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# Unit 6: Incident Communications Systems

STUDENT GUIDE

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## **Objectives**

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By the end of this unit, students will be able to:

- Describe the Communications Unit Leader responsibilities in establishing an incident radio communications system.
- Describe use of command and tactical nets.
- Identify requirements for establishing an incident radio communications system.
- Describe specific communication information gathered.
- Evaluate needs and order supplies, materials, and personnel to keep unit operating.

## **Methodology**

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This unit uses lecture, discussion based activities, and exercises.

Knowledge of unit content will be evaluated through administration of the final exam (to be administered upon completion of the course). Instructors will evaluate students' initial understanding through facilitation of exercise 6.

The purpose of exercise 6 is to provide the participants with an opportunity to order supplies, personnel, and equipment on the ICS Form 213 - General Message. This exercise will also provide the participants with an opportunity to identify the pros and cons of specific tracking systems for accountability purposes during an incident. This exercise is scheduled to last approximately 45 minutes, including small group discussions and presentation of group findings.

The purpose of this unit is to provide students with an understanding of the Communication Unit Leader's responsibility for developing an incident radio communications plan for interoperable communications on an incident or event as well as the communications system to implement the plan.

**Time Plan**

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A suggested time plan for this unit is shown below. More or less time may be required, based on the experience level of the group.

<b>Topic</b>	<b>Time</b>
Lesson	1 hour, 30 minutes
Exercise 6	45 minutes
<b>Total Time</b>	<b>2 hours, 15 minutes</b>

**Reference Materials**

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- Projector & other equipment as necessary for PowerPoint presentation
- Easel pad
- Marking pens
- Laminated blank ICS Form 213 – General Message Form (3x5 feet)
- Dry erase pens
- ICS Form 213 - General Message Forms (3-ply)
- Exercise 6: Initial Resource Order and Accountability
- Handout 6-1: Accountability Tracking Systems

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**Topic**

Unit Title Slide

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**Key Points**

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**Topic****Unit Terminal Objective**

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**Unit Terminal Objective**

At the conclusion of the unit, the student will describe the COML responsibilities in establishing an incident radio communications system.

Unit 6:  
Incident Communications Systems

Visual 6-2

**Key Points**

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**Unit Terminal Objective:**

At the conclusion of the unit, the student will describe the Communications Unit Leader's responsibilities in establishing an incident radio communications system.

**Unit Enabling Objectives:**

- Describe use of command and tactical nets.
- Identify requirements for establishing an incident radio communications system.
- Describe specific communication information gathered.
- Evaluate needs and order supplies, materials, and personnel to keep unit operating.

## Topic

Overview of Networks

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**Overview of Networks**

- According to NIMS there are five networks that may be deployed on any given incident:
  - Command Network
  - Tactical Network
  - Air-to-Ground Network
  - Air-to-Air Network
  - Logistics Network

Unit 6:  
Incident Communications Systems

Visual 6-3

**Key Points**

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According to NIMS, there are five networks that may be deployed on any given incident:

- Command Network may be used by C&G Staff. More often it is a coordination channel for the Operations Section.
- Tactical Networks are used by the Operations Section to execute incident response.
- Air-to-Ground Network is used to coordinate air support.
- Air-to-Air Network is used to communicate between aircraft. It is typically not within the purview of the Communications Unit Leader; it is coordinated by the Air Branch.
- Logistics Network (sometimes known as the Support Network) is used by the Logistics Section to coordinate functions such as supply and data transmission.

## Topic

Command Networks

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**Command Network**

- **Command Network may be used by C&G Staff. More often it is a coordination channel for the Operations Section.**
  - **Usually only one command network is used during an incident**
- **May be patched via a gateway when personnel are on disparate radio systems**
- **Cache radios can be programmed for C&G Staff use**
- **Used as a link between the incident and the Dispatch Center**

Unit 6:  
Incident Communications Systems

Visual 6-4

**Key Points**

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- Cache radios or gateways may be desirable to overcome disparate systems.
- Usually only one Command Net is used during an incident by the C&G staff.
- The positions down to Division/Group Supervisors will likely need two radios, one on the Command Channel and one for tactical use.
- Scanning may be a possibility, but it is a poor solution.
- It may be patched via a gateway when personnel are on disparate radio systems.
- Cache radios or radios can be programmed for command and general staff use.
- This frequency/talkgroup is also used as a link between the incident and the Dispatch Center.



## Topic

Tactical Networks

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**Tactical Networks**

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- There may be several tactical networks at the Division/Group level
- Use caution when patching Tactical Networks; monitor them carefully

What are some examples of tactical networks?

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Incident Communications Systems

Visual 6-5

**Key Points**

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There may be several tactical networks at the Division (geographic)/Group (function) level that may use mobile communications units at the incident to patch tactical networks.

Usually they are the most challenging to design because they have to consider all tactical requirements.

May require mobile communications units to follow tactical units or to provide patch.

Should not be patched together, except as a last resort, because operational needs require consistency in radio systems to avoid problems.

## Topic

Tactical Interoperability

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**Tactical Interoperability**

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- |   |  |
|---|--|
| ■ Fire                                      | ■ Public Works   |
| ■ Law Enforcement                           | ■ Public Health  |
| ■ Emergency Medical Services                | ■ Military   |
| ■ Hospitals                                 | ■ DHS  |
| ■ Emergency Management                      | ■ Schools  |
| ■ Explosive Ordnance Disposal               | ■ Environmental Health                                       |
| ■ HAZMAT                                    | ■ Medical Examiner   |
| ■ Urban Area Search and Rescue Teams (USAR) | ■ Radiological Support                                       |
| ■ Transportation (Public and Private)       | ■ Nongovernmental Organizations (NGOs) such as the Red Cross |
| ■ Utilities                                 |  |

Unit 6:

Incident Communications Systems

Visual 6-6

**Key Points**

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**Topic**Air-to-Ground Networks

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**Air-to-Ground Network**

- Used to coordinate air support during an incident.
- Air-to-Ground Nets are typically FM Public Safety frequencies.
- Allocated according to function, i.e. deck control, takeoff, landing.

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Visual 6-7

**Key Points**

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An air-to-ground network is used to coordinate air support during an incident.

This usually involves a number of frequencies and modulations dedicated to specific functions such as deck frequencies, or takeoff and landing control.

Caution should be used in assigning air-to-ground frequencies. All frequencies are not suitable for high-altitude use.

## Topic

Air-to-Air Network

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### Air-to-Air Network

- Governed by FAA
- AM (standard) or FM
- Air-to-air frequencies are typically coordinated by the Air Branch – not the COML

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Visual 6-8

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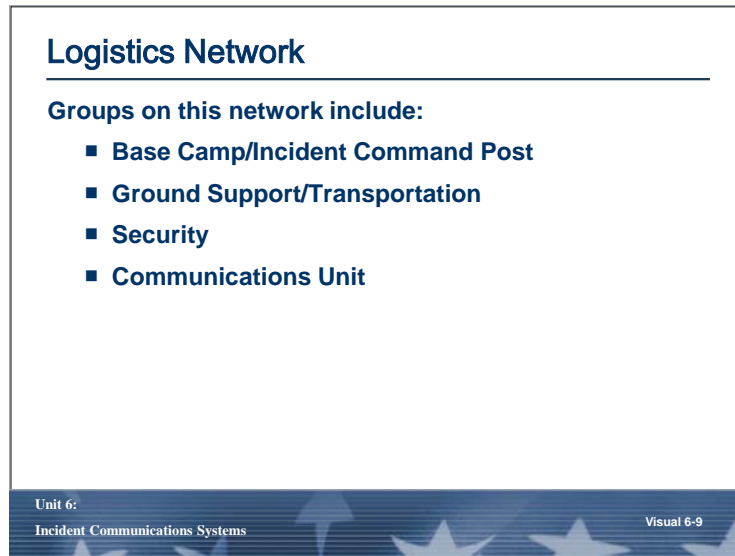
Key Points

- Air-to-air channels may not be used by ground-based resources.
- Unlike most other radio frequencies, air-to-air radio transmission is regulated by the Federal Aviation Administration (FAA). The frequencies that the FAA has assigned for this purpose can only be used with the permission of the FAA.
- The FAA does not allocate frequencies for people or incident teams to self-assign. The FAA maintains strict control over those frequencies in order to avoid interference that may cause an aircraft safety hazard.
- If an incident is complex enough to require Air-to-Air, it is recommended the Communications Unit Leader have someone on staff that is familiar with air-to-air technologies and programs.
- Most standard air-air frequencies are AM, though many airplanes will have additional FM equipment installed.
- Example of incidents requiring an air-to-air network include large searches, either search-and-rescue or law enforcement, or Katrina SAR.

## Topic

Logistics Network

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Key Points

The logistics network can be a critical component to incident management and should not be minimized. Essential support to the incident is predicated on logistical efficiency.

The Logistics Section may be geographically stable, and many units within the section do not require as many radio systems assets. More often, these units require phone, fax, and Internet data links.

Groups on this network will include camps, security, staging, and transportation channels.

Based on the nature of the incident, the Logistics Net may be a large network.

## Topic

Initial Priorities

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**Initial Priorities**

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- Keep constant communications with the Communications POC
- The Communications Unit supports all aspects of incident management
- Priorities may not follow traditional expectations

**Is there something you can do to enhance existing systems while a definitive solution is being implemented?**

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Visual 6-10

**Key Points**

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The COML will have a number of priorities that require attention:

- Is there something you can do to enhance existing systems while a definitive solution is being implemented?
- Because of concurrent priorities, the Logistics Chief or Incident Commander may need to establish the order of priorities.

Constant communications must be kept with the Communications POC, especially if the area is unfamiliar.

**Topic** Designing Command Radio System

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**Designing Radio Systems**

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- Analyze radio needs
    - What is in place now? Will it suffice?
    - If not, perform an analysis to include:
      - GIS
      - Radio coverage software
      - Topographic maps/software
      - Physically survey terrain by ground/air
      - Local technician(s) and resource advisors
- What variables and circumstances must be considered by the COML?**

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Visual 6-11

**Key Points**

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When analyzing coverage, the Communications Unit Leader must consider:

- Terrain
- Incident size
- Available equipment
- Incident coverage
- Timing
- ICP/ICC locations
- Camp locations (remote)
- Roads
- Travel routes
- Accessibility
- Helibase location
- Aircraft

- Staging areas
- Incident size and expected growth
- Incident objectives
- Operational boundaries
- Assigned resource communication capabilities



**Topic** Radio System Considerations

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**Radio System Considerations**

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- Potential problems include:
  - Adjacent incident interference
  - Multiple repeaters
  - Additional equipment as needed

What else could pose a problem?

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Incident Communications Systems

Visual 6-12

**Key Points**

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On large and complex incidents, the COML may be dealing with:

- Adjacent incident interference: Interference with normal daily response radio traffic (e.g., Northridge Earthquake; Atlanta tornado; Ft. Worth Tornado) can be a complication.
- Additional equipment may be needed: More complexity means more need for equipment. Repeaters, links, additional cache radios, etc. are required as an incident's communications scale in complexity.

**Topic**Available/Assigned Nets

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**Available/Assigned Nets**

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- Available Nets (ICS Form 217A)
  - Shared Channels Reference
  - TIC Plan
  - Frequency/Talkgroup agency listing
  - Local/Regional Communications Plan
- Assigning Nets
  - Coordinate with the Local COMC (Communications Coordinator)
- Assess need for cache radio and gateway patches

Unit 6:

Incident Communications Systems

Visual 6-13

**Key Points**

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ICS Form 217A, TIC Plan, Local or Regional Communications Plan.

Coordinate with the local Communications Coordinator, if designated.

**Topic****Implementing Communications Solutions**

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**Implementing Communications Solutions**

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- Use a shared system?
- Use shared channels?
- Activate a radio cache?
- Order a gateway?
- Utilize a mobile communications unit?
- Set up repeaters and portable towers?
- Document the plan with the ICS Form 205

Unit 6:  
Incident Communications Systems

Visual 6-14

**Key Points**

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## Topic

Initial Order—Personnel

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**Initial Order – Personnel**

- Order by assignment and Incident Command System (ICS) position
  - INCM: Incident Communications Center Manager
  - COMT: Incident Communications Technician
  - RADO: Radio Operator
  - THSP: Technical Specialist
- Qualifications?



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Incident Communications Systems

Visual 6-15

**Key Points**

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Assess the personnel requirements according to the duration and complexity:

- RADO and COMT are almost always the first ordered; most incidents require them.
- INCM is in the initial order if the Communications Unit Leader plans to create outposts or have span-of-control issues.
- Technical Specialists are usually any local individuals the Communications Unit needs, but will not fit under any other title.

## Topic

Initial Order—Supplies

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**Initial Order – Supplies**

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- Determine supply needs according to:
  - Tactical resource orders
  - Projected number of incident facilities
  - Projected growth of incident
- When placing initial supply order, plan for approximately three days.
- Battery needs a particular concern
  - May need to order 2 changes of batteries per radio, per operational period.

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Visual 6-16

**Key Points**

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- When placing an initial order, it's important to determine supply needs based on tactical resource orders, the projected number of incident facilities, and the projected growth of the incident. Each of these variables can influence the communications resources needed.
- The initial supply order should aim to sustain communications operations for three days. If the radios used on the incident do not have multiple batteries, then you need to order a sufficient number of rechargeable batteries and chargers to handle the number of radios assigned to the incident and a means to power them. This includes power strips, sufficient outlets, and amperage to support the chargers.
- If AA batteries are employed for clamshell use, warehouse stores (such as Wal-Mart or Costco) have supply chains sufficient for incident support.

## Topic

Initial Order Procedure

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**Initial Order Procedure**

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- **General Message Form (ICS Form 213)**
  - Yellow and pink submitted to recipient
  - White retained by sender
  - Pink returned to sender when reply issued
- **Distribute copies as appropriate**
- **Provide as much information as possible**
  - Give specific delivery time, date and location. Do not use “ASAP”.
- **Route through established ordering channels (often the LSC or SPUL)**

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Incident Communications Systems

Visual 6-17

**Key Points**

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Use the General Message Form (ICS 213) to order supplies, making sure to include quantities and descriptions as well as position codes. Orders should be routed through the established channels, generally the LSC or Supply Unit Leader.

When filling out the ICS 213, be specific and include details. Fill out all blocks on the form. Make delivery times practical (“ASAP” is not acceptable). Be specific when ordering quantities (packages versus pallets). Personnel requests should anticipate practical travel times.

- What do you want?
- When do you want it?
- Where do you want it?

**Topic**Order and Manage Use of Temporary System Equipment

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**Order and Manage Use of Temporary System Equipment**

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- Determine required coverage area
- Locate equipment sites
- Provide for equipment security
- Avoid interference issues
- Apply local and regional SOPs
- Adhere to mutual aid agreements

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Visual 6-19

**Key Points**

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**Topic** Swap/Cache Radios

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**Swap/Cache Radios**

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- Provide radio cache programming coordination and validation
- Accountability



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Incident Communications Systems

Visual 6-20

**Key Points**

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Refer to T-Card in Forms section of the Student Workbook

If necessary, provide for radio cache programming. Provide for accountability of issued equipment.



### Accountability

1. KIND OF PROPERTY	2. CACHE/UNIT NAME	3. I.D. NO.
BK RADIO	K186	07
4. SIZE/CAPACITY		
1- "AA" CLAWHILL		
1- REMOTE SPK & MIC		
1- LEATHER CASE 4/REIT		
ASSIGNMENT RECORD		
5. DATE/TIME	6. OPERATIONAL PERIOD	
08-19-06	0600 TO 1800	
7. NAME		
JohN DOE		
8. HOME BASE		
CITY OF CONCORD PW		
9. INCIDENT ASSIGNMENT		
STREET DIVISION		
10. RETURNED DATE/TIME	11. TRANSFERRED TO	
5. DATE/TIME	6. OPERATIONAL PERIOD	
7. NAME		
8. HOME BASE		

Unit 6:

Incident Communications Systems

HO 6-1: Accountability Tracking

Visual 6-21

### Key Points

They may seem simple, but they don't take batteries and they don't break.

It is highly recommended to avoid using abbreviations on T-Cards if possible.

If it cannot be avoided, keep an abbreviations list available for review as personnel change from one operational period to another.

**Topic**Consider Commercial Services

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**Consider Commercial Services**

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- Radio Systems
- Telephones
- Satellite
- Contract Technicians



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Incident Communications Systems

Visual 6-22

**Key Points**

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This is where your Mob Guide fills a role.

Define your ordering point in your Mob Guide.

Before the incident, know your authority to order and obligate fiscally.

## Topic

## Solutions for Telephone and Data

### Solutions for Telephone and Data

- Terrestrial wired and wireless services
- Satellite services



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Visual 6-23

### Key Points

Consider vulnerability of cell service for emergency operations. Remember cell is still coming out into the landline telephone network at some point.

Wireless carriers may be able to provide Cellular on Wheels (COWS), Cell of Light Trucks (COLTS) and other cellular and wireless resources.

Before requesting resources from wireless carriers, be clear on what it is you are trying to accomplish. All carriers are not the same in terms of coverage, quality and reliability in any given area. No one system will provide service to all users. Clearly identify and get approval for any associated costs in advance. These resources may take considerable time to deploy and they may have deployment costs attached. Have written approval before requesting these resources.

- Verizon Significant Events Center (800) 981-9558
- Sprint-NEXTEL Emergency Contact (888) 639-0020
- AT&T National Communications System-National Coordinating Center (703) 235-5080

## Topic

Technology Services

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### Technology Services

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- Do you need data devices?
- Internet connectivity?
- Establish LAN and WAN?
- Can you provide VoIP?



Unit 6:  
Incident Communications Systems

Visual 6-24

### Key Points

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Consider vulnerability of any system you order. Make sure it will all work together when ordering.

VoIP: Is this technology something that you want or need for your incident?

It is very important to keep your eyes open and stay current about what is available. Are tools resilient and still applicable to the current day?

**Topic** Declared Emergency Coordination

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### Declared Emergency Coordination

<ul style="list-style-type: none"><li>■ <b>Federal Coordination:</b><ul style="list-style-type: none"><li>■ <b>JFO: Joint Field Offices</b></li><li>■ <b>ESF2: National Communications Systems</b></li><li>■ <b>DEC: FEMA Disaster Emergency Communications Division</b><ul style="list-style-type: none"><li>■ <b>MERS: Mobile Emergency Response Systems</b></li></ul></li></ul></li></ul>	<ul style="list-style-type: none"><li>■ <b>State/Local Coordination:</b><ul style="list-style-type: none"><li>■ <b>EMA: State/Local Emergency Management Agencies</b></li><li>■ <b>EOC: Emergency Operations Centers</b></li><li>■ <b>Communications Coordinator</b></li></ul></li></ul>
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Unit 6:  
Incident Communications Systems

Visual 6-25

**Key Points**

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1. Joint Field Offices (JFOs) generally are for the coordination of federal responders.
2. Emergency Support Function 2 (ESF2): National Communications System (NCS).
3. Disaster Emergency Communications (DEC): FEMA's DEC provides tactical disaster emergency communications capabilities to support all-hazards disaster response and national security response requirements.
  - Mobile Emergency Response Systems (MERS): FEMA's communications response that supports Federal, State and local responders – not disaster victims.
4. Emergency Management Agencies (EMA) will typically coordinate local disaster response and will be the interface to State and Federal resources.
5. Emergency Operations Centers (EOC) are a component of the Multiple Agency Coordination System (MACS) within NIMS. They also perform multi-discipline coordination.

## Topic

Other Jurisdictional Communications Assets

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**Other Jurisdictional Communications Assets**

- **CST: National Guard Civil Support Teams**
- **IMT: Regional, State, and national Incident Management Teams (Type 3, 2 or 1 IMTs)**
- **FEMA USAR: Federal Emergency Management Agency Urban Search and Rescue Teams**
  - **IST: Incident Support Team**
- **SUSAR: State Urban Search and Rescue Teams**
- **Fed Tech**
- **Other communications response groups**

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Visual 6-26

**Key Points**

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Other Jurisdictional Communications Assets to coordinate with:

- National Guard Civil Support Teams (CSTs)
  - Many now deploy with a well-equipped communication package. Check with your local team on their capabilities.
- DoD
- Tactical Emergency Response Teams (TERTs)
- Regional, state, and national Incident Management Teams (Type 3, 2, or 1 IMTs)
- Federal Emergency Management Agency Urban Search and Rescue Teams (FEMA USAR Teams)
  - The teams deploy with a robust communication capability and a communication specialist.
- State Urban Search and Rescue Teams
- Fed Tech
  - Ad-hoc group of Federal and local technical assets that track interference
- Other jurisdictional communication response groups

- Group discussion on working with other response groups

### NCS Programs

- Government Emergency Telecommunications Service (GETS)
  - Priority access to the public wireline network
  - GETS is supported by all major service providers
- Wireless Priority Service (WPS)
  - Priority access to the public wireless network
  - WPS is available through AT&T, Edge Wireless, Southern LINC, Sprint/Nextel, T-Mobile, Verizon
- Telecommunications Service Priority (TSP)
  - Establishes priority for restoration/provisioning of NS/EP circuits
  - Supported by an FCC regulatory mandate



Unit 6:  
Incident Communications Systems

Visual 6-27

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## Key Points

Because access to the public communications network is degraded in times of crisis, the National Communications System (NCS) programs ensure priority access for critical users.



## Topic

## GETS

### GETS

- GETS is a no cost calling card that provides priority for outbound calls to all regular telephone numbers
- GETS uses the capacity of the public network, it is not a separate system
- Caveats:
  - GETS will not work without a dial tone
  - May experience soundless delays while queuing
  - GETS does not mitigate cellular congestion
  - GETS cannot be used for toll free numbers



Unit 6:  
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Visual 6-27

### Key Points

NCS: National Communications System

Because access to the public communications network is degraded in times of crisis, the National Communications System (NCS) programs ensure priority access for critical users.

### GETS operations and administration support:

**Website**      <http://gets.ncs.gov/>

**E-Mail:**      [gets@dhs.gov](mailto:gets@dhs.gov)  
To apply for or to manage your GETS account:  
[gwide@saic.com](mailto:gwide@saic.com)

**Telephone:**      **1-866-NCS-CALL** (1-866-627-2255)

All Communication Unit staff should have GETS Cards.

Because access to the public communications network is degraded in times of crisis, the National Communications System programs ensure priority access for critical users.

GETS: Government Emergency Telecommunications Service ([www.gets.ncs.gov](http://www.gets.ncs.gov))

- Priority access to the public wireline network. GETS uses the capacity of the public network, it is not a separate system
- GETS is supported by all major service providers

- GETS is a no-cost calling card that provides priority for outbound calls to all regular telephone numbers. All COMM Unit staff should have GETS Cards.

Important to Know:

- GETS will not work without dial tone
- May experience soundless delays while queuing
- GETS does not mitigate cellular congestion
- GETS cannot be used for toll-free numbers
- Need to test the GETS occasionally
- Identify Point of Contact for GETS
- Useful over satellite phones
- For Mob Guide, find out who in your agency has GETS and WPS cards

## Topic

WPS

### Wireless Priority Service (WPS)

- WPS provides priority for emergency calls made from cell phones including PDAs
- WPS feature is added on a per-phone basis for Alltel, AT&T, Cellular South, Edge Wireless, SouthernLINC, Sprint Nextel, Sprint PCS, T-Mobile, and Verizon Wireless
- Caveats:
  - WPS will not work without a signal
  - Users may experience waits up to 28 seconds
  - WPS may not work when roaming
  - 9-1-1 loses geo locator



Unit 6:  
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Visual 6-29

## Key Points

### WPS - Wireless Priority Service

#### WPS operations and administration support:

E-Mail: [wps@dhs.gov](mailto:wps@dhs.gov)

Telephone: **1-866-NCS-CALL** (1-866-627-2255)  
**1-703-676-CALL** (2255)

WPS: Wireless Priority Service ([www.wps.ncs.gov](http://www.wps.ncs.gov))

- Priority access to the public wireless network. WPS provides priority for emergency calls made from cell phones, including PDAs
- WPS feature is added on a per-phone basis for Alltel, AT&T, Cellular South, Edge Wireless, SouthernLINC, Sprint Nextel, Sprint PCS, T-Mobile, and Verizon Wireless
- Be sure WPS is assigned to fixed cellular units (Telular)
- WPS is an essential tool for COMM Unit personnel

#### Important to Know:

- WPS will not work without a signal
- Users may experience waits up to 28 seconds

- WPS may not work when roaming
- 9-1-1 loses geo locator
- WPS typically has a monthly fee per phone not to exceed \$4.50 and is not available in all carriers
- Utilizes the same point of contact that GETS does

**Topic**      WPS—Fixed Cellular Units

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**WPS – Fixed Cellular Units**

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Unit 6:  
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Visual 6-30

**Key Points**

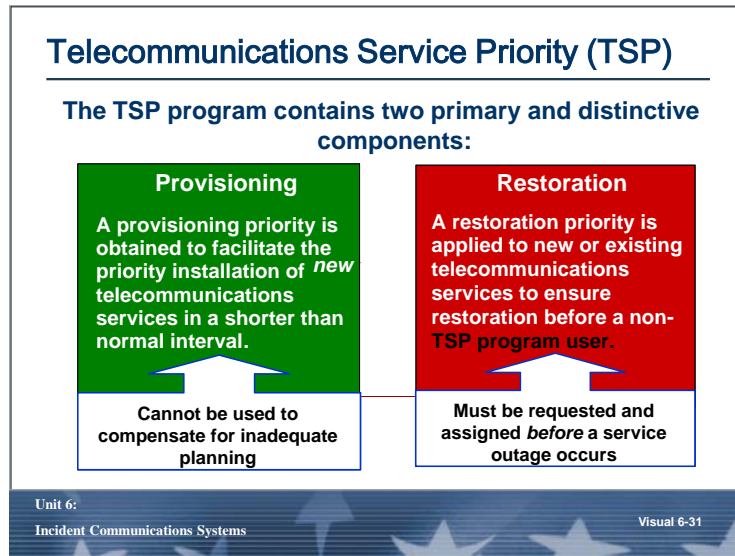
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Cellular fixed wireless devices in a mobile communications vehicle. Verizon and AT&T units are shown.

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**Topic** Telecommunications Service Priority (TSP)

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**Key Points**

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**TSP - Telecommunications Priority Service****TSP operations and administration support:**

Please contact the TSP Program Office staff with questions regarding the TSP Program between 8 a.m. and 6 p.m. (EST), Monday through Friday.

**For Restoration Requests:**

NCS Help Desk, between 8 a.m. and 6 p.m.  
Eastern time, Monday thru Friday:

866-NCS-CALL (866-627-2255) or 703-676-2255

TSP Program Office Staff, between 8 a.m. and 4:30 p.m. Eastern time, Monday thru Friday:

703-235-5359

**For Emergency and Essential Provisioning Requests:**

TSP Program Office Staff, between 8 a.m. and 4:30 p.m. Eastern time, Monday thru Friday:

703-235-5359

After normal working hours:

703-235-5080 (ask for the TSP Duty Coordinator)

**Fax**

703-235-5806. For secure fax number, call 703-235-5080

**Email**

[tsp@dhs.gov](mailto:tsp@dhs.gov)

The TSP program consists of two components: Restoration and Provisioning.

TSP establishes priority for restoration/provisioning of NS/EP circuits. TSP restoration priorities are applied to new or existing telecommunication services to ensure they are restored by telecommunications vendors before a non-TSP program user.

Note that TSP restoration assignments must be requested and assigned before a service outage occurs. In other words, a user cannot request restoration assignments for critical circuits after a natural or technical disaster strikes.

Supported by an FCC regulatory mandate.

TSP Provisioning priorities facilitate the priority installation of new telecommunication services by vendors in a shorter than normal time interval. However, this service cannot be used to compensate for inadequate planning on the part of the user.

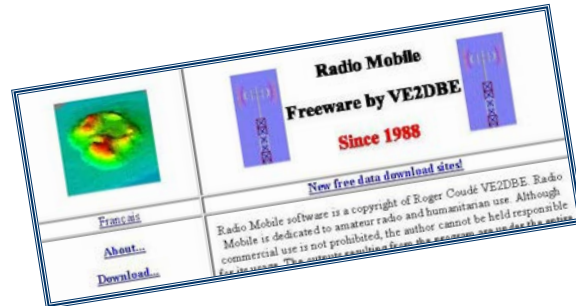
With the exception of EMERGENCY Provisioning orders, restoration orders are processed before new service provisioning orders. In all cases the service order is expedited according to the service vendor's "Best Effort."

### Other Resources (cont.)

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#### Radio propagation software

<http://www.cplus.org/rmw/english1.html>



Unit 6:

Incident Communications Systems

Visual 6-32

### Key Points

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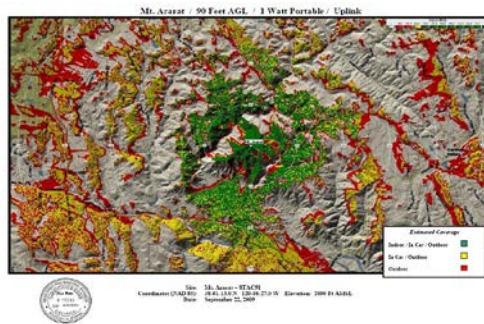
Propagation software may provide an approximation of coverage, but shouldn't be used for hard planning data.

Systems should be physically tested and not deployed solely on the basis of propagation software.



### Other Resources (cont.)

#### ■ Radio Propagation Example



Unit 6:  
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Visual 6-33

### Key Points

## Topic

Other Resources (cont.)

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**Other Resources (cont.)**

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- Here are examples of ways to create a mini logging recorder using a Scanner and PC:
  - [www.butelsoftware.com](http://www.butelsoftware.com)
  - [www.proscan.org](http://www.proscan.org)
- A number of other scanner software vendors can provide this service
- To get almost every frequency, PL and Talkgroup:
  - [www.RadioReference.com](http://www.RadioReference.com)

Unit 6:  
Incident Communications Systems

Visual 6-34

**Key Points**

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## Topic

Other Resources (cont.)

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**Other Resources (cont.)**

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- Yahoo group specifically for communications personnel:
  - OEC-COML
  - <http://groups.yahoo.com/group/OEC-COML/>

Unit 6:  
Incident Communications Systems

Visual 6-35

**Key Points**

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**Topic**Test System

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**Test System**

Continually Test and Evaluate Your System



Unit 6:  
Incident Communications Systems

Visual 6-35

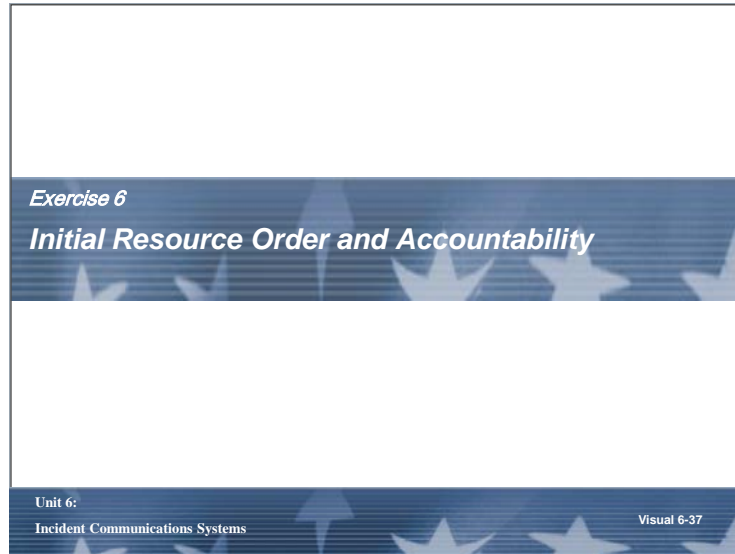
**Key Points**

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With complex systems, constant monitoring is required to ensure the system has not been degraded and to make improvements. Query your performance with actual users in the field.

**Topic**Exercise 6: Initial Resource Order and Accountability

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**Key Points**

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**Exercise:** The purpose of the exercise is to students the participants with an opportunity to order supplies, personnel, and equipment on the ICS Form 213 – General Message. This exercise will also provide the students with an opportunity to identify the pros and cons of specific tracking systems for accountability purposes during an incident. This exercise is scheduled to last approximately 45 minutes, including small group discussions and presentation of group findings.

## Topic

Objectives Review

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**Objectives Review**

1. *Describe the COML's responsibilities in establishing an incident radio communications system.*
2. *Describe use of command and tactical nets.*
3. *What are the requirements for establishing an incident radio communications system?*
4. *Describe specific communication information gathered.*
5. *Describe considerations for evaluating needs and ordering supplies, materials, and personnel to keep unit operating.*

Unit 6:  
Incident Communications Systems

Visual 6-38

**Key Points**

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**Unit Terminal Objective:**

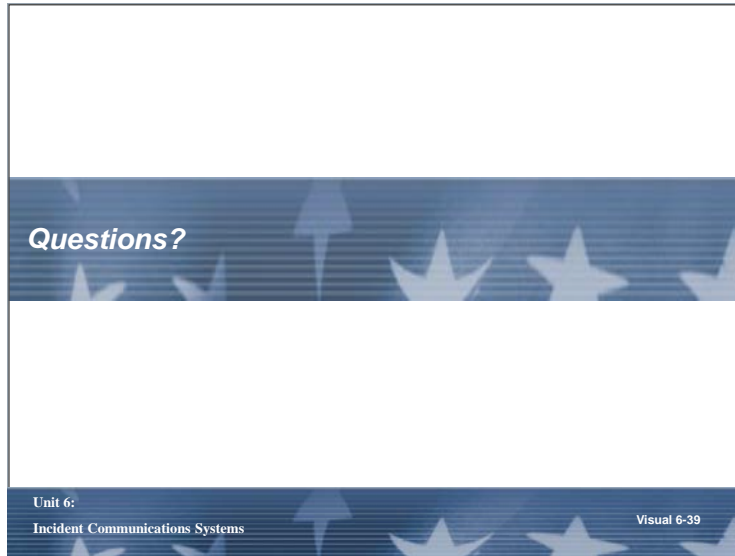
At the conclusion of the unit, the student will describe the Communications Unit Leader responsibilities in establishing an incident radio communications system. The student will also be able to describe the actions and considerations necessary to mobilize for an incident and gain situational awareness.

**Unit Enabling Objectives:**

- Describe the COML's responsibilities in establishing an incident radio communications system.
- Identify Communications Unit Leader incident information sources.
- Describe use of command and tactical nets.
- Identify requirements for establishing an incident radio communications system.
- Identify and describe necessary actions to ensure readiness for assignment.
- Describe the information gathered from the initial meetings, briefings, and documents.
- Describe specific communication information gathered.
- Evaluate needs and order supplies, materials, and personnel to keep unit operating.

**Topic**

Questions?

**Key Points**