

# National Communications System Overview



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# NCS Mission

*To assist the President , the National Security Council (NSC), the Homeland Security Council (HSC), the Office of Science and Technology Policy (OSTP) and the Office of Management and Budget (OMB), in the coordination of the planning for and provisioning of national security and emergency preparedness communications for the Federal Government under all circumstances, including crisis or emergency, attack, recovery and reconstitution*



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# Partnerships: Government and Industry

The NCS provides a collaborative forum for the exchange of ideas among Federal stakeholders and private corporations concerning emergency communications disaster response.

## 24 Federal Members

Central Intelligence Agency	Department of Veteran Affairs
Department of Agriculture	Federal Communications Commission
Department of Commerce	Federal Emergency Management Agency
Department of Defense	Federal Reserve Board
Department of Energy	General Services Administration
Department of Health & Human Services	Joint Staff
Department of Homeland Security	National Aeronautics & Space Administration
Department of Interior	National Security Agency
Department of Justice	National Telecommunications & Information Administration
Department of State	Nuclear Regulatory Commission
Department of the Treasury	Office of the Director of National Intelligence
Department of Transportation	United States Postal Service

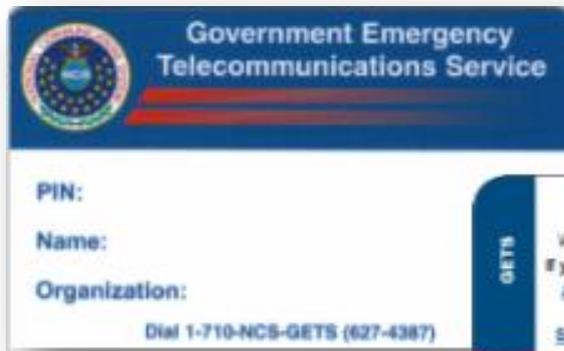


## 56 Industry Members

AT&T	Global Crossing	Qwest Gov't Solutions
Alcatel-Lucent	Globalstar	Raytheon
Americom	HP Enterprise Svc	Research in Motion
APCO	Hughes	SAIC
Arrowhead	Inmarsat	SAVVIS
Artel	INTELSAT	SES World Skies
Boeing	Internap	SIA
CenturyLink	Intrado	Sprint
Cincinnati Bell	Juniper Network	TelePacific
CISCO	Level 3 Comms.	Time Warner Cable
Comcast	LightSquared	T-Mobile
Comptel	Lockheed Martin	TW Telecom
COX	Motorola	Tyco Comms.
	Nat'l Assn. of Broadcasters	USA Mobility
CSC	Nortel Networks	USTA
CTIA	Northrop Grumman	Verisign
Eutelsat	OPASTCO	Verizon
Fair Point	Qualcomm	Verizon Business
Frontier		Verizon Wireless

# Government Emergency Telecommunications Service (GETS)

- Supports COOP, COG, and disaster/emergency response scenarios
- Provides 274,000+ government and emergency response personnel at the federal, state, and local levels priority access and processing within the Public Switched Telephone Network to improve their ability to make calls during crises or congestion
- Capability: Provides 90%+ call completion rates when network call volume is up to eight times greater than normal capacity
  - During 9/11 event, ~10,000 GETS calls were made with a 95% success rate
  - During 2003 Blackout, 1,231 GETS calls were made with a 90%+ success rate



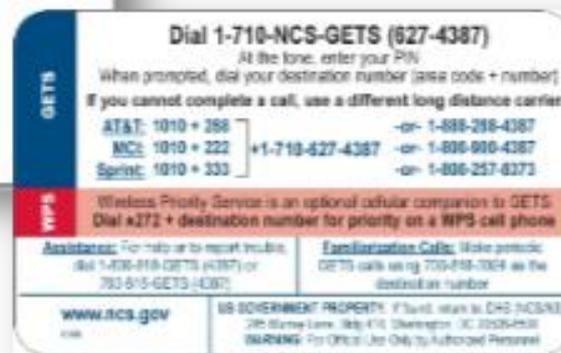
Government Emergency Telecommunications Service

PIN:

Name:

Organization:

Dial 1-710-NCS-GETS (627-4387)



**GETS**

Dial 1-710-NCS-GETS (627-4387)  
At the tone, enter your PIN.

When prompted, dial your destination number (area code + number)  
If you cannot complete a call, use a different long distance carrier:

AT&T: 1010 + 258	-or- 1-888-258-4387
NCS: 1010 + 222	+1-710-627-4387 -or- 1-800-910-4387
Sprint: 1010 + 333	-or- 1-800-257-8373

**WPS** Wireless Priority Service is an optional cellular companion to GETS.  
Dial \*272 + destination number for priority on a WPS cell phone.

**Assistance:** For help or to report trouble, dial 1-800-910-GETS (4387) or 703-615-GETS (4387).

**Familiarization Calls:** Make periodic GETS calls using 703-615-7054 as the destination number.

[www.ncs.gov](http://www.ncs.gov)

U.S. GOVERNMENT PROPERTY. If found, return to DHS (NCS/NL), 205 Stone Lane, 8th Fl, Washington, DC 20526-4930  
**WARNING:** For Official Use Only by Authorized Personnel



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# Wireless Priority Service (WPS)



- Supports COOP, COG, and disaster/emergency response scenarios
- WPS provides service to 108,000 subscribers at the federal, state, and local levels priority access and processing within the public cellular networks to help them make calls during crises or times of congestion
- Together WPS and GETS can provide end-to-end priority service for voice calls
- Currently WPS is widely available with the following carriers: Alltel, AT&T, Cellcom, Cellular South, SouthernLINC, Sprint-Nextel (iDEN), Sprint PCS (CDMA), T-Mobile, and Verizon Wireless



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# Telecommunications Service Priority (TSP)

- Supports COOP, COG, and disaster/emergency response scenarios
- Provides priority restoration (repair) of wireline communications services to those circuits that use TSP
  - Can save days to weeks on the time required to return wireline voice/data services
  - Over 200,000 active TSP circuit assignments in support of NS/EP communications
- Can be used to receive priority installation of new wireline telecommunications services to meet emergency or disaster needs

## Restoration Priority

Applied to new or existing telecommunications services to ensure restoration before a non-TSP program user

- Must be requested and assigned *before* a service outage occurs

## Provisioning Priority

Provides priority installation of new telecommunications services in a shorter than normal interval

- Cannot be used to compensate for inadequate planning



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# SHARES High Frequency (HF) Radio



- **SHARES Overview**
  - Supports COOP, COG, and disaster response operations
  - Over 1,500 SHARES member stations
  - Provides nationwide HF radio communications capability to meet NS/EP requirements
  - Multi-agency network using existing HF assets and frequencies
  - Proven to be an effective, low cost, emergency back-up communications system when normal telephone, cellular, and internet services are lost
- **SHARES Availability:**
  - Always available – 24x7x365
  - Activation can be real-time



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# National Coordinating Center (NCC)



Mission: To assist in the initiation, coordination, restoration, and reconstitution of the NS/EP telecommunications services or facilities under all conditions, crises, or emergencies



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# Communications ISAC

The Communications ISAC, a function of the NCC, supports the NCC mission by facilitating voluntary collaboration and information sharing among its participants; gathering information on vulnerabilities, threats, intrusions, and anomalies from the telecommunications industry, government, and other sources; and analyzing data with the goal of averting or mitigating impact upon the telecommunication infrastructure.



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# NCC Incident Management

- In advance of incidents, the NCC creates effective partnerships with government and industry partners by:
  - Coordinating with the Communications ISAC and government partners (in-person, weekly at a minimum)
  - Providing daily situational awareness bulletins
  - Conducting additional coordination on specific issues
  - Establishing communication priorities (e.g. emergency services)
- During an incident with potential or current impacts to communications critical infrastructure, the NCC:
  - Works with government and industry partners for situational awareness and recovery
  - Hosts regular coordination calls for government and industry partners for situational awareness and identification of field communication requirements
  - Identify state priorities for restoration
  - Identify roadblocks to key issues (Security, Access, Fuel)



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# NCC Watch

- Operational arm of both the NCS and the Communications ISAC
- Senior communications/IT analysts maintain 24x7 readiness to respond to communications emergencies and events.
- Coordinates government and private sector relationships and tools that provide situation assessment, awareness, response and recovery capabilities.
- Coordinates with other Federal entities for cyber issues
- Provides technical, analytic, and liaison support to federal, state, and local, and industry.
- Coordinates with other Federal entities for cyber issues



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# Analysis Response Team (ART)

***The increasing demand for complex, real-time analyses during emergency response operations highlighted a need for a coordinated analytic response across several entities of the NCS and Federal government***

- The mission of the ART is to conduct an exhaustive analysis of communications infrastructures during all stages of a crisis or significant event from preparedness through response to recovery
- The ART brings together representatives from the Operations Analysis (OA) Team of the Critical Infrastructure Protection (CIP) Branch, the NCC Watch, the NCS Technology and Programs Branch, and the Federal Communications Commission (FCC)
- The ART has access to critical network information from the Federal government and private sector to augment NCS data on the communications infrastructure. The enhanced access to data allows the ART to produce more consistent analysis results in an ever-changing threat environment



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# NCS ESF #2– Mission

- Coordinates Federal communications support to response efforts during incidents requiring National Security/Emergency Preparedness (NS/EP) communications
- Provides communications support to Federal, State, tribal, and local governments and first responders when their systems have been impacted
- Support restoration of the communications infrastructure:
- Provides communications and information technology (IT) support to the Joint Field Office (JFO) and JFO field teams
- Facilitates the recovery of systems and applications from cyber attacks



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# ESF#2 National Response Framework

- The National Response Framework (NRF) establishes a coordinated, comprehensive, national, all-hazards approach to domestic incident response.
- The NRF presents the guiding coordinating principles that enable Federal response partners to prepare for, respond to, and recover from Presidential declared disasters and emergencies - from the smallest to the largest.
- ESF#2, Communications, is the responsibility of NCS and FEMA



## National Response Framework



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# Key NCS Mission areas

- **Executive Order 12472 -**

- Assist the President in the coordination of the planning for and provision of national security and emergency preparedness (NS/EP) communications for the Federal government under all circumstances

- **National Response Framework (NRF)**

- Establishes a coordinated, comprehensive, national, all-hazards approach to domestic incident response for federal, state, local and tribal entities.
- Emergency Support Function (ESF) #2, Communications - NCS and FEMA are Primary Agencies that lead federal efforts for restoring communications during/after disasters and support state, local and tribal response.

- **Comm ISAC**

- The Communications ISAC, supports the NCC mission by facilitating voluntary collaboration and information sharing among its participants, with the goal of averting or mitigating impact upon the telecommunication infrastructure



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# Sample Event Interdependencies

Event	Comms sector requirements	Comms support
9/11 Attack	<ul style="list-style-type: none"> <li>- Power</li> <li>- Financial</li> </ul>	<ul style="list-style-type: none"> <li>– Wall Street recovery</li> </ul>
Katrina	<ul style="list-style-type: none"> <li>-Security</li> <li>- Access</li> <li>- Fuel</li> <li>- Power</li> </ul>	<ul style="list-style-type: none"> <li>– Re-establish financial network to process government assistance debit cards</li> <li>– Emergency responder communications</li> </ul>
Hurricane Ike	<ul style="list-style-type: none"> <li>- Power</li> </ul>	<ul style="list-style-type: none"> <li>- Hospital Comms</li> <li>- Utility control systems</li> </ul>
Mid-west floods	<ul style="list-style-type: none"> <li>- Transportation</li> <li>- Power</li> </ul>	<ul style="list-style-type: none"> <li>- Nuclear facility communications</li> </ul>
Northridge earthquake	<ul style="list-style-type: none"> <li>– Natural gas for generator</li> <li>– Water for cooling</li> </ul>	<ul style="list-style-type: none"> <li>- Utility Control systems</li> <li>- Public safety communications</li> </ul>



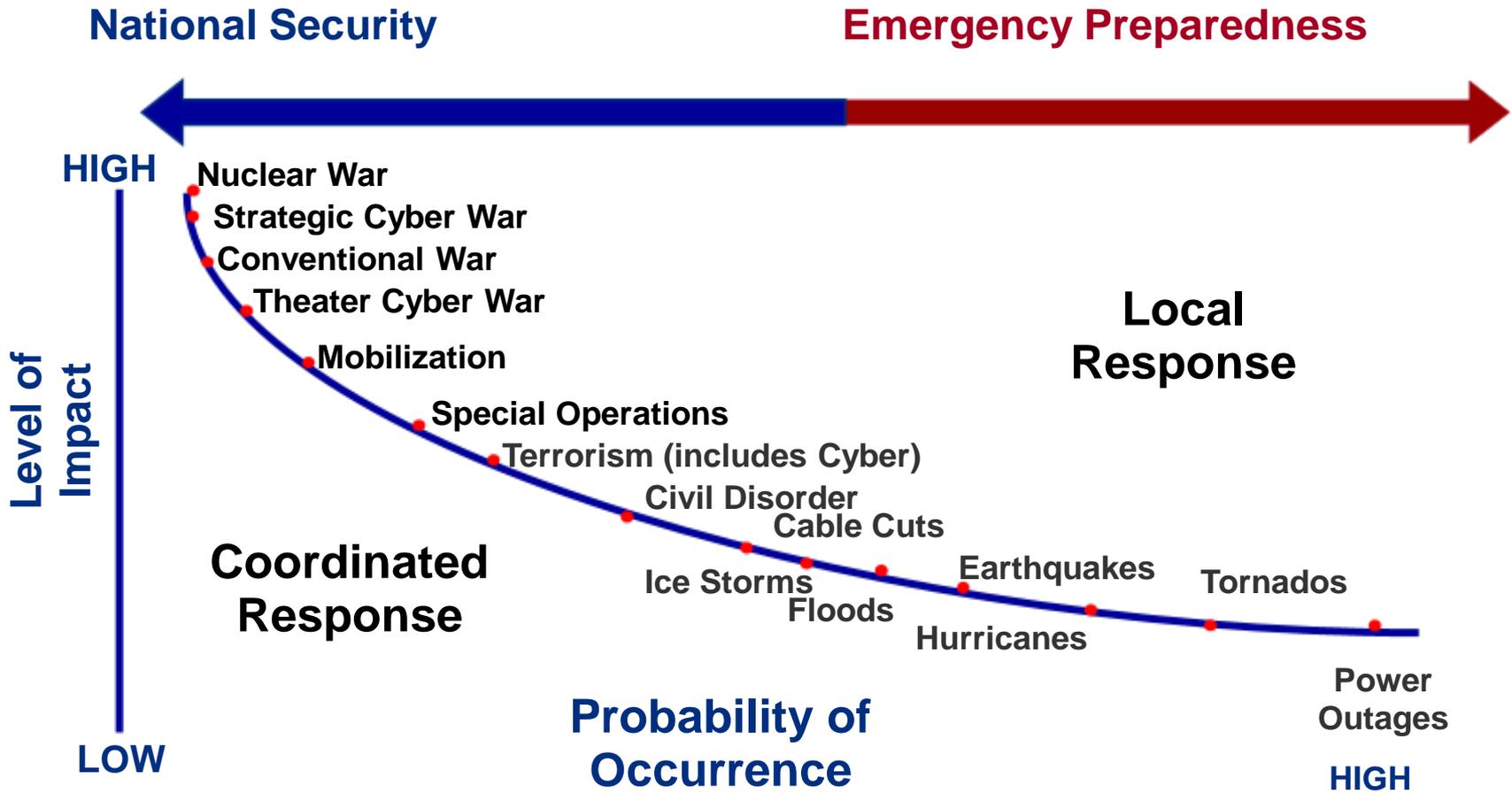
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# NCC Scope of Operations

The NCC is prepared to respond to a wide range of emergencies...



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# NCS Priority Programs

Because the public communications network is often degraded or inoperable in times of crisis, the NCS has developed programs to ensure continuity of NS/EP communications

- Government Emergency Telecommunications Service (GETS) -- provides individual priority access to the public wireline network
- Wireless Priority Service (WPS) -- provides individual priority access to the public wireless network
- Telecommunications Service Priority (TSP) -- establishes priority for the restoration and provisioning of critical NS/EP circuits
- Shared Resources High Frequency Radio Program (SHARES) - provides a single, interagency message handling system with no reliance on the public network



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# NCS Priority Programs



Government Emergency Telecommunications Service (GETS)  
-- provides priority access to the public wireline

Wireless Priority Service (WPS) -- provides priority access to the public wireless network



Telecommunications Service Priority (TSP) -- establishes priority for the restoration and provisioning of critical NS/EP circuits

Shared Resources High Frequency Radio Program (SHARES)  
- interagency message handling system with no reliance on the public network



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# NCC Roles and Responsibilities

- Government
  - Interfaces with represented government agencies
  - Coordinates with the White House Office of Science and Technology Policy (OSTP)
    - Continuity of Government (COG)
    - Section 706 War Powers Act
  - Supports Industry with the coordination of Security, Access, and Fuel during an emergency response
  - Conduit for threat and vulnerability information (Intelligence Community)
  - Information sharing with other government operations centers and Industry
- Industry
  - Provides telecommunications expertise and resources during an emergency
  - Supports the Federal government's National Security/Emergency Preparedness (NS/EP) telecommunications mission
  - Maintains necessary interfaces within their respective companies
  - Provide situational awareness on their respective telecommunication infrastructures



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