Michigan 911 Outage Guidelines

Purpose:

This document is meant to be a guide for use before, during, and after a 911 outage to prepare, respond, and follow-up to a 911 outage event. Because there may be various parties involved in any outage, it is important that all parties potentially involved be familiar with this protocol. This includes PSAP staff of all levels, local emergency management coordinators, communications network providers and technicians, command and response personnel at the Michigan State Police Operations Desk (MSP Ops Desk), and other parties who may be involved.

While this protocol has been established to be a voluntary best practice, there are pieces that are subject to the state and federal regulations (such as provider outage reporting to the FCC and PSAPs' use of LEIN).

Definitions:

911 Outage or Service Interruption is defined as:

The loss of 911 connectivity from any point in the communications network (wireless, wireline, or IP) supporting or delivering 911 services that:

- Interrupts the consumer's access to 911
- Limits the ability to initiate a 911 connection
- Disrupts any part of the 911 connection process

Outages can stem from a myriad of occurrences, including weather, equipment failure, and human error. While this is not an all-inclusive list, examples of an outage can be:

- The loss of both commercial power and generator power at a PSAP.
- The disconnection or disabling of a circuit within an IP or legacy 911 network (for instance, a contractor fails to notify Miss Dig and cuts a bundle of fiber or a driver strikes a pole with a car damaging lines and/or fiber).
- The loss of a tower or switch in the cellular network (i.e. a power UPS fail).
- The loss of connectivity from an IP-based system into a legacy system (i.e. a lightning strike or a power surge).

Partial 911 outage:

A partial outage is defined as a loss of 911 service within a limited geographical area, within a PSAP service area, or a loss of service with only a specific provider (such as an individual wireless or cable/VoIP provider).

Non-emergency phone service outage:

A non-emergency phone service outage is defined as a loss of service to PSAP non-emergency lines and numbers.

A. PSAP-Initiated Notice of E911 Service Interruption

These are best practices that can be followed by the PSAP at the onset of the outage. There may be other emergency circumstances occurring simultaneously with a 911 outage, such as severe weather, mass casualty incident, natural or manmade disaster, etc. Proper prioritization of the circumstances should be based on the situation and acted upon accordingly.

It is important to establish and test PSAP back-up systems and procedures in advance. All PSAP staff should be trained and versed in their PSAP's protocol or outages prior to outages occurring.

1. Contact should be made with the appropriate 911 Resolution Center immediately.

    Frontier 911 Resolution Center – 877-245-3511
    AT&T 911 Emergency Resolution Center – 888-424-3911
    Peninsula Fiber Network – 888-564-8881

Even if the outage is not the result of a service provider outage, the service provider may need to be advised for the purposes of needed reroutes or other impacts to the system the outage may have.

If the outage is affecting non-emergency lines, contact may need to be made with another service provider if appropriate. Local procedures should include these contacts.

2. Initiate and follow local PSAP policy. This may include:

    * Creating an action plan based on communication capabilities.
        o Will all 911 calls need to be transferred to another PSAP?
        o Will the public need to be provided any specific instructions?
        o Will additional staffing be needed? Will staff need to be sent to another PSAP?
    * Notifying or manning back-up PSAPs.
    * Contacting PSAP management.
    * Alerting local public safety responders. This may include the need to stage public safety personnel at stations for public access.
    * Notice to the public.
    * Activating media/social media and other alerting systems (i.e. EAS, EMnet, Media page, public notification alert systems such as Nixle and Code Red).

    * Creating a press release including public instruction:

        Examples:

        "911 service in ABC County [or specific area covered] is temporarily out of service due to an equipment failure (phone line cut, fiber cut). Persons with emergencies should travel to the closest police station, local fire, or EMS stations where emergency personnel will be standing by."

> *"911 calls in ABC County [or specific area covered] are temporarily being answered by DEF County 911 due to a fiber cut at X and Y street. If you need to reach ABC County directly, you are asked to dial 123-456-7891.."*

> *"ABC Wireless customers within ABC County are experiencing problems with dialing 911. ABC 911 can be reached at 123-456-7891 or customers can dial 911 from a landline."*

Agencies with proper credentials can also request that announcements be made through NOAA, IPAWS, and CMAS alerting. This responsibility may fall to the local emergency management coordinator depending on the PSAP.

3. Making notification to other PSAPs outside the immediate 911 service area may be needed. This could be not only for assistance and overflow but to provide notification of potential problems outside of the area. The PSAP should use the means established by local policy and which are most feasible and effective in the circumstances. This may include:

- CAD to CAD
- Radio
- Fax
- Email
- Phone service that is not affected such as a non-emergency landline, wireless, or satellite phone
- LEIN

LEIN may be a PSAP to PSAP message or via the statewide PSAP message through LEIN administrative message by using the four-letter mnemonic of the PSAP.

Use of the LEIN mnemonic code and engagement of the MSP Ops Desk

The PSAP mnemonic code will send out a statewide message to all the PSAPs in Michigan as well as the Michigan State Police Operations Desk (LEIN mnemonic ELOP). The LEIN message through the PSAP mnemonic should be succinct and contain as much information about the situation as possible. This should include:

a. Brief description of the current circumstances.
b. Identification of back-up PSAP(s) and/or request for back-up PSAP(s) needed.
c. Method to contact PSAP during the outage.
d. Estimated time of duration (if possible).
e. Any other information relevant to the outage that PSAPs and the MSP Ops Desk may need to be aware of. Examples of this may include a request for additional resources, names of departments, or personnel that may need to be contacted on behalf of the PSAP.

If a PSAP is unable to do this through the LEIN system, or another mode of notice is more feasible, contact may be made to the MSP Ops Desk via telephone at 517-241-8000 or by email at OperationsLts@michigan.gov. Please be mindful that messages sent via email may experience a delay in receipt and response.

Once the MSP Ops Desk is engaged, it should be updated with information as it is received and all changes in status, including 911 back in service, should be reported as close to real time as possible.

In addition to these guidelines, the use of PSAP mnemonic through LEIN must also follow all the rules and laws that govern LEIN use. (See your LEIN TAC for further direction on these requirements.) Unauthorized use of the PSAP mnemonic is not permissible and misuse falls under all the applicable LEIN rules and statutes.

Additional notes:

Because 911 outages can occur in various forms, durations, and in various geographical proportions, the PSAP LEIN notification mnemonic can ONLY be sent and received as statewide broadcasts. PSAPs not affected by the outage should be aware that they may not need to take any action, but should be aware of the circumstances in service areas that may affect them.

When a PSAP is under outage circumstances and other PSAPs have been notified, ***unless otherwise requested by that PSAP (or its backup PSAP), only contact that is <u>necessary</u> should be made with the PSAP experiencing the outage until further notice.***

B. Communication Provider-Initiated Notice of E911 Service Interruption

A communications provider whose network is affected by an outage must communicate the outage directly to the affected PSAP(s).

Contact can be made with the Michigan State Police Operations Desk (MSP Ops Desk) for a request for LEIN notification to the affected agencies using the mnemonic PSAP. Contact the MSP Ops Desk via telephone at 517-241-8000 or by email at OperationsLts@michigan.gov. Please be mindful that messages sent via email may experience a delay in receipt and response if using email contact. A communication provider should also be aware that interruption to service may also affect a PSAP's connection to LEIN so this method for contact must not be the primary method.

If there is a 911 Outage or Service Interruption or Partial 911 Outage that interrupts the consumer's access to 911, reports by the communications provider to the MSP Ops Desk may be made based on that communication provider's internal policies. This includes determining 911 service outage parameters and notification systems.

Other methods to notify the MSP Ops Desk of an outage may be considered, but must have prior approval from the State 911 Office and the MSP Ops Desk. These methods include, as an example, automated notification systems delivering messages through email and/or phone communications.

The communications provider's information to be disseminated through LEIN or provided to the PSAP directly should include:

    a. The areas affected by the outage.
    b. The nature and cause of the outage.
    c. Status, including repair progress and expected time of completion.
    d. Name and contact information for the person/facility serving as lead on the issue (this is in the event of media inquiries, shift changes, or other contact that may need to be made in regard to the issue).
    e. The name and direct contact information for the person with the communications provider who is managing the outage incident.
    f. Incident/trouble ticket number, if appropriate.

The communications provider should keep the affected PSAP and MSP Ops Desk (if contact with MSP Ops Desk has been initiated) updated with all relevant information as soon as it is received including: all changes in status, other locations that may be affected, estimated time of restoration of service, and confirmation of return of 911 service. All information should be reported as close to real time as possible.

If the affected PSAP and/or the MSP Ops Desk determine that another intermediary for communication is more feasible, then that message will be relayed to the provider.

C. After service is restored:

1. Restoration notices must be sent to those notified of the outage as soon as possible. These can include:
    a. PSAP Management.
    b. Back up PSAPs and any mutual aid involved.
    c. Public Notification - All systems utilized for initial notification (i.e. EAS, EMnet, Media page, and public notification alert systems such as Nixle and Code Red) as well as any additional media outlets that may have been engaged during the outage.
    d. All affected public safety agencies and emergency personnel.
    e. MSP Ops Desk (ELOP), if notified.
    f. A LEIN message to the PSAP mnemonic if an earlier message was sent.

2. After normal operations have been restored, the PSAP manager should file a report of the outage as soon as possible with the FCC. This can be done online through the FCC web page at: **www.fcc.gov/general/public-safety-support-center**.

3. After normal operations have been restored, the PSAP manager should also file a report of the outage as soon as possible with the State 911 Office. This can be done online through the SNC web page at: **www.michigan.gov/snc**.