Staff Workshop on 911 Reliability Certification

Public Safety & Homeland Security Bureau
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Eric Schmidt, Attorney Advisor
(202) 418-1214
eric.schmidt@fcc.gov
This presentation summarizes the 911 Reliability Report and Order adopted by the Commission in December 2013.


- Relevant rules are codified at 47 C.F.R. § 12.4.

- The Report and Order reflects the Commission’s official decision and supersedes the overview provided here. If in doubt, please consult the actual text of the rules.

- Please direct any questions about interpretation of the rules to PSHSB staff and/or your legal counsel.
911 Reliability Report and Order

- Adopted in response to preventable 911 outages during June 2012 derecho storm

- Covered 911 Service Providers must take reasonable measures to provide reliable service, as evidenced by an annual certification of compliance with best practices or reasonable alternative measures.
  - Critical 911 circuit diversity
  - Central office backup power
  - Diverse network monitoring

- If a service provider relies on alternative measures or claims that a portion of the certification is not applicable to its network, it must provide a brief explanation.

- PSHSB has delegated authority to administer certification process, develop and revise forms, review certification information, and order remedial action if necessary.
Covered 911 Service Providers

- Any entity that:
  - **Provides 911, E911, or NG911 capabilities** such as call routing, automatic location information (ALI), automatic number identification (ANI), or the functional equivalent, directly to a public safety answering point (PSAP)
    - Does not include PSAPs or governmental authorities
    - Does not include communications providers that originate 911 calls where another provider delivers those calls and ALI/ANI to the appropriate PSAP
  - **Operates a central office that directly serves a PSAP**
    - A central office *directly serves a PSAP* if it hosts a selective router or ALI/ANI database, provides equivalent NG911 capabilities, or is the last service-provider facility through which a 911 trunk or administrative line passes before connecting to a PSAP.
Certification Elements: Critical 911 Circuit Diversity

- A Covered 911 Service Provider shall certify whether it has, within the past year:
  - Conducted diversity audits of critical 911 circuits or equivalent data paths to any PSAP served
    - Critical 911 circuits defined as facilities that originate at a selective router or its functional equivalent and terminate in the central office that serves a PSAP, including links to ALI/ANI databases
  - Tagged critical 911 circuits to reduce the risk of inadvertent loss of diversity between audits
  - Eliminated all single points of failure in critical 911 circuits or equivalent data paths serving each PSAP.
    - If not possible to eliminate single points of failure, the provider must include a brief explanation of alternative measures or ongoing remediation, the date by which it anticipates remediation will be completed, and why it believes those measures are reasonable under the circumstances
    - May respond that this section is not applicable if a provider does not operate any critical 911 circuits (e.g. provides a PSAP’s 10-digit administrative lines but not its selective router(s) or location database(s))
Certification Elements: Central Office Backup Power

- With respect to any central office that directly serves a PSAP, a Covered 911 Service Provider shall certify whether it:
  - **Provisions backup power** through fixed generators, portable generators, batteries, and/or fuel cells to maintain full-service functionality, including network monitoring capabilities:
    - For at least **24 hours** if the central office directly serves a PSAP
    - For least **72 hours** if the central office hosts a selective router
  - **Tests and maintains** backup power equipment in accordance with the manufacturer’s specifications
  - Designs backup generators for **fully automatic operation** and for **ease of manual operation**, when required
  - Designs, installs, and maintains each generator in any central office that is served by more than one backup generator as a **stand-alone unit** that does not depend on the operation of another generator for proper functioning
  - May certify **alternative measures** or **non-applicability**, but must provide a brief explanation.
Certification Elements: Diverse Network Monitoring

- A Covered 911 Service Provider shall certify whether it has, within the past year:
  - Conducted diversity audits of its aggregation points for network monitoring data in each 911 service area and of the monitoring links between such aggregation points and its network operations center(s) (NOCS)
  - 911 service area defined as the geographic region in which a Covered 911 Service Provider operates a selective router or the functional equivalent
  - Implemented physically diverse aggregation points for network monitoring data in each 911 service area and physically diverse monitoring links from such aggregation points to at least one NOC
    - If not possible to implement physically diverse aggregation points or monitoring links, the provider must include a brief explanation of alternative measures or ongoing remediation, the date by which it anticipates remediation will be completed, and why it believes those measures are reasonable under the circumstances
    - May respond that this section is not applicable if a provider does not operate a selective router or the functional equivalent (i.e. no “911 service area” to monitor)
Certification Information

- Materials submitted with a certification will be presumed confidential to the extent that they consist of:
  - Descriptions and documentation of alternative measures
  - Information detailing specific corrective actions
  - Supplemental information requested by the Commission or Bureau

- Fact of filing or not filing a certification and aggregated responses on the face of form will not be treated as confidential.

- Each certification must be submitted under penalty of perjury by a corporate officer with supervisory and budgetary authority over network operations in all relevant service areas.

- Service providers encouraged to share relevant circuit audit records with PSAPs on reasonable terms that protect confidentiality of proprietary information.
Status and Effective Dates

- Rules that do not require OMB approval (e.g. “reasonable measures” requirement) took effect **February 2014**.

- **Initial and annual certifications** involve a collection of information that must be approved by OMB.
  - OMB approval expected approximately **September 2014**.
  - Initial certification of at least 50-percent compliance with each element will be due **mid-2015**
  - Full annual certifications due **every year thereafter**

- **Petition for Reconsideration** filed February 2014 involving certification obligations of Next Generation 911 (NG911) providers and responsibility for auditing facilities leased from third parties
  - Petition is still pending
  - Comments should be filed in **PS Docket Nos. 13-75 and 11-60**