NRSC BULLETIN No. 2007-1
January 2007

Background
During the NRSC's June 2006 quarterly public meeting, the FCC expressed concern regarding the "major" E-911 outages and asked the NRSC to investigate. Major E-911 outages are defined by the FCC as affecting 300,000 or more users for 60 minutes or more.

The NRSC recently completed a study of major E-911 outages reported to the FCC during the period of January 2005 through July 2006. The NRSC examined 73 major outage reports (14% of total E-911 outages). Nearly half (49%) of the major outages were due to procedural errors. The study showed that once these errors were identified they were quickly corrected. For the remaining outages there were a number of contributing causes that might have prevented or mitigated the impact of these outages. These causes indicate a need for:

- Improvement in engineering, installation, and documentation of E-911 assets
- Improvement in monitoring and maintaining E-911 assets
- Improvement in growth and change activities concerning E-911 assets

Suggested Action
As a result of its review, **the NRSC urges service providers and network operators to review the following industry best practices with the aim of considering their implementation within their operations:**

7-7-0510 Network Operators, Service Providers and Equipment Suppliers should, by design and practice, manage critical Network Elements (e.g., Domain Name Servers, Signaling Servers) that are essential for network connectivity and subscriber service as critical systems (e.g., secure, redundant, alternative routing).

7-7-0571 Network Operators, Service Providers and Property Managers should emphasize the use of Methods Of Procedures (MOPs), vendor monitoring, and performing work on in-service equipment during low traffic periods.

7-7-0590 Network Operators, Service Providers and Equipment Suppliers should prepare Methods of Procedure (MOPs) for core infrastructure hardware and software growth and change activities as appropriate.

7-7-0693 Network Operators, Service Providers and Property Managers should emphasize the use of Methods of Procedures (MOPs), vendor monitoring, and performing work on in-service equipment during low traffic periods.

A complete copy of the Major E-911 Outages Study Group Report may be found at:
http://www.atis.org/NRSC/Docs/NRSC_E911_study_status_report_final.pdf

All industry Best Practices may be found on the NRIC web site at:
http://www.bell-labs.com/USA/NRICbestpractices/