

Annual Review: NG9-1-1 Interoperability Testing Program - Projects 2A & 2B

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The Problem

- Statement of the problem:
 - The United States has identified the 911 system as critical infrastructure. While a \$15 billion national transition to NG 911 is occurring we currently have no way of ensuring interoperability of sub-systems.
 - DHS CISA has the lead responsibility in interoperability for critical infrastructure. They are working with the US DoT NG-911 office, the FCCs Public Safety Bureau, the National Emergency Number Association (NENA) and others.
- How are you approaching it, and what makes your approach unique?
 - We have created a Stakeholders group that will provide guidance on the Governance of, Technology used and Financial model of a DHS NG-911 Interoperability Certification process. The stakeholders group includes DHS, DoT, FCC, NIST, State Agencies, Industry Associations and Academia. It also includes international participation.

What Will Success Look Like?

- Success will include;
 - A conformance testing system that is in the public domain encouraging more testing facilities,
 - At least one test facility that operates under a sustainable model,
 - All jurisdictions procuring NG-911 components requiring DHS Certification,
 - Overwhelming acceptance by all stakeholders,
 - An ecosystem that is standards conformant and interoperable

Benefits

- How will success benefit the Homeland Security Enterprise?
 - The initial promises of NG-911 included;
 - Additional capabilities for emergency callers (video, text, additional data)
 - Lower costs through additional competition, the use of off the shelf hardware and the acceptance of standards
 - Higher reliability thru call redirecting, diverse routing and network-to-network interconnection.
 - None of these promises can be realized unless the underlying NG-911 subsystems are interoperable.

Accomplishments

- Phase 2a
 - Document 10 call scenarios for end-to-end testing (7 of 10 complete).
 - Install and document first complete ESInet with required NGCS functional elements.
 - Test call conformance through ESInet working with Verizon for call ingress.
- Phase 2b
 - Establish stakeholders group membership and structure and schedule first full member face-to-face meeting.
 - Initiate contract with consultant for ISO 17025 conformance.

Activities Remaining

- Phase 2a
 - Complete second i3 ESInet and PSAP for end-to-end testing.
- Phase 2b
 - Hold stakeholders face-to-face meeting (2 March)
 - Produce outreach video
 - Complete and document ISO 17025 Certification for TAMU ITEC
 - Validate end-to-end testing model
 - Document operational cost model