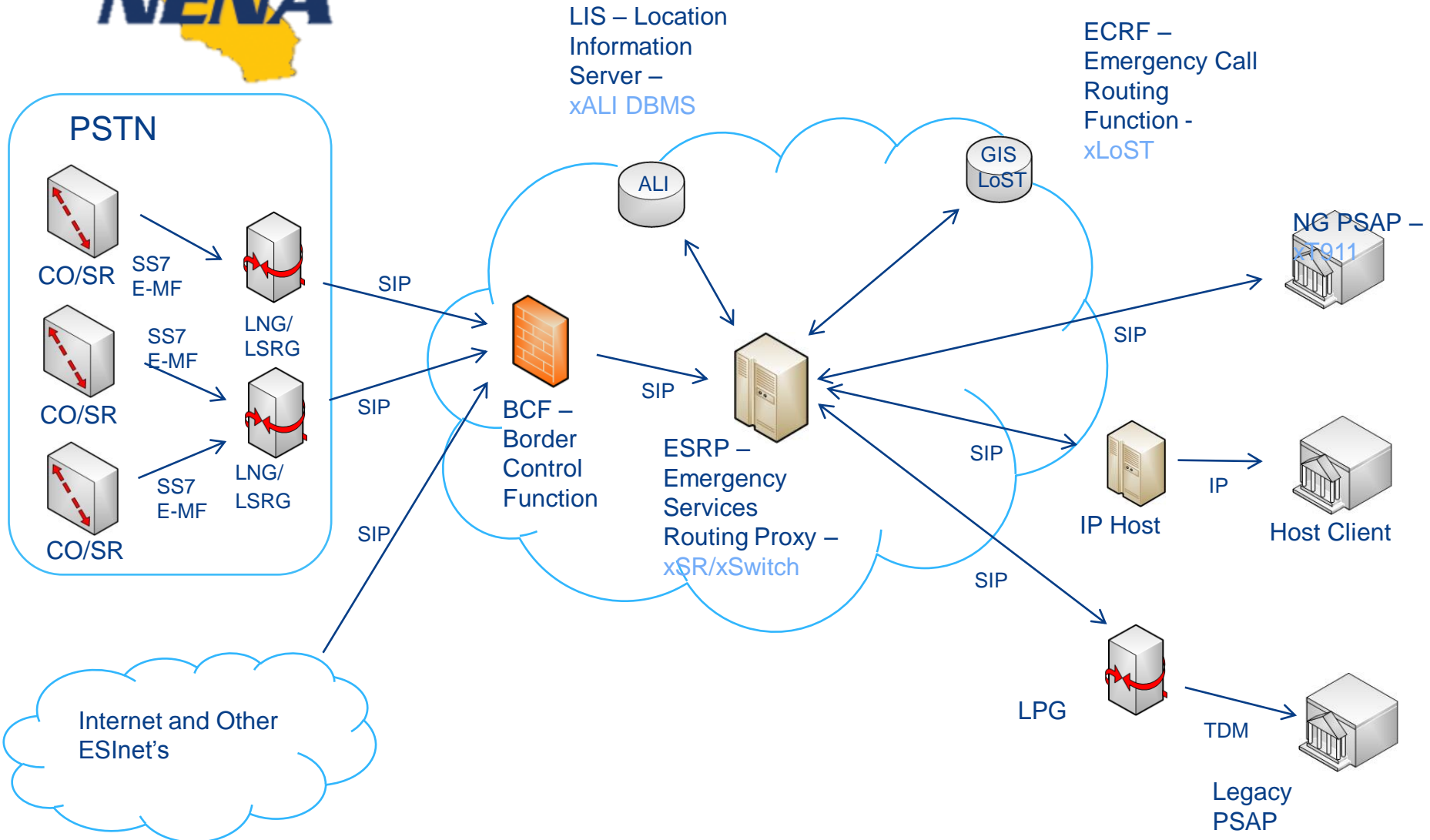
The Future of 9-1-1

ESINet



- * Basic network with function to support NG9-1-1
- * Location information is delivered with call
- * Stays with call
- * All calls are Session Initiation Protocol (SIP) or converted to SIP at network edge
- * Common Off The Shelf (COTS) equipment
- * PSAPs can be located anywhere on a commonly available IP network
- * Access to information and ALL call types (text/IM, voice and video)

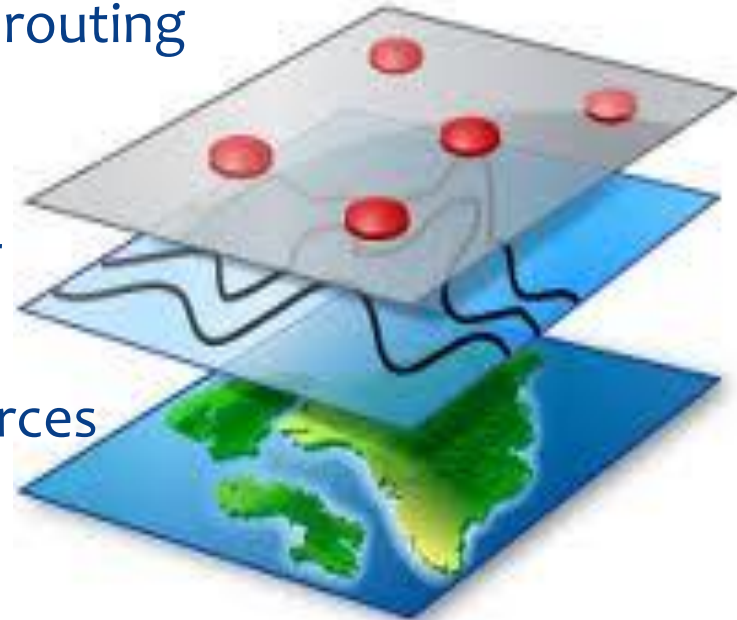
Anatomy of NENA i3 ESInet



Transition to ECRF



- * Emergency Call Routing Function (ECRF)
 - * GIS-Based
 - * Will replace Legacy Selective Router Databases
 - * Opens door for alternative dynamic call routing
- * Challenges
 - * GIS Databases Need Grooming for ECRF
 - * Alignment with legacy MSAG
 - * Coalescence of GIS data from many sources
 - * Process for ongoing updates



Dynamic ECRF Management



X-Solution Dashboard View Log Logout

xSolution Configuration

- System Wide
- Agent Settings
- Contacts
- Response Agencies
- Stations/Hosts

xLoST Dashboard

xLoST OTF Routing Requests/Logs

Lock Extent

New Geometry

<New Geometry>

Edit "New Geometry"

Cancel

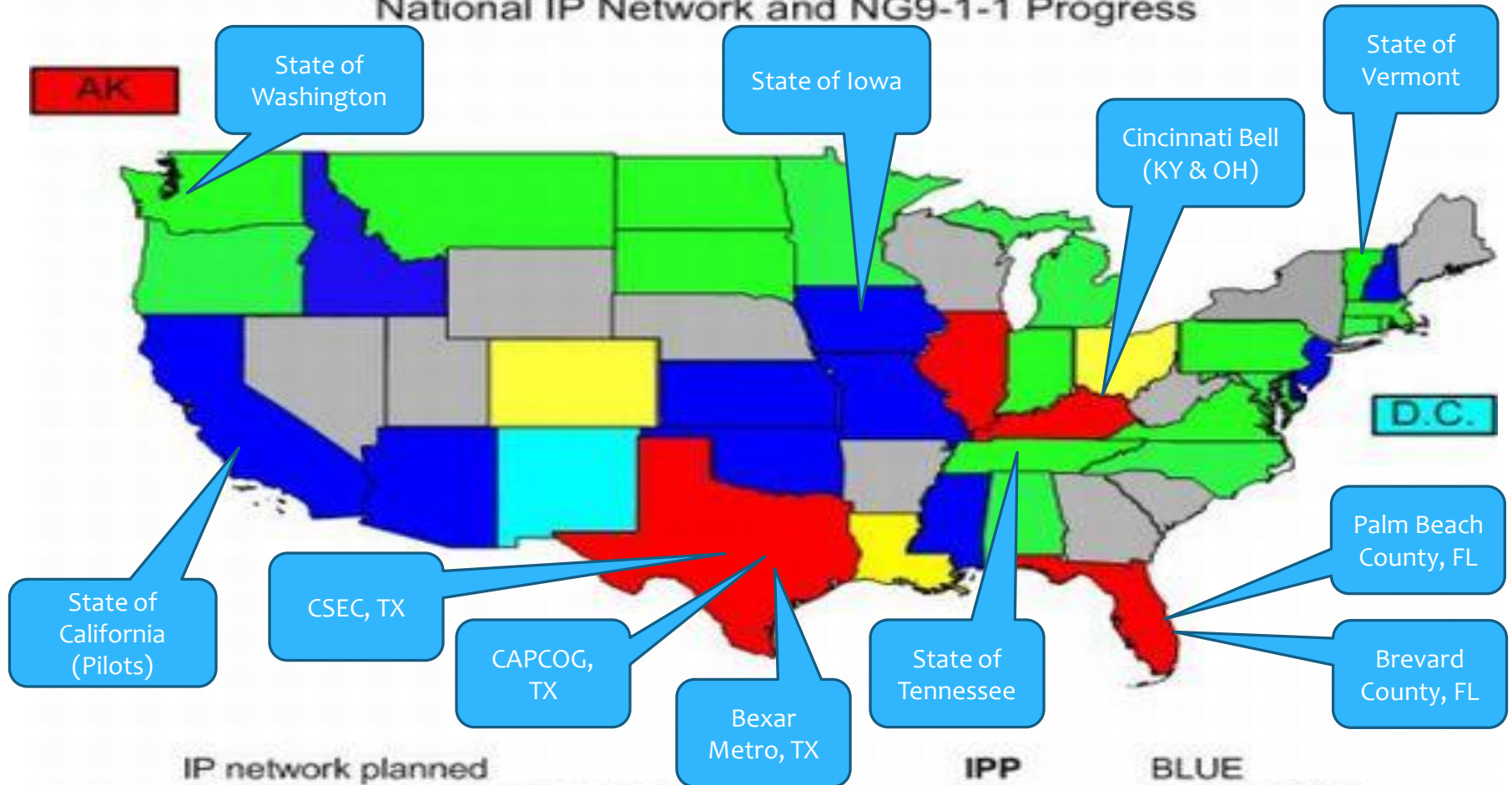
Polygon drawn with drawing tools

The image shows a composite screenshot of two web-based dashboards. The top-left dashboard is the 'X-Solution Dashboard', which includes a navigation menu with options like 'System Wide', 'Agent Settings', 'Contacts', 'Response Agencies', and 'Stations/Hosts'. The bottom-right dashboard is the 'xLoST Dashboard', which features a map of a geographic area with various roads and landmarks. A red polygon is drawn on the map, and a red circle highlights a dropdown menu labeled 'New Geometry' with the option '<New Geometry>'. An arrow points from the text 'Polygon drawn with drawing tools' to the red polygon on the map. The 'esri' logo is visible in the bottom right corner of the map area.

Early Adopter Agencies



National IP Network and NG9-1-1 Progress



IP network planned
 IP network available at state level
 IP network at sub-state level
 NG9-1-1 preparation activity at state level
 NG9-1-1 preparation activity at sub-state level

IPP
 IPS
 IPSS
 NGS
 NGSS

BLUE
 TURQUOISE
 YELLOW
 GREEN
 RED

Questions?

