ESSENTIAL SUPPORT FUNCTION # 2

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Communications

- ESF Coordinator
    - The Emergency Management Coordinator is the suggested top official with management oversight responsibility for the incident with this ESF. The ESF Coordinator has ongoing responsibilities throughout the preparedness, response, and recovery phases of incident management and support. ESF Coordinator's duties during an emergency may be delegated. The role of the ESF Coordinator is carried out through a "unified command" approach as agreed upon collectively by the designated primary agencies and as appropriate, support agencies.

- Primary Agency(s)
    - A primary agency is a jurisdiction agency with significant authorities, roles, resources, or capabilities related to this ESF. A jurisdiction agency designated as the ESF primary agency serves as Incident Commander under Iowa statues to accomplish the ESF mission. More than one agency may share this ESF and have separate specific responsibilities, but the primary agency should be responsible for pre-incident planning of fixed sites within their jurisdiction.
    - Humboldt County Law Enforcement Center (PSAP)
    - Iowa Statewide Interoperable Communications System Board (ISICS)
    - Joint 911 Service Board

- Support Agency(s)
    - Support agencies are those agencies with specific capabilities or resources that support the primary agency in executing the mission of the ESF.
    - City/ County/ State/ Others:
        - City County
            - Humboldt County Emergency Management
            - Humboldt County Sheriff's Department
            - Humboldt County EMS
            - Bode Volunteer Fire and Rescue Department
            - Bradgate Volunteer Fire Department
            - Gilmore City Fire and EMS Department
            - Humboldt Fire Department
            - Humboldt Independent Newspaper
            - Humboldt Police Department
            - I Am Responding
            - KHBT Radio
            - Livermore Volunteer Fire Department
            - Ottosen Volunteer Fire Department

        - Renwick Volunteer Fire and EMS Department
        - Thor Volunteer Fire Department
    - State and Federal Support Agencies
        - Alert Iowa
        - Integrated Public Alert & Warning System
        - Iowa Department of Public Safety
        - Iowa Homeland Security & Emergency Management
        - Iowa National Guard
        - Department of Defense
        - Department of Homeland Security
        - Federal Communications Commission
        - National Oceanic and Atmospheric Administration
        - National Weather Service
        - NEXIL Warning System
    - Other Communication Organizations
        - Cellular Telephone Vendors
        - Landline Vendors
        - Electronic Engineering

1. Introduction

A. Purpose

Emergency Support Function (ESF) 2 – Communications provides for the planning of coordination and support services in response to emergencies in Humboldt County. ESF 2 supports the restoration of the communications infrastructure, facilitates the recovery of communication systems, and coordinates communications support. ESF 2 also provides communications support to local governments and first responders when their systems have been impacted.

During emergencies, 911 emergency communications will coordinate equipment and services that are available within the county in support of the Incident Command and Humboldt County Emergency Operations Center. This section should assist in developing guidance and procedures to ensure accurate and timely information on which to base decision and response activities.

B. Scope

1) ESF 2 coordinates Humboldt County actions to assist industry by identifying critical infrastructure and priorities in restoring the public communications infrastructure and to assist State, tribal, and local governments with emergency communications and restoration of public safety communications systems and first responder networks.
2) ESF 2 provides communications support to the Incident Command Post and the Humboldt County Emergency Operations Center.
3) For incidents that are primarily cyber in nature, the Cyber Incident Annex is used and ESF 2 supports responses to cyber incidents as directed.

2. Policies

A. Purpose

The Incident Command System (ICS) will be used as the basis for on-scene management of any private sector resources. Local and mutual aid resources will be exhausted before requesting assistance from state resources. Local entities are encouraged to maintain their own public and private partnerships so they may acquire private sector resources when necessary.

B. Local

1) In accordance with the National Incident Management Systems policy, plain language will be used in all radio traffic during emergencies or disasters. Coded language should not be used.
2) Primary and support agencies shall be responsible for maintenance and upgrades of their owned systems and infrastructure. Each agency should prepare procedures to assure viable continuity to maintain and replace essential services.
3) Primary and support agencies should participate in drills and exercise to test and improve plans and procedures.
4) Agencies should maintain updated emergency contact lists of essential personnel. A resource list should be maintained that identifies all equipment including equipment that meets standards of National Incident Management System compliant resource typing.

C. County

1) Joint 911 Service Board. In accordance with Iowa Code Section 34A.3, the board of supervisors of each county shall maintain a Joint 911 service board. The joint 911 service board shall maintain an enhanced 911 service plan encompassing at minimum the entire county, unless an exemption is granted by the program manager permitting a smaller 911 service area.
2) Chapter 28E agreement as alternative to joint 911 service board. A legal entity created pursuant to chapter 28E by a county or counties to jointly plan, implement, and operate a countywide, or larger, enhanced 911 service system may be substituted for the joint 911 service board by agreement of the parties entitled to voting membership on a joint 911 service board or agreement of the members of a joint 911 service board.
3) An alternative chapter 28E entity has all of the powers of a joint 911 service board and any additional powers granted by the agreement. As used in this ESF, "joint 911 service board" includes an alternative chapter 28E entity created for that purpose.
4) Participation in joint 911 service board is required. A political subdivision or state agency having a public safety agency within its territory or jurisdiction shall participate in a joint 911 service board and cooperate in maintaining the 911 service plan.

D. State

1) Iowa Statewide Interoperability Communications System Board. During the first session of the 82nd General Assembly, the Iowa Legislature established

the Iowa Statewide Interoperability Communications System Board. 2007 Iowa Acts, House File 353, created Iowa Code Section 80.28, which addresses the membership of the Board, and Section 80.29 identifies board duties.

2) The Iowa Statewide Interoperable Communications System Board was established to develop, implement, and oversee policy, operations, and fiscal components of communications interoperability efforts at the state and local level, and coordinate with similar efforts at the federal level, with the ultimate objective of developing and overseeing the operation of a statewide integrated public safety communications interoperability system.
3) For the purposes of section 80.28 and section 80.29, “interoperability" means the ability of public safety and public services personnel to communicate and to share data on an immediate basis, on demand, when needed, and when authorized.
4) Iowa Administrative Code section 605, Emergency Management, Chapter 10 (Enhanced 911 Telephone Systems) provides for the orderly development, installation, and operation of enhanced 911 emergency telephone systems. This applies to each joint 911 service board or alternative 28E entity as provided in Iowa Code chapter 34A and to each provider of enhanced 911 services.

E. Federal

1) The Cyber Incident Annex outlines the provision of Federal cyber incident response coordination among the Federal departments and agencies and, upon request, State, tribal, local, and private-sector entities in response to any incident induced by cyber means (e.g., significant cyber events, technological emergencies, and Presidentially declared major disasters and emergencies that threaten, disrupt, or cripple communications and information technology services or degrade other essential infrastructures).
2) The Homeland Security Act of 2002, as amended by the Post-Katrina Emergency Management Reform Act, establishes an Office of Emergency Communications within the Department of Homeland Security. This office is responsible for coordinating the establishment of a national response capability with initial and ongoing planning, implementation, and training for the deployment of communications equipment for relevant State, tribal and local governments, and emergency response providers in the event of a catastrophic loss of local and regional emergency communications services.

3. Authorities and References

A. Iowa Code - Chapter 29C - Emergency Management
B. Iowa Administrative Code - Chapter 605 - Emergency Management

4. Planning Situations and Assumptions:

A. Planning Situations

1) Severe weather watches and warnings are disseminated from the National
2) Weather Service to the Humboldt County Communications Center.

3) The National Weather Service also provides advisory, watch, warning, and other emergency products through the National Oceanic and Atmospheric Administration Weather Alert Radio System.
4) Iowa Public Safety area Warning Point 1, Des Moines, is responsible for dissemination of attack warnings and other types of warnings to Humboldt County Communications Center.
5) The communication center in Humboldt County will follow established procedures for coordinating and cooperating with elected officials in providing warning to the public.
6) Hazardous materials incidents may be reported by phone from the facility coordinator, from citizens using cell phones and calling 911, or from a first responder using a radio.
7) KHBT Radio station is the primary contact for this area and will back up flash flood warnings and tornado warnings through the Emergency Alert System.
8) Tornado sirens are activated in the event of a tornado warning.
9) Health and medical warnings are disseminated by the Iowa Department of Public Health in conjunction with the State Emergency Operations Center using the Health Alert Network.
10) The warning periods are dependent upon the type of incident, notification, and capability to identify the situation and assess the vulnerable areas potentially involved.

B. Assumptions

1) Assistance is available from the Iowa Homeland Security and Emergency Management duty officer or from the State Emergency Operations Center, if open.
2) If other counties are impacted, state and federal sources may provide temporary emergency communications assistance before, during, and after an emergency or disaster.
3) All radio and television stations in the area receive information from the National Weather Service and can broadcast directly to the public.
4) Effective communications networks exist in Humboldt County for disseminating information on natural and technological emergencies.
5) Warning needs and methods for the general public differ according to the type of hazard and mobility/language barriers exist for the population.
6) Outdoor warning systems are vulnerable to electric power failure and the majority of current outdoor warning systems do not have battery or generator back up. The unpredictability of some hazards will vary from adequate warning time to none at all.
7) Public Safety Answering Points and the Humboldt County Communications Center maintains adequate spare parts, resources, plans, and personnel to ensure operations during a disaster or emergency.
8) Generators may provide backup emergency power for 911, the Emergency Operations Center, and other critical infrastructure.
9) Telephony Companies have on-site generators at their central office facilities.

10) Emergency Alert Systems operates through local radio and television stations and is intended to provide jurisdictions with the means to disseminate prompt alerting and warning information to the public.
11) Iowa has 100% coverage of National Oceanic and Atmospheric Administration Weather Alert Radios - local Emergency Managers may access that infrastructure (via the National Weather Service) with emergency code to disseminate emergency messages of any type.
12) Private vendors can provide maintenance and emergency repair service on 24/7 availability to county owned or maintained communications facilities and equipment.
13) Private vendors can provide emergency repair for county owned computer equipment, internet connectivity, and telephone lines.

5. Concept of Operations

A. General

1) ESF 2 is organized consistent with the State Emergency Operations Center and the requirements of the National Response Framework and the National Incident Management System.
2) During an emergency or a large incident requiring local or State mutual aid assistance, ESF 2 will work with its support agency counterparts to coordinate and direct the use of any required communication assets.
3) During response and recovery periods, ESF 2 will continuously evaluate and analyze communications requests and will update assessments of the communications service situation and status of the affected area(s). ESF 2 will coordinate with ESF 5 – Emergency Management to meet anticipated demands or additional requirements.
4) 911 emergency communication staff plays a critical role in maintaining situational awareness and providing a Common Operating Picture for Incident Commanders and the Humboldt County Emergency Operations Center. Upon receipt of information, the communication center will refer to and automatically implement their established procedures. They will notify the appropriate personnel or agencies of the current emergency or pending emergency as indicated in departmental Standard Operation Procedures. All communications activities will be conducted in accordance with the National Incident Management System.

B. Internal Emergency Notifications / Special Needs

1) Redundant internal notification systems such as building-wide intercom, wireline phone messages, email notifications, and person-to-person communications for crisis management instructions (e.g., for full evacuation or relocation to a designated area of the building) have been established.
2) Notification systems can function in the event of a power failure. Although consideration is often given to lighting, public address or other notification systems sometimes are overlooked.
3) Employees with disabilities and special needs have been identified and procedures have been developed for keeping them informed during an

emergency. Some employees, for example, may be unable to see or hear workplace announcements.

4) Plans for evacuating employees with special needs, such as those in wheelchairs, have been developed.

C. Communications Security

1) Communications and Information Technology systems and facilities are protected from physical attacks.
2) Vital communications and Information Technology equipment is in protected locations with authorized access only.
3) Key facilities are secured with experienced personnel and/or video surveillance cameras.

D. Communication Repair and Restoration Priorities

1) 911 Emergency Communications
2) Public Warning Systems
3) Public Radio/Television Stations
4) Critical Facility non-emergency communication
5) General population communication

E. Communications and Continuity of Operations (COOP)

1) Operational processes. Individuals with key communications and information technology expertise and that are critical to the continuation of essential services in an emergency have been identified.
2) Communications response team. Teams that will act during and following an emergency with clearly defined employee roles and responsibilities.
3) Service provider contact lists. Contact information for information technology, internet service providers, and telecommunications services including circuit numbers, diagrams, and Telecommunication Service Priority codes (see below).
4) Priority services. If cost effective, three key federal programs may be used that allow for priority call queuing and the priority provisioning or restoration of key communications circuits. These programs are:
    a) The Telecommunications Service Priority Program. Provides organizations engaged in national security and emergency preparedness functions with priority provisioning and restoration of telecommunications services that are vital to coordinating and responding to crises. Telecommunications service vendors prioritize service requests by identifying those critical services. A telecommunications service user with a Telecommunications Service Priority assignment is assured of receiving service by the service vendor before a non- Telecommunications Service Priority service user.
    b) The Government Emergency Telecommunications Service Program. Provides emergency access and priority processing in the local and long-distance segments of the Public Switched Network. It is intended to be used in an emergency or crisis situation during which the probability of

completing a call over normal or other alternate telecommunication means has significantly decreased.

c) The Wireless Priority Service Program. Provides improved connection capabilities for a limited number of authorized national security and emergency preparedness cell phone users. In the event of congestion in the wireless network, an emergency call using the Wireless Priority Service will have priority queuing for the next available channel.

F. Redundant / Back-up Communications

1) Communication systems should be assessed in order to determine which systems and/or databases require redundancy.
2) Safe locations for communications systems that require redundancy and back-up configurations have been identified and established.
3) Scheduled periodic testing of systems to make sure they will work in an emergency is performed.
4) Specific vulnerabilities (i.e., power outages, high wind, flooding, etc.) that are most likely to occur in that specific region and provide resources to overcome them have been identified.
5) Resiliency, redundancy, and interoperability of the communication systems have been documented and tested.
6) Amateur Radio Emergency Services and Amateur Radio Civil Emergency Services radio operators have been identified and participate in planning, training, and exercises.

G. Communications System Diversity

1) The vulnerability of each communications service provider's infrastructure and facilities should be examined, and alternate providers identified.
2) All redundant communications systems are periodically tested.
3) Use of divergent routes, such as an office across the street that may be fed from a different cable or transformer have been established and can be accomplished in a discussion with your telecommunications service provider.
4) The Public Safety Answering Point provider should also consider arranging with another Public Safety Answering Point for backup and support in the event of total failure or abandonment of the Public Safety Answering Point.

H. Emergency / back-up power

1) Backup power should be activated automatically through the use of a power source having a low risk of being interrupted during a power outage to maintain continuity of operations (i.e. a power generator).
2) Power generators should be deployed at secure, elevated locations in cases where it is essential to maintain daily operations. Generators should be maintained by frequently tested under load.
3) Sufficient levels of fuel should be maintained and available at all times and periodically checked. When ordering a new installation, consider using dual fuel, such as Natural Gas and Diesel.
4) Power batteries should be available for critical communications in case the power generators fail to function. Consider installing solar power or fuel cells

where applicable. It is important to note that batteries are good for short-term outages but often do not power air conditioning equipment and do not adequately cool the other equipment (especially computers) which may be damaged or shut off when overheated.

5) Sources for obtaining fuel to refill generators should be identified.
6) Batteries for radios, flashlights, fire detectors and other communications and safety devices are working, charged, and ready. A daily, weekly, or monthly schedule for periodically testing them has been developed and implemented.
7) Additional supplies of batteries are kept at the worksite and at the alternative operational site. Rechargeable batteries should be tested as appropriate equipment and replaced periodically based on manufacturers' requirements.

I. Communications Equipment Testing
   1) Technician test equipment is available onsite when an emergency occurs. Test equipment works with both commercial and battery power when applicable.

6. Responsibilities and Organization

A. ESF 2 Coordinator
   1) Each coordinator has ongoing responsibilities throughout the preparedness, response, recovery, and mitigation phases of incident management. The role of the coordinator is carried out through a “unified command” approach as agreed upon collectively by the designated primary agencies.
   2) Responsibilities of the coordinator include:
      a) Pre-incident planning and coordination.
      b) Maintaining ongoing contact with primary and support agencies.
      c) Conducting periodic meetings and conference calls.
      d) Coordinating efforts with corresponding private-sector organizations.
      e) Coordinating activities relating to catastrophic incident planning and critical infrastructure preparedness as appropriate.

B. Primary Agencies
   1) When activated in response to an incident, the primary agency is responsible for:
      a) Conducting response operations within their functional area for an affected area.
      b) Providing staff for the operations functions at fixed and field facilities.
      c) Notifying and requesting assistance from support agencies.
      d) Managing mission assignments and coordinating with support agencies, as well as appropriate local jurisdictions.
      e) Working with appropriate private-sector organizations to maximize use of all available resources.
      f) Supporting and keeping all organizational elements informed of operational priorities and activities.
      g) Procuring goods and services as needed.
      h) Ensuring financial and property accountability for activities.

i) Planning for short-term and long-term incident management and recovery operations.
j) Maintaining trained personnel to support interagency emergency response and support teams.

C. Support Agencies
1) When activated in response to an event, threat, or incident, support agencies are responsible for:
a) Conducting support operations using their own authorities, subject matter experts, capabilities, or resources.
b) Participating in planning for short-term and long-term incident management and recovery operations.
c) Assisting in the conduct of situational assessments.
d) Furnishing available personnel, equipment, or other resource support as requested by the primary agency.
e) Providing information or intelligence regarding their agency's area of expertise.

D. Organization
1) The Iowa Department of Public Safety Communications Department will disseminate all warnings via the Homeland Security/Emergency Management Iowa Warning System telephone, the Iowa Public Safety radio, and the Iowa On-Line Warrants and Articles and Emergency Broadcasting Systems.
2) These systems provide the primary means of disseminating warnings and alerts, actual and exercise, over the Public Safety and Emergency Management Department Communications systems.
3) The responsibility to disseminate all warnings in Humboldt County rests with the Humboldt County Communications Center and local law enforcement with the capability to activate such warning systems.
4) The Humboldt County Emergency Communications Center is located at 430 Sumner Avenue, Humboldt, IA. In the event that location is not available, emergency communications will be provided at Humboldt County Emergency Management EOC at 426 Sumner Avenue, Humboldt, IA.

E. General assigned tasks
See page 11. Figure 1.

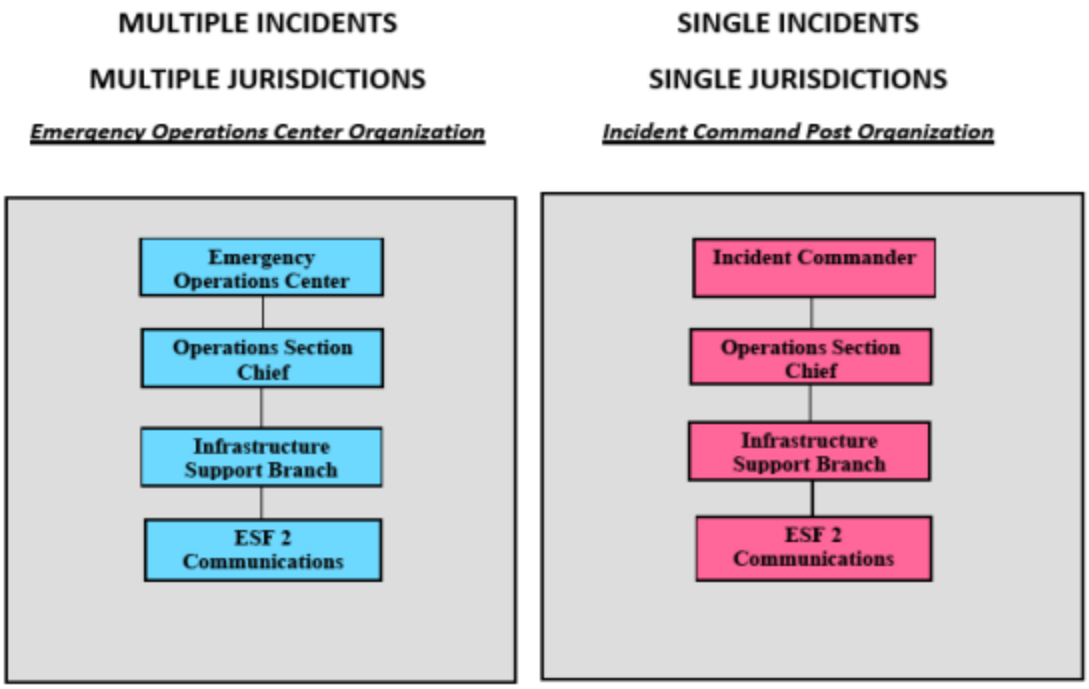

Figure 1: Coordination flow in the Emergency Operations Center and the Incident Command Post.