NCOEMS Emergency operations Plan (NCOEMS – EOP)
APPENDIX 5: Communications and information management systems
October 2023

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Purpose

To provide NCOEMS personnel responsible for staffing the SEOC ESF8 Desk, Support Cell, and other operational sites, a more complete understanding of the purpose and use of the various information and communication systems available and actions necessary to maintain these systems and the capabilities they provide in the event of interruptions that impact their use.

Scope

This document identifies essential NCOEMS communications functions, the supporting communications platforms, describes the basic purpose, use, and access to each communication and information management system, and procedures and plans to maintain the continuity of NCOEMS communications functions despite disruptions to the platforms and/or systems on which they depend.

Communications Functions

These are the essential communications functions that NCOEMS personnel conduct during disaster response as well as day-to-day activities. These require communications platforms and the systems they support to be effective and timely. Functions include:
1. NCOEMS ESF8 priorities include planning, response, and decision points.
2. Requesting, notifying, and mobilizing resources.
3. Interacting with Healthcare Coalitions and healthcare partners.
4. Sharing information with partner State agencies.
5. Sharing information with Federal agencies.

Communication Platforms

These are the means through which the essential communication functions are conducted. Platforms can be hardware or software based. Platforms include:
1. Voice Communications
    a. Cellular or landline telephone systems.
    b. Internet based calling methods.
    c. Radio
        i. Public safety bands (VIPER)
        ii. Amateur bands
    d. Face to Face
2. Data Communications
    a. Internet (Terrestrial based connections).
    b. Internet (Cellular based connections).
        i. Commercial broadband
        ii. Public Safety broadband
    c. Satellite
        i. Phone / Push-to-talk (MSAT)
    d. Radio – Amateur radio (AUXCOM)
        i. Information sharing via access to the internet via radio frequencies (Winlink)

Communication and Information Management Systems

These are the systems that NCOEMS personnel interface with directly to carry out their assigned communications functions. Each system, their purpose(s), use, and access are summarized below. The

use of these systems is dependent on the integrity of either the voice-based or data-based platforms that support them. If use of any of these systems is lost, refer to **Continuity of Communications Platforms and Systems** section below to regain or identify alternative communication methods.

Telephone Communication Systems

Telephone and FAX resources available for use at the SEOC and Support Cell are listed below.

a. *Voice-Over-the-Internet-Protocol (VOIP) telephones - SEOC:*
   i. Incoming calls use telephone: (919) 825-2427
   ii. Outgoing calls use telephone: (919) 825-2426
b. *Voice-Over-the-Internet-Protocol (VOIP) telephones – Support Cell:*
   i. All calls use telephone: (919) 855-4688
c. *Facsimile (FAX) telephone - SEOC:*
   i. FAX: (919) 733-7554 (in Operations Center)
d. *Facsimile (FAX) telephone – Support Cell:*
   i. FAX: (919) 733-7021 (in Room 129)
e. *NCOEMS-Assigned SMART Phones:*
   i. See OEMS Directory on OwnCloud (DHHS – SDO Resources – OEMS Telephone Listings)
f. *NCOEMS Conference Line:*
   i. Dial-in: (919) 233-7092
g. *NCOEMS Satellite Telephones:*
   i. This emergency telephone/radio system is provided through Light Squared. These phones allow for communication with regional offices and disaster scenes where satellite units have been deployed when the power is out, or other communications systems fail. Unit in the Wright Building Communications Room (Room 124) is active, regionally based units are not live and must be notified with activation instructions.

E-mail Communication Systems

Staff should utilize the DHHS e-mail accounts through Microsoft 365 as primary means for e-mail communication. https://outlook.office365.com/mail/inbox

Information Management Systems

Information Management systems available for use at the SEOC and Support Cell include the following.

a. *CONTINUUM:* Primary database for NCOEMS Regulatory components to include EMS Systems, EMS Agencies, Personnel, EMS Credentials, EMS Vehicles, EMS Educational Institutions, EMS Patient Care Reports, EMS Compliance components and one-way email communication to EMS. https://continuum.emspic.org
b. *ICAM SYSTEM:* Inventory Control Asset Management (ICAM) system is used for inventory and resource tracking of State Medical Response System (SMRS) equipment and supplies. http://ncoems.icamservice.com/login
c. *MICROSOFT TEAMS:* Workplace hub for team collaboration, chat, videoconferencing, and file storage. The program is hosted locally on NCOEMS assigned laptops and SMART phones.
d. *MULTI-HAZARD THREAT DATABASE (MHTD):* GIS application providing information on all North Carolina Division of Health Service Regulation (DHSR) licensed facilities (hospitals, nursing homes, mental health, intermediate care facilities, home health, long term, and

adult care facilities). Used for gathering facility info, mapping facilities, weather, and hazards. https://www.ncmhtd.com/oems/

e. *NCSPARTA – WEBEOC:* Web based interface between the State EOC and State Emergency Response Team (SERT) partners. Primarily used for emergency management operations, maintaining situational awareness, coordination of ESF8 resource requests, reporting (IAP, situation reports, ICS forms) and file library for response / recovery documents. https://www.ncsparta.gov/eoc7/default.aspx

f. *NORTH CAROLINA TRAINING EXERCISE RESPONSE MANAGEMENT SYSTEM (NCTERMS):* Web based interface between the State EOC and SERT Partners for response team rostering, deployment and tracking during statewide activations. Database for SERT training and exercise offerings as well as providing registration with reporting utilities. https://terms.ncem.gov/TRS/

g. *OWNCLOUD:* A secure cloud service used primarily as a file library for the storage of SMRS emergency response information (e.g., plans, guidance documents, etc.). https://www.ncmhtd.com/owncloud/index.php/login

h. *READYOP:* A secure cloud service used primarily for situational reporting, daily activity logs, customized information gathering, two-way communication, and roster of SMRS personnel and partners by organization with contact information. SMRS Mission Ready Package information and availability status. Hospital diversion status board updates. https://nc.readyop.com/

Radio Communication Systems – VIPER Medical Network (VMN)

These systems are used to monitor and communicate with North Carolina SERT Partners and SMRS organizations, and other organizations utilizing the VIPER (Voice Interoperability Plan for Emergency Responders) radio system and as a redundant communication system in the event of the loss of voice-based and/or data-based communications platforms due to a general commercial communications system failure. For additional information:
https://www.ncmhtd.com/owncloud/index.php/s/NPwXglQe1FQgEOy

The following VIPER-compatible radio equipment will be available and/or can be requested to fulfill operational needs:

1. Portable (hand-held) Radios
   a. Incoming/outgoing calls for NCOEMS set one radio to **VMJ59101** talk group – (official communications)
   b. Incoming/outgoing calls for NCOEMS set one radio to **OEMS SECURE** talk group – (internal communications, AES-256 Encrypted)
2. VMN Reference Information Guide
   a. For VMN radio channels, talk group, and use guidance. Refer to: https://www.ncmhtd.com/owncloud/index.php/s/NPwXglQe1FQgEOy
   b. *Talk Groups – Purpose and Use:*
      i. External ESF8 Coordination - SEOC ESF8 Desk (SMRS Disaster) to Partner Agency/Unit:
         1. Find VMN channel of agency in the VMN Reference Information Guide
      ii. Internal NCOEMS Coordination/Conference - NCOEMS Staff to NCOEMS Staff:
         1. **OEMSSTAFF** and **OEMS SECURE**

      iii.   ESF8 Operational Assignments: Request for these talk groups should be sent to the ESF8 desk for assignment. If any communications resources are activated (contingency or assigned), the ESF8 desk or designated comms personnel, will produce an ICS205 form for each operational period. Each ICS205 should be shared with the ESF2 desk for situational awareness and conflict resolution. Initial VIPER Medical Network (VMN) talk groups available for assignment are:

1. **VML79600**
2. **VML79601**
3. **VML79700**
4. **VML79701**
5. **VML79800**
6. **VML70801**

   c. *Redundant Communication with the ESF8 Desk:* During disaster response, primary communication methods to contact the ESF8 Desk will be via telephone or email. In the event of a commercial communications failure, resulting in the inability to contact the ESF8 desk, contact the NCEM 24-Hour Watch Center on VIPER talk group "**EM EOC**" located in the VIPER "Statewide" zone. Advise the watch center that you are experiencing a commercial communications failure and need to contact the ESF8 Desk. Once advised by the watch center, the ESF8 Desk will contact you on the "**EM EOC**" talk group and advise you which VIPER Medical Network (VMN) talk group to utilize for direct communications with the ESF8 Desk (typically this will be "**VML79501** Medical Statewide Disaster Contact"). You will then switch to this ESF8 assigned talk group and contact the ESF8 Desk with your traffic.

Continuity of Communications Platforms and Systems

In the event that the ability of NCOEMS personnel to fulfill assigned communications functions are interrupted by disruptions to communication platforms and essential systems, the following procedures and plans will be utilized to attempt to restore and maintain these functions. For additional information regarding response to disruptions related to cybersecurity issues, refer to **APPENDIX B1 NCOEMS Cybersecurity Incident Response Plan (CIRP)**.

Single Platform Disruptions - Platforms affected: Voice or Data

Voice Communications: If there is a loss of voice communication(s) pathway noted above, they may present themselves in the following manner.

1. Loss of cell phone service.
   a. Users cannot use a cell phone to make a phone call and note "No Service" on their device.
   b. Voice networks are overwhelmed, and user receives an "All Circuits are Busy, Please Try Again."
2. Loss of landline telephone service.
   a. Users cannot access landline dial tone.
3. Loss of radio system coverage.
   a. The primary radio system is in a failure state:
      i. Site Trunking Failsoft

        ii.   Complete system failure

ACTIONS
- Report any outage to the Communications Unit (919-302-0794 or Dale.Sutphin@dhhs.nc.gov) if greater than 1 hour in length.
- If personnel are engaged in activation activities, they should notify ESF8 lead of the outage immediately.
- For cellular devices, users should attempt to turn on their "Wi-Fi Calling" feature and re-attempt the call.
- For overwhelmed networks, users should attempt Wireless Priority Service (WPS) or Government Emergency Telephone System (GETS) platforms.
- Radio system coverage outages should be reported to the communications unit for interaction with North Carolina State Highway Patrol Technical Services Unit. (NCSHP TSU).
- Switch radio off the affected network, if capable, and attempt contact.

Data Communications: If there is a loss of data communications pathway(s) noted above, they may present themselves in the following manner.
1. Loss of access to the internet and therefore common information sharing platforms.
   a. A user cannot access the internet due to a failure of hardware or local internet provider.
   b. The infrastructure has become damaged.
   c. A cyber event has occurred.
   d. There is a prolonged period of no power.

   ACTIONS
   - Attempt to connect via another means (MiFi, Hotspot, Wi-Fi)
   - Attempt to contact via landline telephone.
   - Attempt to contact via mobile radio system (VIPER).
   - Attempt to contact via satellite phone.
   - Attempt contacts via amateur radio.
2. Internet access not interrupted but with loss of access to information sharing and/or resource coordination pathways.
   a. Users cannot access government networks for email/messaging or file sharing.

   ACTIONS
   - Report any outage to the DHHS IT (via DHHS Service Portal- https://ncgov.servicenowservices.com/sp_dhhs/ , telephone- 919-855-3200
   - Utilize alternate communications pathways until the network is restored.
   - If SDO, notify admin on call.
   - If personnel are engaged in activation activities, they should notify ESF8 lead of the outage immediately.

   b. Internet access not interrupted but with loss of any of the following information sharing and resource coordination platforms: ReadyOp, OwnCloud, WebEOC, NC TERMS, Continuum, or iCAM.

   ACTIONS

- Notify HPP Systems Support Team (via email: HPPSystemsSupport@dhhs.nc.gov or phone 919-302-0794 or 919-971-7477
- Utilize alternative information sharing platforms.
- Utilize alternative communication pathways.
- If SDO, notify admin on call.
- If personnel are engaged in activation activities, they should notify ESF8 lead of the outage immediately.

Multi-Platform Disruptions - Platforms affected: Voice and Data
In the event of a multi-platform communications disruption your ability to communicate will be extremely difficult and/or not available at all. Immediate steps to attempt **Primary, Alternate, Contingent and Emergency (PACE)** plan contact should be taken based on the equipment available.

NCOEMS ESF8 PACE Plan: PACE plans can be specific based on situation, communications function, or communications platform and current incident missions at hand. All situations are different; therefore, this plan is scalable and adaptable. Personnel should use their best judgement in always maintaining continuity of operations. It is important that this PACE plan is exercised frequently. This plan will ensure that communications with essential personnel can be maintained should primary communication methods become compromised. The table below shows the plan for various situations.

NCOEMS ESF8 Basic PACE Plan

Essential Function	**P**rimary *Routine, most effective*	**A**lternate *Another common method with limited impact*	**C**ontingent *Method not as convenient or efficient, but available*	**E**mergent *Method of last resort that may incur delays*	Notes
Routine information sharing	Email	Cellular Telephone (Voice or Text)	Web based application (Voice or Data)	Land mobile radio (VIPER)	Day to day activities
SDO Operations	Cellular Telephone (Voice or Text)	Email	Web based application (Voice or Data)	Land mobile radio (VIPER)	This includes SDO notification communications and admin on call communications
Response Activations	ReadyOp/WebEOC	Email	Cellular Telephone (Voice or Text)	Land mobile radio (VIPER)	This includes general information, resource requests and other actionable/ICS requirements
OEMS/DHHS Leadership- Command a	Face to Face	Cellular Telephone (Voice or Text)	Web based application (Voice or Data)	Land mobile radio (VIPER) - Encrypted Talk Group	This includes situation reports and critical/sensitive notifications