

# Emergency Support Function (ESF) # 2

## Communications & Information Technologies (IT)



### Preface

**Voice and data communications infrastructure may be severely compromised during a catastrophic emergency. This infrastructure is vital for communications to/from emergency responders in the field, between incident sites and the Emergency Operations Center (EOC), and for the City-County government to maintain linkages to the general public, NGOs and other levels of government.**

**The purpose of Emergency Support Function 2 is to support the operation of City-County government agencies by maintaining continuity of information and telecommunication infrastructure equipment and other technical resources.**

### Primary Agency

**911 Communication Center  
Management Information Systems (MIS)**

**Butte–Silver Bow, Montana**

**Emergency Operations Center ESF # 2 – Communications & Information Technologies (IT)**

**Purpose:**

1. Support public safety and the operation of government agencies by maintaining continuity of information and telecommunication infrastructure equipment and other technical resources. The emergency communications/notification and warning system is described in the Public Protection: Alert & Warning Emergency Support Function (ESF # 14).

**Primary:**

- **911 Communication Center**
- **Management Information Systems**

**Support:**

- Amateur Radio
- Public Schools
- Broadcast Media
- Private Sector Communications

**Likely Tasks:**

- Staff the IT&C ESF within the Butte – Silver Bow EOC.
- Determine condition, status of the City-County communication systems.
  - Contact dispatch centers and request operational status.
- Ensure EOC internal communications are adequate.
  - Manage the emergency communications section in the EOC to include radio, telephone, repair crews, runners, amateur radio, backup resources etc.
  - Support media center communications operations, as needed.
- Coordinate, acquire and deploy additional resources, equipment and personnel technicians to establish point-to-point communications as required.

**Likely Tasks Continued:**

- Obtain, coordinate communication resources as requested by field incident commanders.
- Sources for resources can include:
  - All City-County departments.
  - State ECC.
  - Amateur Radio.
  - Commercial vendors.
  - State or Region Radio Cache.
- Establish, maintain contact with State EOC through the Butte – Silver Bow EOC.
  - Provide information on status of City-County communication systems.
  - Request additional communications resources, as needed.
- Prioritize and coordinate restoration of communications with public utility communication providers.
- Ensure communication links to/from shelters.
- Assess damages to City-County's communications and data system.
  - Provide installation/restoration and repairs.
- Provide voice and data support to recovery operations.
- Establish communications with operational units and field incident commanders.

**State of Montana**

**Primary**

- Transportation

**Support**

- Civil Air Patrol (via MOU)
- Environmental Quality
- Fish, Wildlife & Parks
- Highway Patrol (DOJ)
- ITSD (DOA)
- MT National Guard (DMA)
- Public Safety Services Bureau (DOA)
- RACES

**Support Continued:**

- Security & Continuity Services (DOA/ITSD)
- Transportation

**Actions:**

- Coordination with telecommunications and information technology industries
- Restoration and repair of telecommunications infrastructure Protection, restoration, and sustainment of national cyber and information technology resources
- Coordination of communications within the Federal and State incident management and response structures

**Federal Government**

**Primary**

- Department of Homeland Security/ Information Analysis and Infrastructure Protection/National Communications System

**Support**

- Department of Agriculture
- Department of Commerce
- Department of Defense
- Department of Homeland Security
- Department of the Interior
- Federal Communications Commission
- General Services Administration

**Actions**

- Coordination of available federal telecommunication systems, equipment, personnel, facilities.

**Actions Continued:**

- Coordinate federal actions to provide the required temporary National Security and Emergency Preparedness (NS/EP) telecommunications, and the restoration of the telecommunications infrastructure.
- Communications services may be provided through various Department of Homeland Security/Information Analysis and Infrastructure Protection/ National Communications System (DHS/IAIP/NCS) National-Level Programs, including the Shared Resources (SHARES) High-Frequency Radio Program, Telecommunications Service Priority (TSP) Program, Government Emergency Telecommunications Service (GETS), and Wireless Priority Service (WPS).

Comprehensive Emergency Management Plan

Emergency Support Function # 2

**Communications & Information Technologies  
(IT)**

<b>Co-Primary Agencies:</b>	<b>911 Communications Center Management Information Systems</b>
<b>Primary Coordinators:</b>	<b>911 Communications Center Manager Management Information Systems Director</b>
<b>Support Organizations:</b>	<b>Public Schools Broadcast Media Amateur Radio</b>

**I. INTRODUCTION.**

**A. PURPOSE.**

Support public safety and the operation of City-County government agencies by maintaining continuity of information and telecommunication infrastructure equipment and other technical resources. The City-County's emergency communications, notification and warning system are further described in the Public Protection: Alert & Warning Emergency Support Function ESF # 14.

**B. SCOPE.**

Coordinate and assist in voice and data communications infrastructure and technical support to local emergency response and other City-County government agencies. This function is the focal point for all voice and data communications infrastructure support at the City-County level before, during, and after activation.

**C. SITUATION.**

1. The City-County's communication infrastructure will sustain damage. This damage will influence the quantity and types of communications assets available for the coordination of response and recovery efforts by government agencies and the ability to communicate with emergency victims.
2. Disaster responses which require communications will be difficult to coordinate

effectively due to a break-down in public and private systems.

3. The requirement for communications during the response phase may exceed the capability of existing resources.
4. The initial assistance effort will rely heavily on the capability of individual support agencies of this ESF.
6. Emergencies could have an adverse effect on the City-County's communications system.
7. The commercial telephone system serving the City-County is vulnerable to the effects of emergencies and to possible system overload due to increased usage.
8. Electricity may be lost during emergency situations, necessitating the use of auxiliary power.
9. Technical failure, damage to, or loss of a telecommunications central office, a communications tower, or repeater could hamper communications or the ability to page emergency personnel throughout the region.
10. The ability to repair damage to the City-County communications system is contingent upon the availability of private commercial repair technicians.
11. State assistance may be needed to procure supplemental communications equipment or to locate available repair technicians following a major emergency.
12. Mutual aid repeaters in contiguous jurisdictions may not be available, or may not be able to provide sufficient coverage or channel loading to compensate for technical failure or damage to telecommunications resources in the City-County during an emergency.

**D. POLICIES.**

1. Each City-County department will ensure the ability to communicate with the Butte – Silver Bow Emergency Operations Center (EOC) from their operations center and from their operations center to their operational units.
2. Emergency response activities will be given priority use of all the City-County communications systems and resources.
3. Normal communications systems will be utilized as much as possible during an emergency. Some communications needs will be met by re-prioritizing day-to-day frequency use to special emergency use.
4. Priority will be given to restoration of communications systems in the event of an emergency.

5. In the event of an emergency, all City-County departments will ensure the security of computer equipment and printers located in their areas.
6. Management Information Systems and other City-County departments will have regularly scheduled computer back up programs in effect for critical computer applications and data.
7. Management Information Systems will ensure that all network data is adequately backed up and secured in an offsite location.
8. Butte-Silver Bow Facilities Management will coordinate with Management Information Systems, the 911 Communication Center, and other City-County departments to ensure the necessary emergency power systems are in place to keep the voice and data communications infrastructure operating when there is a commercial power outage.

## **II. CONCEPT OF OPERATIONS.**

### **A. GENERAL.**

1. A coordinated, effective response to emergencies requires communications among emergency responders, among incident sites and EOC and linkages to the general public and other levels of government. Local government's day-to-day communications systems are seldom sufficient to meet the increased communications demands caused by emergency conditions. The communications function aims to provide a structure whereby all public, private, and volunteer communications capabilities are linked to and coordinated by the EOC.
2. Post-emergency routine modes of communications and information systems that are operational will continue to be used after the occurrence of the event.
3. The identification, acquisition, prioritization, and deployment of communications and information system assets will be coordinated as appropriate within the EOC to assure continuity and consistency of City-County response actions.

### **B. TASKS AND RESPONSIBILITIES.**

#### **1. Pre-Emergency Tasks.**

- a. Primary and support departments will coordinate with the Butte-Silver Bow Homeland Security and Emergency Management Agency to:
  - Maintain this Emergency Support Function (ESF).
  - Identify communications facilities and resources available for use (VHF Radios, Cell Phones, Satellite Phones, and telephonic public notification networks, etc.).
    - Develop inventories of equipment.
  - Ensure that the emergency communications section in the EOC is

equipped with the appropriate voice and data equipment.

- Ensure redundant communications to Butte – Silver Bow EOC.
- Ensure that backup power generation is in place or planned for.
- Maintain list of radio frequencies.
- Develop frequency use procedures and protocols.
- Schedule tests, exercises.
- Develop emergency action checklists.
- Develop network mutual aid agreements.
- Develop a prioritized list of networks to be restored in the event of failure.

**2. General Emergency Tasks.**

- a. All agencies maintaining stations on the various networks will ensure their portion of the system is maintained in an operational state of readiness.
- b. Unless informed otherwise, agencies tasked during emergency operations will maintain communications with their personnel using their existing communications systems. Agencies utilizing their own dispatch/operations centers, such as Public Works and Animal Services, should establish and maintain communications with the EOC.
- c. If two-way radio or telephone contact is not possible, City-County employees should listen to radio, TV stations, and monitor for email and/or telephonic notification systems for advisories and instructions.

**3. Specific Emergency Concepts and Responsibilities.**

- a. **911 Communications Center and Management Information Systems (MIS):**
  - Determine who will assume the primary role and staff the IT & Communication Group Supervisor under the EOC Logistics Section.
  - Respond to requests for local communications assistance, identify required support agencies, begin mobilization of resources and personnel, and prepare to activate.
  - Coordinate activities of support agencies.
  - Prior to activation, set up and check the EOC telephone system as provided, for use by the EOC staff, and information line personnel.
  - Assist post-emergency outreach programs (e.g., Disaster Recovery Centers) in establishing any necessary communications.
  - Maintain records of cost and expenditures to accomplish this ESF and forward them to the EOC Finance/Administration Section Chief.
- b. **Amateur Radio:**
  - The City-County may use amateur radio operators and other nongovernmental volunteer groups to assist with primary or alternate emer-

gency radio communications support.

- The amateur radio and other nongovernmental volunteer groups/operators used in this role will be under the coordination authority of the local Homeland Security-Emergency Management Agency during emergency activations.
- The amateur radio and other nongovernmental volunteer groups/operators will be required to actively participate in regular training and exercises established by the Homeland Security-Emergency Management Agency.
- Record costs and expenditures and forward them to this ESF's Group Supervisor.

c. **Public Schools:**

- Develop emergency communications support plans, which provide alternate or supplementary support to the voice and data communications infrastructure during emergency situations.
- During EOC activation, as requested, provide for radio, telephone and data connectivity to be stationed and staffed with a district liaison at the EOC.
- Record costs and expenditures and forward them to this ESF's Group Supervisor.

d. **Broadcast Media (Cable, TV, Radio):**

- Recommendation to develop emergency communications support plans, which provide alternate or supplementary support to the voice and data communications infrastructure during emergency situations.
- During EOC activation, as requested, provide the capability for telephone and data connectivity with the EOC.

**C. ROLE OF BUTTE-SILVER BOW EOC.**

1. The EOC will respond to requests for local communications assistance, identify required support agencies, begin mobilization of resources and personnel, and prepare to activate.
2. Contact between the EOC staff and the agencies will be maintained through telephone, information technology (IT) and radio networks. All EOC Functional Representatives are responsible to insure that communications systems are in place between their function and the departments/agencies.
3. If the situation warrants, the EOC Manager may establish the IT & Communication Group (ESF # 2) within the Operations Section. Responsibilities include:
  - Determine condition and status of City-County voice and data communications systems infrastructure.
  - Obtain and coordinate communications infrastructure as requested by field

- incident commanders.
  - Prioritize and coordinate maintenance.
  - Prioritize and coordinate restoration of voice and data communications infrastructure.
4. If the situation warrants, the EOC Manager may establish the Communications Unit within the Logistics Section. Responsibilities include:
- Manage the emergency communications process within the EOC to include the receipt of calls into the EOC, radio and telephone operation and repair, the utilization of amateur radio and other backup resources, etc.
  - Ensure EOC internal communications are adequate.
  - Establish communications with operational units and field incident commanders and obtain needed communications resources for field incident commanders.
  - Ensure communication links to/from shelters and other emergency facilities that are established.
5. Primary communications with other counties and the State EOC is through established systems such as NAWAS, telephonically, interoperable radio systems
6. Information Technologies & Communication (ESF # 2) likely tasks are found in the City-County box on the tab page for this ESF.

**D. LIFE SAFETY ASSESSMENT.**

The City-County Department of Management Information Systems is responsible for the operation of computer networks that may be used to disseminate information to, and communicate between City-County departments. They provide computer support during and after an emergency and will assure priority restoration of communication functions and systems.

**E. EVACUATION.**

1. TBD

**F. FIELD OPERATIONS.**

1. A Mobile Command Vehicle, provided and maintained by HSEMA is available for deployment for on-scene emergency communications center.

***III. ATTACHMENTS AND REFERENCES.***

**A. ATTACHMENTS.**

1. Communication & Information Technologies (IT) (ESF # 2) Checklist.

**B. REFERENCES.**

None.

**C. PROVISIO.**

This support annex has been prepared in accordance with the standards of the National Incident Management System and other Federal and State requirements and standards for emergency response plans applicable as of the date of the plan's preparation.

The plan provides guidance only; it is intended for use in further development for response capabilities, implementation of training and exercises, and defining the general approach to incident response. The actual response an incident is dependent on:

1. The specific conditions of the incident, including incident type, geographic extent, severity, timing, and duration;
2. The availability of resources for response at the time of the incident;
3. Decisions of Incident Commanders and political leadership; and
4. Actions taken by neighboring jurisdictions, the State, and the Federal Government.

These and other factors may result in unforeseen circumstances, prevent the implementation of plan components, or require actions that are significantly different from those described in the plan.

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*Attachment 1*

**INFORMATION TECHNOLOGIES & COMMUNICATION (ESF # 2) CHECKLIST**

<p><b>Pre-Emergency</b></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Maintain this ESF document.</li> <li><input type="checkbox"/> Identify information technology facilities and resources available for use.</li> <li><input type="checkbox"/> Ensure that the EOC is equipped with the appropriate voice and data gear.</li> <li><input type="checkbox"/> Identify communication facilities and resources available for use ( VHF Radios, Cell Phones, etc.).</li> <li><input type="checkbox"/> Develop inventories of equipment.</li> <li><input type="checkbox"/> Ensure redundant communications to state EOC and regional EOCs.</li> <li><input type="checkbox"/> Coordinate to ensure necessary backup power generation.</li> <li><input type="checkbox"/> Maintain list of radio frequencies.</li> <li><input type="checkbox"/> Develop frequency use procedures and protocols.</li> <li><input type="checkbox"/> Develop a City-County-wide data recovery plan.</li> <li><input type="checkbox"/> Assure incremental backups are performed everyday with full backups performed on weekends.</li> <li><input type="checkbox"/> Copy mission critical databases to offsite location every evening</li> <li><input type="checkbox"/> Schedule tests, exercises of emergency plans.</li> <li><input type="checkbox"/> When notified, make contact with City-County Emergency Management staff and report to the Butte – Silver Bow EOC.</li> <li><input type="checkbox"/> Develop network mutual aid agreements.</li> <li><input type="checkbox"/> Develop a prioritized list of networks to be restored in the event of failure.</li> </ul>
<p><b>Emergency</b></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Staff the Communications &amp; IT Group Supervisor position within the Butte – Silver Bow EOC (See EOC Operations Manual.)</li> <li><input type="checkbox"/> Determine condition, status of the City/County communication and technology systems.             <ul style="list-style-type: none"> <li>– Contact dispatch centers and request operational status.</li> </ul> </li> <li><input type="checkbox"/> Ensure EOC internal communications and technology systems are adequate.             <ul style="list-style-type: none"> <li>– Support the communications unit in the EOC Logistics Section.</li> <li>– Support Joint Information Center communications operations, as needed.</li> </ul> </li> <li><input type="checkbox"/> Prioritize and coordinate restoration of communications and technology systems with public utility communication providers.</li> <li><input type="checkbox"/> Assess damages to City-County's communication and technology systems.             <ul style="list-style-type: none"> <li>– Provide installation/restoration and repairs.</li> </ul> </li> <li><input type="checkbox"/> Provide voice and data support to recovery operations.</li> <li><input type="checkbox"/> Coordinate with Facilities Management within the Logistics Section to restore power to the networks.</li> <li><input type="checkbox"/> When notified, report to the Butte – Silver Bow EOC.</li> </ul>

<p style="text-align: center;"><b>Emergency Operations Center (EOC)</b></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Establish and maintain communications links with operational units and field incident commanders.</li> <li><input type="checkbox"/> Establish and maintain communications to State EOC and regional EOCs.</li> <li><input type="checkbox"/> Coordinate, acquire and deploy additional resources (normal or backup such as amateur radio), equipment and personnel technicians to establish point-to-point communications as required.</li> <li><input type="checkbox"/> Obtain, and coordinate communication resources as requested by field incident commanders.</li> <li><input type="checkbox"/> Sources for resources can include:             <ul style="list-style-type: none"> <li>– All City-County departments.</li> <li>– State EOC.</li> <li>– Amateur Radio.</li> <li>– Commercial vendors.</li> </ul> </li> <li><input type="checkbox"/> Establish, maintain contact with State EOC.             <ul style="list-style-type: none"> <li>– Provide information on status of City-County communications systems.</li> <li>– Request additional communications and technology resources, as needed.</li> </ul> </li> <li><input type="checkbox"/> Ensure communication links to/from shelters.</li> </ul>
<p style="text-align: center;"><b>Recovery Actions</b></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Communication &amp; IT Group Supervisor establishes communications with MIS Recovery Team.</li> <li><input type="checkbox"/> MIS Recovery Team evaluates initial condition of the City-County’s network infrastructure and equipment and reports status to MIS Director.</li> <li><input type="checkbox"/> Telecommunications Group Supervisor reports status of systems to EOC Manager.</li> <li><input type="checkbox"/> Conduct a safety inspection and document damages photographically.</li> <li><input type="checkbox"/> MIS Recovery Team establishes communications with Network, Application and Workstation Recovery Teams to begin network infrastructure recovery.</li> <li><input type="checkbox"/> Contact power company to restore power if necessary.</li> <li><input type="checkbox"/> Contact telephone company to re-connect data circuits.</li> <li><input type="checkbox"/> Contact necessary vendors to assist in recovery efforts.</li> <li><input type="checkbox"/> Accumulate damage information obtained from assessment teams, the local emergency operations center and other City-County departments specific to:             <ul style="list-style-type: none"> <li>– Damaged or missing antenna structures.</li> <li>– Damaged or missing radio transmission systems.</li> <li>– Damaged or inoperable power generation sources at radio transmitter sites.</li> </ul> </li> <li><input type="checkbox"/> Damaged telephone systems, critical cellular telephones and pagers.</li> </ul>

	<ul style="list-style-type: none"><li><input type="checkbox"/> Other local agencies with communications assets may be requested to contribute assets to the response efforts. Availability, operational condition and duration of need must be considered.</li><li><input type="checkbox"/> Restore systems in accordance with predefined priorities.</li><li><input type="checkbox"/> Begin setup of departmental computer equipment based on priorities set by administration.</li></ul>
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