### Course Overview

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<th>Topic</th>
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<tr>
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<td><img src="image.png" alt="ESF #2 Communications" /></td>
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#### Key Points

**Purpose:** The purpose of this course is to familiarize you with the function and composition of ESF #2 – Communications.

**Approximate Time:** 1 hour

**Content Outline:** This module includes the following major topics:
- ESF Overview
- Primary and Support Agencies
- Organizational Response
- ESF #2: Specialized Resources
- Summary

**Materials:**
- Instructor Guide
- Student Manual (including the ESF #2 – Communications Annex)
**Topic**  
Course Overview

**Display Visual 2**

### Objectives
- Describe the overall purpose and scope of ESF #2.
- Identify the supplemental assistance ESF #2 provides to State, tribal, and local governments.
- Identify typical activities accomplished by ESF #2 resources.
- Describe the types of partnerships formed between ESF #2 and other response agencies and organizations.

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**Key Points**

At the end of this course, you will be able to:

- Describe the overall purpose and scope of ESF #2.
- Identify the supplemental assistance ESF #2 provides to State, tribal, and local governments.
- Identify typical activities accomplished by ESF #2 resources.
- Describe the types of partnerships formed between ESF #2 and other response agencies and organizations.
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**Introductions**

Tell us:
- Your name.
- Your role in emergency management.
- What you hope to gain from this course.

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**Key Points**

Introduce yourself to the members of your table groups, providing:
- Your name.
- Your role in emergency management.
- What you hope to gain from this course.
The National Response Framework (NRF):

- Is a guide to how the Nation conducts all-hazards response.
- Builds upon the National Incident Management System (NIMS) coordinating structures to align key roles and responsibilities across the Nation, linking all levels of government, nongovernmental organizations, and the private sector.

The NRF is comprised of:

- The Core Document, which describes the doctrine that guides our national response, roles and responsibilities, response actions, response organizations, and planning requirements to achieve an effective national response to any incident that occurs.
- Emergency Support Function Annexes, which identify Federal resources and capabilities that are most frequently needed in a national response (e.g., transportation, firefighting, mass care).
- Support Annexes, which describe essential supporting aspects that are common to all incidents (e.g., financial management, volunteer and donations management, private-sector coordination).
- Incident Annexes, which address the unique aspects of how we respond to seven broad categories or types of incidents (e.g., biological, nuclear/radiological, cyber, mass evacuation).
- Partner Guides, which provide ready references describing key roles and actions for local, tribal, State, Federal, and private-sector response partners.
Key Points

The Federal Government and many State governments organize many of their resources and capabilities—as well as those of certain private-sector and nongovernmental organizations—under Emergency Support Functions (ESFs).

The ESFs:

- Are coordinated by the Federal Emergency Management Agency (FEMA) through the National Response Coordination Center (NRCC), Regional Response Coordination Centers (RRCCs), and Joint Field Offices (JFOs).
- Are a critical mechanism to coordinate functional capabilities and resources provided by Federal departments and agencies, along with certain private-sector and nongovernmental organizations.

Note that some States also have organized an ESF structure along this approach.
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**Display Visual 6**

**ESF General Duties**
- Commit agency assets.
- Approve and implement mission assignments.
- Maintain situational awareness and report on ESF operations.
- Represent agency on task forces and ad hoc groups.
- Serve as technical experts.

**Key Points**

Review the general ESF duties listed on the visual.

Why is it important that ESFs have the authority to commit agency assets?
The ESF structure includes:

- **ESF Coordinator.** The entity assigned to manage oversight for a particular ESF.
- **Primary Agencies.** ESF primary agencies are Federal agencies with significant authorities, resources, or capabilities for a particular function within an ESF. A Federal agency designated as an ESF primary agency serves as a Federal executive agent under the Federal Coordinating Officer (or Federal Resource Coordinator for non-Stafford Act incidents) to accomplish the ESF mission.
- **Support Agencies.** Support agencies are those entities with specific capabilities or resources that support the primary agencies in executing the mission of the ESF.

ESFs provide support to other ESFs. For example: ESF #3 – Public Works and Engineering may support rural ESF #5 – Emergency Management forces to obtain heavy equipment and/or demolition services as needed to suppress incident-related fires.
**Key Points**

The ESF coordinator has management oversight for that particular ESF.

Note that, as described on the visual, the ESF coordinator has a role throughout the incident management cycle.
When an ESF is activated in response to an incident:

- **The primary agency** is responsible for:
  - Serving as a Federal executive agent under the Federal Coordinating Officer (or Federal Resource Coordinator for non-Stafford Act incidents) to accomplish the ESF mission.
  - Orchestrating Federal support within its functional area for an affected State.
  - Providing staff for the operations functions at fixed and field facilities.
  - Notifying and requesting assistance from support agencies.
  - Managing mission assignments and coordinating with support agencies and appropriate State agencies.
  - Working with appropriate private-sector organizations to maximize use of all available resources.
  - Supporting and keeping other ESFs and organizational elements informed of ESF operational priorities and activities.
  - Maintaining trained personnel to support interagency emergency response and support teams.

- **Support agencies** are responsible for:
  - Conducting operations, when requested by the Department of Homeland Security (DHS) or the designated ESF primary agency, using their own authorities, subject-matter experts, capabilities, or resources.
  - Participating in planning for short- and long-term incident management and recovery operations and the development of supporting operational plans, standard operating procedures (SOPs), checklists, or other job aids, in concert with existing first-responder standards.
  - Assisting in the conduct of situational assessments.
  - Furnishing available personnel or other resource support as requested by DHS or the ESF primary agency.
  - Providing input to periodic readiness assessments.
  - Participating in training and exercises aimed at continuous improvement of response and recovery capabilities.
  - Identifying new equipment or capabilities required to prevent or respond to new or emerging threats and hazards, or to improve the ability to address existing threats.
Key Points

ESFs may be selectively activated for both Stafford Act and non-Stafford Act incidents under circumstances as defined in Homeland Security Presidential Directive 5 (HSPD-5). Note that not all incidents requiring Federal support result in the activation of ESFs.

FEMA can deploy assets and capabilities through ESFs into an area in anticipation of an approaching storm or event that is expected to cause a significant impact and result. Note that this coordination through ESFs allows FEMA to position Federal support for a quick response, though actual assistance cannot normally be provided until the Governor requests and receives a Presidential major disaster or emergency declaration.
The 15 ESFs are listed on the visual. The complete ESF Annexes are available at the NRF Resource Center at www.fema.gov/nrf.

This course focuses on ESF #2 – Communications.

Describe your roles or associations with ESF #2.
Key Points

The Nation’s communications infrastructure is a vital part of both daily activities, such as trading on Wall Street, and response operations, such as coordinating responder activities.

Cyber attacks constitute attacks on the communications infrastructure.
Key Points

ESF #2 – Communications supports the Department of Homeland Security (DHS) by:

- Supporting the restoration of the communications infrastructure, facilitating the recovery of systems and applications from cyber attacks, and coordinating Federal communications support to response efforts during incidents requiring a coordinated Federal response. This ESF implements the provisions of the Office of Science and Technology Policy (OSTP) National Plan for Telecommunications Support in Non-Wartime Emergencies (NPTS).
- Providing communications support to Federal, State, tribal, and local governments and first responders when their systems have been impacted, and providing communications and information technology (IT) support to the Joint Field Office (JFO) and JFO field teams, by providing:
  - **Access**, so communications infrastructure can be repaired.
  - **Security**, to protect responders and equipment.
  - **Fuel**, to support communications in absence of commercial power.

Given the rapid convergence of communications and IT, the National Communications System (NCS) and the National Cyber Security Division (NCSD) work closely to coordinate the ESF #2 response to cyber incidents. This convergence requires increased synchronization of effort and capabilities between the communications and IT sectors to facilitate ESF #2’s ability to respond to all types of incidents.

Refer to the purpose statement on page 1 of the ESF #2 – Communications Annex.
ESF #2 coordinates Federal actions to help:

- Industry restore the public communications infrastructure.
- State, tribal, and local governments with emergency communications and restoration of public safety communications systems and first responder networks, including:
  - Supporting Federal departments and agencies in procuring and coordinating National Security and Emergency Preparedness (NS/EP) communications services.
  - Providing communications support to the JFO and any JFO field teams.

ESF #2 also addresses cyber security issues that result from or occur in conjunction with incidents.

Scope information can be found on page 1 of the ESF #2 – Communications Annex.
For incidents that are primarily cyber in nature, the Cyber Incident Annex is used and ESF #2 supports responses to cyber incidents as directed.
Key Points

As the ESF #2 coordinator and one of the two primary agencies, NCS:

- Exercises primary responsibility for restoration of telecommunications in an incident area.
- Coordinates the planning for and provision of National Security and Emergency Preparedness (NS/EP) communications for the Federal Government under all circumstances.
- Monitors training for all ESF #2 team members.
- Designates a team lead for a component responsible for communications infrastructure restoration functions.
- Coordinates the restoration of communications infrastructure and supports Federal departments and agencies in procuring and coordinating NS/EP communications services when the component responsible for communications infrastructure restoration functions is operational.
- Coordinates with FEMA and support agencies to develop ESF #2 documentation, policies, and procedures.
- Coordinates with FEMA and support agencies to provide and execute a construct for training and deploying personnel to support ESF #2 operations.

Information about the coordinator’s role can be found on page 3 of the ESF #2 – Communications Annex.
As one of the two ESF #2 primary agencies, NCS:

- Exercises primary responsibility for restoration of telecommunications in an incident area.
- Establishes, in consultation with FEMA and other NCS member agencies, a cadre of qualified and appropriately trained personnel certified to serve as Federal Emergency Communications Coordinators (FECCs)/Communications Branch Directors.
- Designates an FECC to lead ESF #2 when it is activated. Normally the NCS will confer with FEMA and the ESF #2 support agencies regarding the selection of the FECC.
- Certifies personnel for inclusion in the FECC cadre.
- Designates a team lead for a component responsible for communications infrastructure restoration functions.

Information about the primary agency’s role can be found on page 3 of the ESF #2 – Communications Annex.
Key Points

As the other primary ESF #2 agency, FEMA:

- Acts as the ESF #2 primary agency for support of public safety disaster emergency communications.
- Consults with and advises the NCS on the selection, training, and certification of a cadre of personnel eligible to serve as FECCs.
- Activates ESF #2 under the Stafford Act as required by the event, including the need for State, tribal, and local government support for tactical communications or as requested by the NCS for infrastructure restoration.
- In the event an FECC is required, may provide a recommendation to the NCS regarding the selection of an FECC for a specific incident.
- Provides short-term restoration support to State, tribal, and local government emergency communications in the event of a failure.
- Designates a team lead for a component responsible for tactical communications functions.
- Designates personnel to support tactical communications functions.
- Provides personnel to support overall ESF #2 operations.
- Coordinates with the NCS and support agencies to develop appropriate documentation, policies, and procedures pertinent to tactical communications functions.
- Provides communications support to State, tribal, and local first responders.
- Coordinates the restoration of public safety communications systems and first responder networks.
- Provides communications and IT support to the JFO, JFO field teams, other Federal response/recovery facilities within the area of operation, the Federal Coordinating Officer (FCO), the Principal Federal Official (PFO) if appointed, and Federal response teams.

Refer to pages 3 and 4 of the ESF #2 – Communications Annex for additional information.
Key Points

ESF #2 support agencies provide additional expertise and resources to help accomplish the ESF’s mission.

The agencies listed on the visual represent a sampling of the agencies that contribute to ESF #2.

The duties of each agency will be discussed in greater detail on the following visuals.
The Department of Agriculture/Forest Service and the Department of the Interior provide:

- Radio communications systems to support firefighters, law enforcement officers, and incident response operations.
- Engineers, technicians, and liaison staff to assist the Disaster Emergency Communications Branch Director.
- National Interagency Radio Support systems for damage reconnaissance teams and other applications.
- A communications officer to accompany radio systems for user training and operator maintenance indoctrination.
- Additional radio systems to support the Joint Field Office (JFO) radio network.
**Primary and Support Agencies**

**Display Visual 21**

The Department of Homeland Security’s:

- **Office of Infrastructure Protection** provides situational awareness, cross-sector coordination, and prioritized recommendations regarding critical infrastructures and key resources.

- **National Cyber Security Division (NCSD)** coordinates implementation of the National Strategy to Secure Cyberspace and is the national focal point for cyber security issues. NCSD implements Homeland Security Presidential Directive 7 infrastructure protection responsibilities for the IT sector and supports efforts by Sector-Specific Agencies to protect the cyber elements of their critical infrastructure and key resources sectors.

- **Wireless Services** provides spectrum management support and coordination in conjunction with other support agencies.
The Federal Communications Commission (FCC):

- Provides spectrum management and frequency allocation for the entities it regulates.
- Collects, compiles, and analyzes communications infrastructure and service outage and restoration information.
- Provides trained staff members to support communications restoration teams and senior personnel for assignment as the Disaster Emergency Communications Branch Director.
- Assists with the provision of communications support to Federal, State, tribal, and local governments, including public safety entities.
- Assists with developing and conducting communications restoration training and exercises.
- Conducts outreach to all FCC licensees to determine: (1) their needs, and (2) whether they have resources to offer that would aid the restoration effort.
- Performs such functions as required by law with respect to all entities licensed or regulated by the FCC, including (but not limited to) the extension, discontinuance, or reduction of common-carrier facilities or services; the control of common-carrier rates, charges, practices, and classifications; the construction authorization, activation, deactivation, or closing of radio stations, services, and facilities; the assignment of radio frequencies to FCC licensees; the investigation of violations of pertinent law and regulation; and the initiation of appropriate enforcement actions. The FCC also reviews policies, plans, and procedures that are developed by entities licensed or regulated by the FCC to provide national security and emergency preparedness communications services to ensure such policies, plans, and procedures are consistent with the public interest, convenience, and necessity.
The Department of Commerce’s National Telecommunications and Information Administration (NTIA) provides Federal spectrum management and interoperability support. The NTIA also:

- Supports the Disaster Emergency Communications Branch Director either in an on-call capacity at NTIA Headquarters or deployed as a member of the Emergency Communications Team – Field (ECT-F).
- Provides policy and procedural guidance concerning the control and allocation of radio frequency assignments in those parts of the electromagnetic spectrum assigned to the Federal Government.
- Amends, modifies, or revokes such assignments as necessary and will develop plans and procedures for spectrum priorities, including a system for radio spectrum management.
- Assists the Director of the Office of Science and Technology Policy in the implementation of these plans and procedures in non-wartime emergencies, including the resolution of any conflicts in or among such priorities.
- Supports the Joint Telecommunications Resources Board as required.
**Key Points**

The General Services Administration (GSA) provides regionally based personnel, who often deliver the initial ESF #2 field response.

Each GSA Regional Administrator ensures that an NCS regional manager (NCSRM) is identified for each of the 10 standard Federal regions and the National Capital Region. The GSA Federal Acquisition Service Emergency Coordinator authorizes the NCSRM to accept direction from the Manager of the National Coordinating Center (NCC) or his or her designated representative during the predeployment phase of a communications emergency.
Organizational Response

Key Points

The Federal Emergency Management Agency (FEMA) activates ESF #2 when a significant impact to the communications infrastructure is expected or has occurred.

When activated, ESF #2 provides communications support to the impacted area, as well as internally to the JFO and associated Federal JFO teams.

ESF #2 support is scalable to meet the specific needs of each incident response, and response resources are drawn from a matrix of personnel and equipment available from the ESF #2 support agencies.

This information can be found on page 2 of the ESF #2 – Communications Annex.
ESF #2 actions to supplement State, tribal, and local resources are provided by the National Coordinating Center (NCC) and Emergency Communications Team – National (ECT-N), and include:

- Damage assessments.
- Cyber security.
- Communications industry support.
- Identification of available communications assets.

This information can be found on pages 7 and 8 of the ESF #2 – Communications Annex.
At the field level, the Disaster Emergency Communications Branch Director/Emergency Communications Team – Field (ECT-F):

- Deploys to the Regional Response Coordination Center, JFO, or other facility as required.
- Coordinates with the NCC and FEMA to fill ECT-F duty positions.

This information can be found on pages 7 and 8 of the ESF #2 – Communications Annex.
Key Points

Whether providing vital communications resources to emergency responders or assessing damage to communications infrastructure, the specialized resources of ESF #2 help ensure the safety and security of our Nation. Briefly review the following special resources. The next few visuals will go into greater detail on each:

- **The Joint Telecommunications Resources Board (JTRB)** resolves conflicts regarding NS/EP communications priorities and resources that cannot be resolved by the FCO or PFO.
- **The Operations Section – Communications Branch** is the focal point for communications infrastructure restoration and coordination with industry service providers.
- **The Logistics Section, Services Branch**, has a **Communications Unit** that provides internal communications and IT support to the JFO.
- ESF #2 provides two specialized resources for cyber incidents and threats:
  - **The National Cyber Security Division (NCSD)** coordinates implementation of the National Strategy to Secure Cyberspace and is the national focal point for cyber security issues.
  - **The National Cyber Response Coordination Group (NCRCG)** is an interagency forum to coordinate response to cyber incidents and threats.

This information can be found on pages 5 and 6 of the ESF #2 – Communications Annex.
The Joint Telecommunications Resources Board:

- Resolves conflicts regarding NS/EP communications priorities and resources that cannot be resolved by the FCO or PFO (if appointed).
- Advises the Director, Office of Science and Technology Policy.
- Monitors potential or actual situations that create the need for extraordinary communications support.

The JTRB is supported by the NCS using the resources of the NCC, Global NetOps Center, FEMA Operations Center, and other Federal agency operations centers as necessary.

This information can be found on page 5 of the ESF #2 – Communications Annex.
## Key Points

The Operations Section – Communications Branch:

- Is led by an NCS-appointed Communications Branch Director who manages the ECT-F.
- Becomes the focal point for communications infrastructure restoration and coordination with industry service providers.
- Coordinates with other components of the Operations Section and other ESFs to ensure industry Essential Service Providers, as defined by the Stafford Act, as amended, have the access, security, and fuel required to restore communications in the incident area.
- Coordinates with Federal agencies providing communications support to response operations and advocates for their needs and priorities.
- Provides communications support to Federal, State, tribal, and local response operations.
- Coordinates the restoration of public safety communications systems and first responder networks.
- Organizes into groups to support activities such as providing communications support to responders, restoring communications infrastructure, and providing spectrum management.

This information can be found on page 6 of the ESF #2 – Communications Annex.
The Logistics Section, Services Branch, has a Communications Unit that:

- Is led by a FEMA-appointed Communications Unit Leader.
- Provides internal communications and IT support to the JFO and any satellite facilities.
- Provides communications and IT support to JFO Federal field teams.

This information can be found on page 6 of the ESF #2 – Communications Annex.
At the headquarters level, ESF #2 provides two specialized resources for cyber incidents and threats:

- The National Cyber Security Division (NCSD) coordinates implementation of the National Strategy to Secure Cyberspace and is the national focal point for cyber security issues. Note that the NCSD implements Homeland Security Presidential Directive 7 infrastructure protection responsibilities for the IT sector and supports efforts by Sector-Specific Agencies to protect the cyber elements of their critical infrastructure and key resources sectors.
- The National Cyber Response Coordination Group (NCRCG) is an interagency forum to coordinate responses to cyber incidents and threats.

This information can be found on page 5 of the ESF #2 – Communications Annex.
Instructions:

- Answer the review questions on pages 36 and 37 of your Student Manual.
- Be prepared to share your answers with the class in 5 minutes.
- If you need clarification on any of the material presented in this course, be sure to ask your instructors.

Additional information about the National Response Framework and Emergency Support Functions can be obtained at the NRF Resource Center at www.fema.gov/nrf.
Key Points

Instructions:

1. Take a few moments to review your Student Manuals and identify any questions.
2. Make sure that you get all of your questions answered prior to beginning the final test.
3. When taking the test . . .
   - Read each item carefully.
   - Circle your answer on the test.
   - Check your work and transfer your answers to the computer-scan (bubble) answer sheet or enter the answers online.

You may refer to your Student Manuals and the annex when completing this test.
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**Key Points**

Please complete the course evaluation/feedback form.
ESF #2 – Knowledge Review

1. Who serves as the coordinator for ESF #2?

2. Which of the following activities is **NOT** within the scope of ESF #2?
   a. Taking action to resolve cyber security issues.
   b. Identifying communications assets for use in a response.
   c. Assuming the lead in criminal investigations of attacks on communications infrastructure.
   d. Supporting the communications industry during and after an incident requiring a coordinated Federal response.

3. Read the following scenario, and then identify three potential actions for ESF #2.

   **Scenario:** A major earthquake has just been reported along the lower Mississippi Valley from just west of Memphis, TN, into southern Illinois. Because of limited communications from the region, damage reports are unreliable.
4. Match the activities with the ESF #2 support agencies that perform them.

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<thead>
<tr>
<th>Activities</th>
<th>Support Agencies</th>
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<tr>
<td>Disseminates cyber threat warning information.</td>
<td>A. Department of Agriculture</td>
</tr>
<tr>
<td>Provides radio communications systems to support firefighters, law enforcement officers, and incident response operations.</td>
<td>B. Department of Homeland Security</td>
</tr>
<tr>
<td>Supports the Emergency Alert System and provides public dissemination of critical pre-event and post-event information.</td>
<td>C. National Oceanic and Atmospheric Administration</td>
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5. Use the space below to make note of any questions you have about the material covered in this course.
Your Notes