



City and County of San Francisco Emergency Response Plan

ESF #2:

Communications Annex





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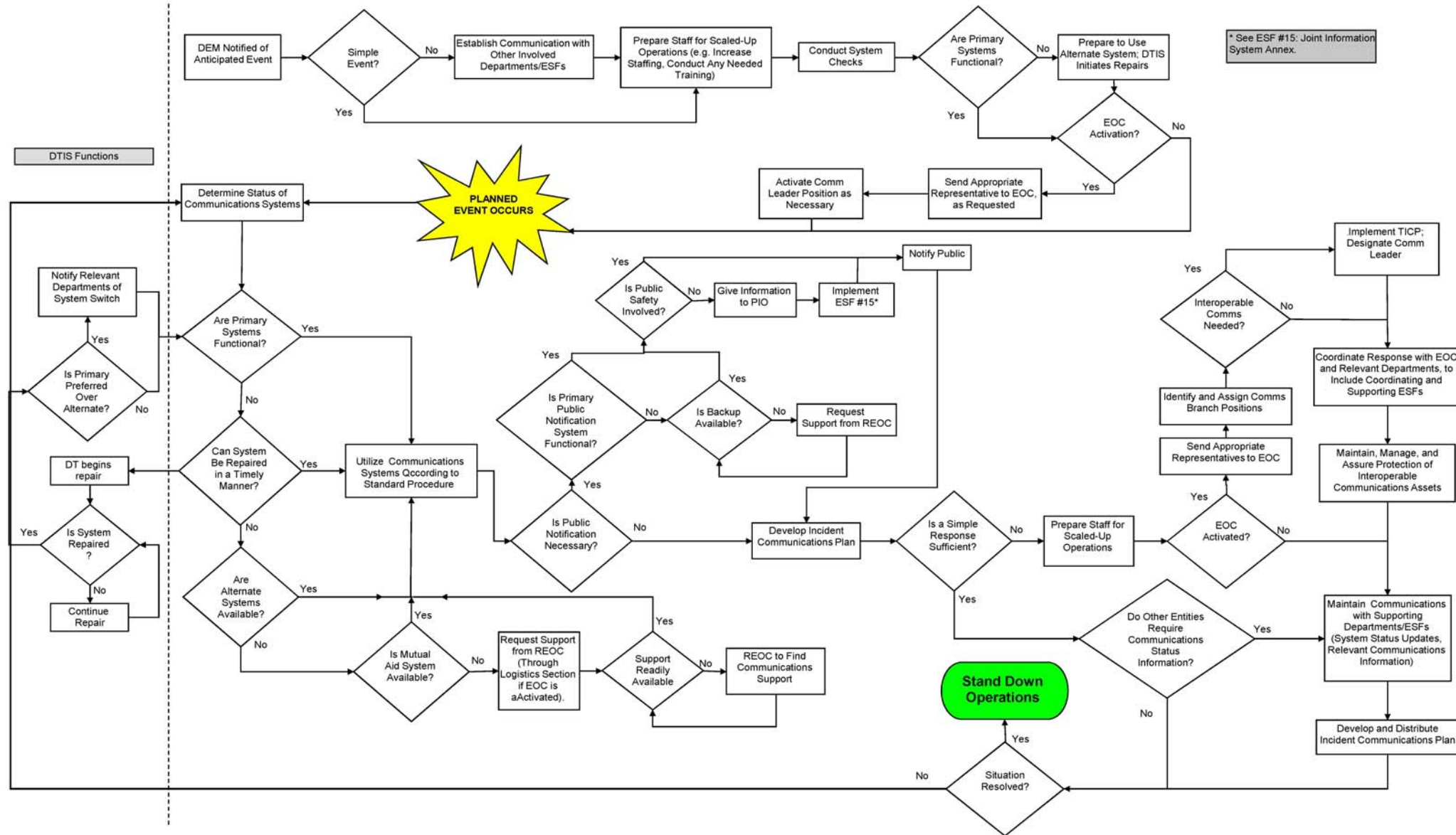
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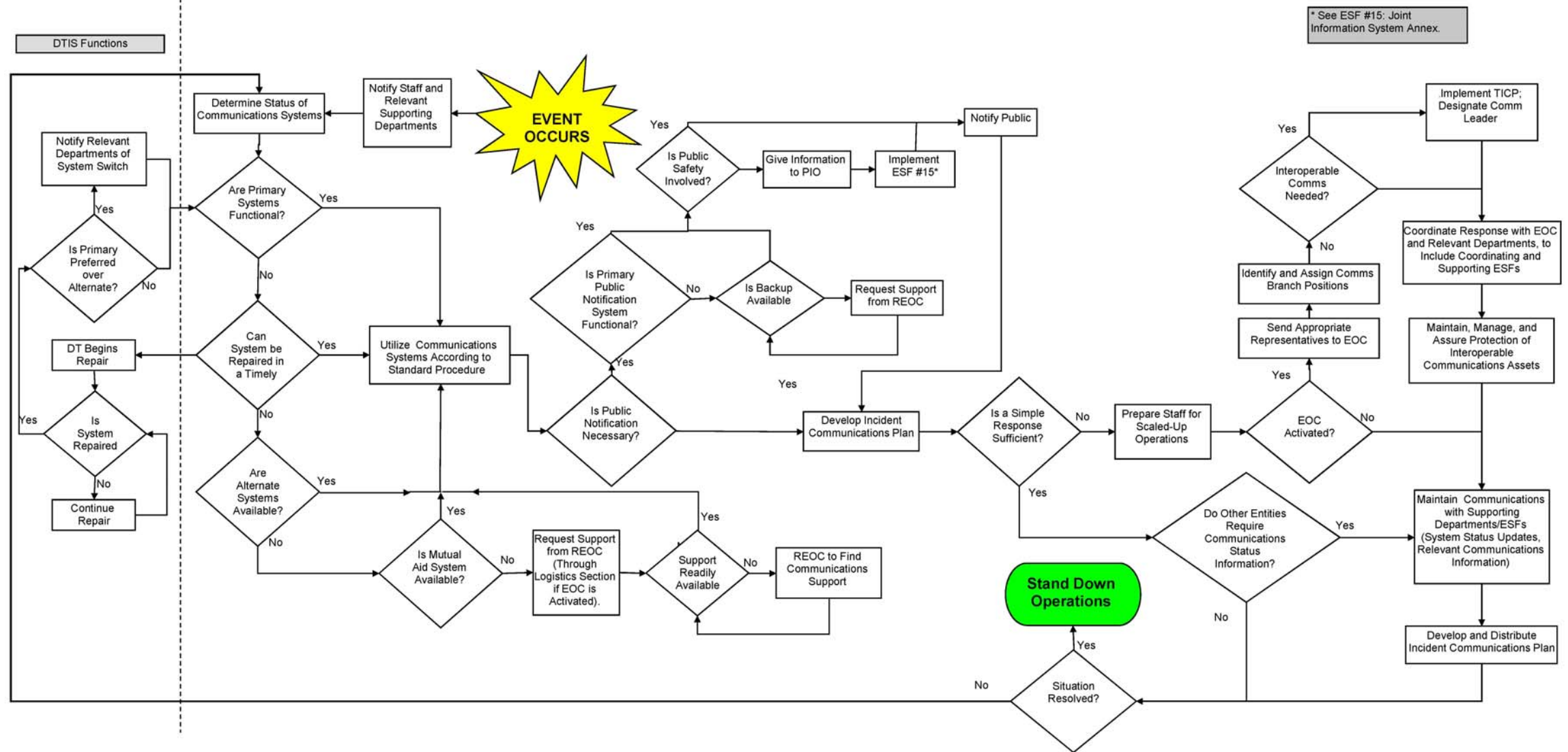
ESF #2: Communications
 Process Flow Chart
 Planned Event



* See ESF #15: Joint Information System Annex.

Figure A: Planned Event Process Flow Chart

ESF #2: Communications
Process Flow Chart
Unplanned Event



* See ESF #15: Joint Information System Annex.

Figure B: Unplanned Event Process Flow Chart



Section I: Introduction

1.1 Coordinating and Supporting Departments

Coordinating Department	DEM (DES)
Supporting Department(s)	211, 311, ACS, DEM (DEC), DT

1.2 Department Responsibilities

Department	Responsibilities
DEM (DES)	<ul style="list-style-type: none"> • Provide oversight for all ESF #2 activities • Coordinate the activation of ESF #2 and the staffing of the EOC Communications Branch • Develop Communications Plan during emergency situation • Activate ACS when their services are needed • Activate various public warning systems as necessary • Provide staff to and/or management of the EOC Communications Branch as necessary
DEM (DEC)	<ul style="list-style-type: none"> • Act as an information relay point between: <ul style="list-style-type: none"> - Citywide first responders and the EOC via CAD and 800 MHz radios - Dispatch and the EOC via CAD • Provide information verification via CAD and 800 MHz radios • Provide channel utilization support to 800 MHz degradation activities • Access the Outdoor Public Warning System via 800 MHz • Communicate public safety information to EOC • Provide staff to EOC Communications Branch as necessary
211	<ul style="list-style-type: none"> • Communicate emergency information to the public regarding community social services • Maintain coordination with the EOC Communications Branch to ensure the provision of needed information to the public • Provide staff to EOC Communications Branch as necessary
311	<ul style="list-style-type: none"> • Communicate emergency information to the public regarding city services • Provide an interface for public service agencies such as DPW, PUC, and MTA • Provide public warning through the 311 website, call-takers, and AlertSF • Maintain coordination with the EOC Communications Branch to ensure the provision of needed information to the public • Provide staff to EOC Communications Branch as necessary



<p style="text-align: center;">ACS</p>	<ul style="list-style-type: none"> • Activate auxiliary communication links between: <ul style="list-style-type: none"> - DOCs and the EOC - NERT staging areas, Battalion Stations, and the Fire DOC - EOC and REOC - Other field units (hospitals, shelters, Incident Command Post) and DOCs • Provide communications assistance to CCSF departments and agencies during an emergency or in any event where additional communications equipment or personnel may be needed • Support communication and the flow of information by whatever means available and appropriate to the situation, including telephone, cellular phone, Internet, 800 MHz trunked radios, and Amateur Radio (voice and digital) • Coordinate all efforts with EOC Communications Branch • Activate resources to support flow of information in the EOC • Provide operational knowledge of backup and auxiliary communications systems • Assist in the development of the citywide Communications Plan (ICS 205) • Provide staff to EOC Communications Branch as necessary
<p style="text-align: center;">DT</p>	<ul style="list-style-type: none"> • Provide information to the EOC Communications Branch about CCSF communications infrastructure status and estimated timeframe for repairs • Provide maintenance and repair to CCSF communications infrastructure (radio/wireless, fiber, servers, network, web) to ensure timely, efficient emergency messaging among responders • Deliver emergency messages to the public as required • Assist in the development of the citywide Communications Plan (ICS 205) • Provide access to SFgovTV, applicable public warning systems, the CCSF website, and resources under existing telecommunications vendor contracts • Provide staff to EOC Communications Branch as necessary to perform Infrastructure Unit roles/responsibilities

1.3 Purpose

Emergency Support Function (ESF) #2: provides the citywide capability to receive and transmit priority communications traffic during an imminent or actual emergency event that necessitates expanded coordination of communications systems. During such an event, ESF #2 will provide management, oversight, and coordination of communications functions among City and County of San Francisco (CCSF) first responders, the CCSF Emergency Operations Center (EOC), City departments, and the general public.



1.4 Scope

ESF #2 will coordinate the establishment, maintenance, and restoration of CCSF communications systems to ensure the provision of efficient communications during emergency operations. This function will enable the receipt and transmission of priority messages by coordinating emergency systems used to communicate with and among the various response departments and emergency systems used to communicate disaster information to the general public. ESF #2 applies to all departments that may require communications services, or whose communications systems may be affected during emergency response operations.

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Section 2: Concept of Operations

2.1 General Concepts

The CCSF Department of Emergency Management (DEM), Division of Emergency Services (DES) will activate ESF #2 during an impending or actual emergency event that threatens the integrity of or relies heavily on CCSF communications systems. When activated, ESF #2 provides communications support to the affected area, field personnel, all CCSF Department Operation Centers (DOCs), and to the EOC.

As the coordinating department, DEM (DES) has ultimate responsibility to oversee ESF #2 activities. Response resources such as equipment and personnel are drawn from ESF #2 supporting departments.

This Concept of Operations will outline the following elements of the Communications support function:

- Emergency Communications
- EOC Communications Branch
- Organizational Structure
- Positions and Responsibilities
- Notification and Activation Procedures
- Response Actions
- Deactivation Procedures

2.1.1 Emergency Communications

Response Department Communications

During any major event impacting the CCSF, emergency communications systems are at risk of becoming limited due to systems being damaged, destroyed, overloaded, or otherwise rendered inoperable. Because effective communication is a critical component of emergency management, the use of interoperable, redundant communications systems among all response elements is essential to ensure a prompt and coordinated response.

ESF #2 has been designated to ensure the fluidity of emergency response messaging among city departments. Through monitoring communications systems, coordinating the repair of damaged systems, providing backup and auxiliary communication assets, and notifying relevant departments of systems status, ESF #2 enables effective and interoperable communications between responders. As a result, response departments are able to:

- Establish and maintain a common operating picture of the event
- Develop and disseminate appropriate public warnings
- Formulate, execute, and communicate operational decisions made at an incident site and among CCSF response departments



- Facilitate departmental awareness and understanding of the event
- Enable emergency management personnel to develop, coordinate, and execute operational decisions and requests for assistance

Public Warning Communications

Public warning systems are designed to allow CCSF authorities to warn the public of impending or current emergencies affecting their area. During a major disaster or event where the need to relay public information is immediate, ESF #2 will coordinate the development of public warning messages and their release via the most appropriate/effective public warning system.

Public warning systems may be activated by local government officials, and will typically contain alert, notification, and educational information. Such public warning systems are valuable due to their ability to communicate critical information to the public when other communications systems are undependable. Public warnings may be issued during severe weather, flooding, fire, hazardous material release, terrorist threat, water contamination, and any other threats to life, property and safety.

Several public warning systems are utilized throughout the CCSF, to include:

- Commercial Pages
- Emergency Digital Information Service (EDIS)
- Emergency Alert System (EAS)
- KALW @ 91.7
- National Oceanic and Atmospheric Administration (NOAA)
- Outdoor Public Warning System (OPWS)
- RoamSecure Notifications
- San Francisco Government Television (SFGTV)
- New Media (Blogging, Websites, Social Networking)

Emergency Communications Systems Overview

The CCSF communications and warning capabilities presently available are telephone communications, radio communications, data / internet connection communications, and public warning system communications. The following tables (Table 2-1, Table 2-2, Table 2-3, and Table 2-4) provide an overview of each system available within the CCSF.



Telephone Communications	
System	Description
Cellular Telephones	Cellular telephones are wireless radio telephones that are primarily dependent upon terrestrial cellular sites e.g., radio reception points, to enable transmission of calls. Cellular services in general are prone to disruptions due to user overload, system failures at times of disasters, emergencies and large special events, and therefore may not typically be fully reliable / dependable at such times.
Government Emergency Telecommunications System (GETS)	Provided by the National Communications System (NCS) in the Cyber Security & Communications Division, National Protection and Programs of the Department of Homeland Security. GETS provides National Security/Emergency Preparedness (NS/EP) personnel a high probability of completion for their phone calls when normal calling methods are unsuccessful. It is designed for periods of severe network congestion or disruption, and works through a series of enhancements to the Public Switched Telephone Network (PSTN). Users receive a GETS "calling card" to access the service.
Mayor Emergency Telephone System (METS)	METS is a proprietary telephone system connecting all major City buildings and departments. METS line phones are dedicated and are often identifiable as red-colored phones sets. The blue police call boxes located on the streets throughout the City operate on the METS system. These lines have the ability to call all City offices as well the ability to connect to the external public telephone network.
National Warning Alert System (NAWAS) / California Warning Alert System (CALWAS)	This is a dedicated, nationwide, party line telephone warning system operated on a 24 hours basis. It is used for the dissemination of warning and other emergency information from federal and state warning points to county warning points. In California, it is controlled by the California the California Emergency Management Agency (CalEMA).
OASIS	Operated by CalEMA, OASIS is a dedicated satellite radio phone system with low speed data capability, created to assist in emergency services coordination. It is installed in every California county Emergency Operations Center and many State facilities, including the State Warning Center. The system can be accessed via external phone lines and can also be used to access external phone lines.
Plain Old Telephone System (POTS)	POTS lines are the standard wired systems using land-based copper lines for voice exchange between two telephones or multiple telephones via conference calling. All City agencies are connected within their premises by a mechanical switch or a PBX server, which regulates the internal extensions and all external incoming calls. In the event of telephone service failure, each City agency may still be able to communicate within their respective premises using the POTS in the intercom mode, e.g., retain ability to call internal extensions within premises.
Satellite Phones	Satellite phones are commercial wireless radiotelephones that rely on radio transmissions via orbiting satellites and strictly operate under direct "line-of-sight" rules.



<p>Voice Over Internet Protocol (VOIP)</p>	<p>The VOIP Service is a method of voice communications using Internet Protocol. The telephone numbers and extensions rely on a computer system and server which executes the call routing and interfaces with the public telephone system. The City, through the Department of Technology utilizes VOIP in a small number of City Departments. The VOIP Service can be either locally supported (within a given office or structure) or distributed through the City's Fiber Network.</p>
<p>Wireless Priority Access (WPS)</p>	<p>Provided by NCS in the Cyber Security & Communications Division, National Protection and Programs of the Department of Homeland Security. WPS is a method of improving connection capabilities for a limited number of authorized national security and emergency preparedness cell phone users. In the event of congestion in the wireless network, an emergency call using WPS will wait in queue for the next available channel. WPS calls do not preempt calls in progress or deny the general public's use of the radio spectrum.</p>

Table 2-1: Telephone Communications Systems



Radio Communications	
System	Description
“25-Cities” Gateway	The 25 Cities Project is an interoperability gateway that will allow Federal Users the ability to talk with 800 MHz Mutual Aid Users and UHF MA TBAND, and Low Band CLEMARS Users.
800 MHz Citywide Emergency Radio System (CERS)	Dedicated, 800 MHz trunked public safety radio system that provides radio services to first responders and other Federal, State, and local agencies.
800 MHz Mutual Aid	The state of California has assigned four 800 MHz frequencies specified for public safety mutual aid. Two have been designated for the Fire/Medical Services (Firemars High and Low) and two specified for law enforcement (CLEMARS High and Low).
800 MHz Public Works Emergency Radio System (PERS)	Motorola Smartzone 3.0 System consisting of four sites in a simulcast configuration. Provides radio services to 43 talk groups between 12 city agencies/departments. Consists of 10 channels, but expandable to 12.
American Red Cross	The American Red Cross has a unique conventional, analog 800 MHz radio channel that operates within six counties of the Bay Area. It is typically used as a command channel, as capacity is limited.
Auxiliary Communications Service (ACS)	ACS is the voluntary communications arm of the San Francisco Department of Emergency Management which supports CCSF communication and information flow by whatever means available and appropriate to the situation, including telephone, cellular phone, Internet, 800 MHz trunked radios, and Amateur Radio (voice and digital).
California Emergency State Radio System (CESRS)	CESRS is a VHF radio system that is repeated throughout California that connects all Operational Areas with Regional and State Emergency Operations Centers.
Console Patches	Console Patching functionality is the ability to link channels or talkgroups together to provide radio interoperability for dispatchers and users in the field.
Control 9 / Control 10 (CORD 9/10)	The Cord 9/10 system is two UHF frequencies that are used by the Department of Public Health, San Francisco General Hospital, and Laguna Honda Hospital for communications.
Fire White Channel	The Fire White Channel is available throughout the State of California, dedicated for interoperability for Fire Departments. San Francisco Department of Technology (DT) maintains a Fire White Base Station at Twin Peaks for coverage within San Francisco. This is an analog, conventional channel.
Handheld Amateur (HAM) Radio – Digital Communication	Utilizing digital modes within the UHF, VHF and HF amateur radio bands, text-based information can be relayed among CCSF departments and agencies. Communication with neighboring jurisdictions can also be established as needed. HAM Radios are operated as a function of ACS.



<p>HAM Radio – Voice Communication</p>	<p>Amateur Radio frequencies in UHF, VHF and HF bands are used by the Federal Communications Commission (FCC) Licensed Amateur Radio Operators in the Auxiliary Communications Service to perform voice communications for departments and agencies of the City and County of San Francisco. Communication with neighboring jurisdictions can also be established as needed. HAM Radios are operated as a function of ACS.</p>
<p>Hospital Emergency Administration Radio Network (HEARNET)</p>	<p>The HEARNET System is a VHF dedicated frequency linking all hospitals for coordination.</p>
<p>Public Utilities Commission (PUC) Water Department – Conventional LowBand System</p>	<p>The San Francisco Public Utilities Commission, Water Department Users, utilize a low-band communications system throughout the Bay Area. This includes communications through the peninsula, the East Bay, and to Hetch Hetchy Reservoir.</p>
<p>San Francisco International Airport (SFO)</p>	<p>The San Francisco International Airport maintains a unique Radio Communications System within the geographic footprint of the Airport, consisting of VHF, UHF T-Band and 800MHz frequencies.</p>
<p>San Francisco Metropolitan Transportation Authority (MTA) San Francisco Municipal Railway (MUNI) Radio Systems</p>	<p>The San Francisco Municipal Transportation Agency utilizes several radio communications systems for daily operations, to include UHF, VHF and 800 MHz.</p>
<p>SFPD - VHF-Low Band</p>	<p>SFPD has the ability to operate on simplex frequencies in the Conventional Low Band VHF radio systems.</p>

Table 2-2: Radio Communications Systems



Data / Internet Connection Communications	
System	Description
Fiber Connectivity	There are 70 miles of fiber throughout the City and County of San Francisco. The City owned fiber network connects most City-Owned and City Occupied buildings. There are 91 facilities connected as spur locations, The fiber network also connects several of the Radio Sites which offers redundant links to the sites.
Internet Services	Presently there is one internet connection point in San Francisco, maintained by the Department of Technology. Additionally, individual departments have their own DSL connections that can access the Internet. DT is planning for a backup internet connection point for redundancy.
Private Wireless Data Network	The City owns and operates a private 800MHz IP-Based Wireless Data Network. It is used by San Francisco Police Department (SFPD), San Francisco Fire Department (SFFD) and selective San Francisco Sheriff's Department (SFSD) Users. The network is Motorola's HPD and DataTAC technology, and requires a unique modem to operate on the network. There is no access to the Internet via this system.
Public Carrier Services	Several City Departments utilize wireless data services offered by Public Carriers, including Sprint/Netxtel, Verizon and AT&T. Public Carriers use data technologies including EDGE, HSDPA and CDMA, depending on the carrier. Public Carriers include AT&T, Verizon, Sprint/Nextel, and T-Mobile. These networks are accessed via subscription based service, and funded and maintained by each City Department.
Wireless Fidelity (WiFi)	WiFi allows access to the Internet via 802.11 protocols, utilizing 2.4GHz frequency. It is a wireless "hot spot" technology that offers little mobility. The City has several WiFi nodes available for Public Access including City Hall, Union Square, Portsmouth Square, etc. The WiFi nodes have access to the Internet via a different channel than the Internet Service offered by Department of Technology, described above.

Table 2-3: Data / Internet Connection Communications Systems

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Public Warning Communications Systems	
System	Description
Commercial Pages	A number of commercial entities provide paging service for individuals on a subscription basis. These pagers are often capable of receiving short alpha-numeric text messages, and some are capable of sending a response. A number of Departments and Agencies use pagers as one method of notifying their critical personnel of important information, and pagers can also be used to alert the public if they are enrolled in the Roam Secure Notification system managed by the Department of Emergency Management (CCSF Alert and AlertSF).
Emergency Alert System (EAS)	EAS is a national system that superseded the Emergency Broadcast System (EBS). The EAS digital system architecture allows broadcast stations, cable systems, participating satellite companies, and other services to send and receive emergency information quickly and automatically even if those facilities are unattended.
Emergency Digital Information Service (EDIS)	EDIS is a service of CalEMA in partnership with private, local, state and federal organizations and agencies. Service to the deaf and hearing-impaired and other populations with special needs is a particular emphasis of the EDIS program. EDIS utilizes a combination of communication methods to notify emergency management, media, and the public of emergency information.
KALW @ 91.7	KALW is an educational, non-commercial FM radio station operated by the San Francisco Unified School District. KALW can be used to broadcast emergency information to the public directly from the DEC/911 Dispatch Center.
New Media	New Media includes media outlets such as blogging, websites, and social networking sites (Twitter, Facebook, MySpace).
NOAA	The National Oceanic and Aeronautics Administration (NOAA), through it's National Weather Service, maintains beacons throughout the country that broadcast weather forecasts, as well as alerts, watches and warnings for severe weather and natural hazards. NOAA allows emergency management and public safety agencies to use this system to inform the public of non-weather emergency and disaster information
Outdoor Public Warning System	OPWS is designed to alert residents and visitors of San Francisco who are outdoors about possible danger. Specific emergency announcements can be broadcast over any one of the 72 sirens, which are located on poles and on top of buildings throughout all neighborhoods in San Francisco. They are tested at 12 o'clock every Tuesday afternoon. During the weekly test, the siren emits a single 15-second alert tone, similar to an emergency vehicle siren. In the event of a disaster, the 15 second alert tone will sound repeatedly for five minutes.



<p>RoamSecure Notifications (CCSF Alert and AlertSF)</p>	<p>RoamSecure Notification Systems (CCSF Alert and AlertSF) are text-based notification systems. AlertSF is designed for notification of the public during or after an emergency. CCSF Alert is the internal system the city uses for various day to day tasks as well as the dissemination of information during an emergency.</p>
<p>San Francisco Government Television (SFGTV)</p>	<p>SFGTV is a cable channel granted to the City and County of San Francisco for the purpose of cable-casting government television programming. In the event of an emergency, SFGTV is available as needed, and emergency information has priority over all other programming.</p>

Table 2-4: Public Warning Communications Systems



2.1.2 EOC Communications Branch

Mission

The mission of the EOC Communications Branch is to enable the CCSF EOC to receive and transmit priority message traffic on a 24-hour daily basis; to facilitate the receipt and transmission of emergency message traffic among CCSF departments in support of imminent or actual emergency operations; and to ensure that warnings, weather advisories, and critical event information are efficiently and appropriately delivered to the public.

Overarching Responsibilities

The overarching responsibilities of the CCSF Communications Branch include the following:

- Coordinate activation of CCSF public warning systems when a threat to the health or safety of residents is identified
- Send messages over various networks in collaboration with the Joint Information Center (JIC), Operations Support Section Chief, or EOC Manager
- Implement EOC information systems
- Coordinate assessment and restoration of communications infrastructure
- Develop and distribute an ICS 205 Communications Plan that identifies all systems in use, ensures enough frequencies are allocated to facilitate operations and lists specific frequencies allotted for the emergency (see the *San Francisco Tactical Interoperable Communications Plan* [TICP] for further details)
- Coordinate activities with the Infrastructure Branch and/or ESF# 12: Water and Utilities, as necessary
- Ensure sufficient staffing of the Communications Branch
- Request communications-related Mutual Aid resources as necessary



2.2 Communications Organization

2.2.1 ESF #2 Organizational Structure

During a CCSF EOC activation, ESF #2 is coordinated at the EOC Communications Branch. Figure 2-1 below depicts the structure of the Communications Branch, the positions within the branch, and the interaction between the supporting ESF #2 departments and the coordinating department, DEM (DES).

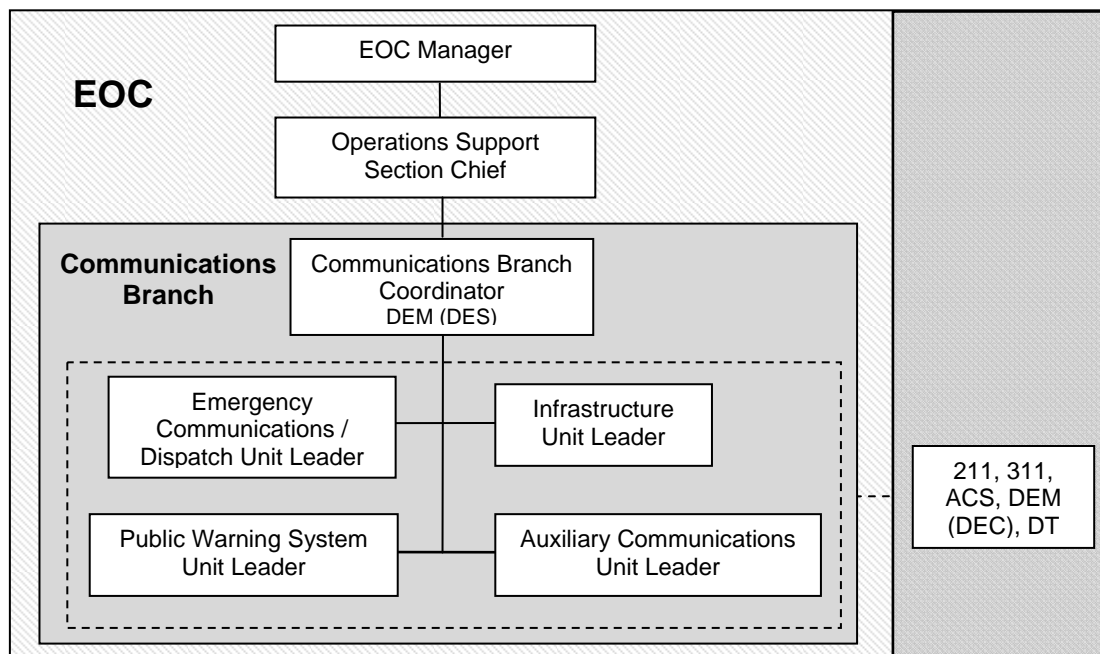


Figure 2-1: ESF #2 Organization



2.2.2 Communications Branch Positions and Responsibilities

The following table details the overall responsibilities of each Communications Branch position.

Position	Responsibility
Communications Branch Coordinator	<ul style="list-style-type: none"> • Coordinates overall Communications Branch activities • Exchanges information with the Operations Support Section Chief on a regular basis to ensure continual event awareness • Determines staffing needs according the event and assigns personnel to fill positions • Coordinates dissemination of public information with ESF #15: Joint Information System
Auxiliary Communications Unit Leader	<ul style="list-style-type: none"> • Coordinates the use of alternate communications systems according to the needs of the event • Maintains situational awareness to continually assess the status of auxiliary communications that are needed and those that are in use • Provide situation status updates to Communications Branch Coordinator
Emergency Communications Unit Leader	<ul style="list-style-type: none"> • Receives communications systems status updates from the 911 Public Safety Answering Point (PSAP) and Dispatch Center • Provides Computer-Aided Design (CAD) support for EOC Law and Fire as requested • Receives and coordinates requests for communications assistance • Coordinates the repair of damaged communications systems as needed • Coordinates the switchover to secondary communications systems as needed • Delivers regular communications system status updates to the Communications Branch Coordinator
Infrastructure Unit Leader	<ul style="list-style-type: none"> • Receives communications systems status updates from non-public safety CCSF departments • Receives and coordinates requests for communications assistance • Coordinates the repair of damaged communications systems as needed • Coordinates the switchover to secondary communications systems as needed • Delivers regular communications system status updates to the Communications Branch Coordinator



Position	Responsibility
<p>Public Warning System Unit Leader</p>	<ul style="list-style-type: none"> • Gathers necessary event information and formulates public warning messages • Facilitates the timely dissemination of public warning messages • Coordinates with the necessary departments to disseminate public warning notifications

Table 2-5: ESF #2 Positions and Responsibilities

2.3 Notification and Activation

2.3.1 Notification

Upon activation of ESF #2, the EOC Communications Branch Coordinator will notify all supporting ESF #2 departments. Notification will be distributed via the most appropriate communications equipment for the event requirements, and will detail event information, reporting instructions, and any relevant communications coordination information. Supporting department representatives involved within the EOC Communications Branch will be determined according to the needs and scope of the event.

2.3.2 Activation

The activation of ESF #2 and corresponding activities generally coincide with an activation of the EOC. DEM will determine the extent to which ESF #2 coordination activities are needed, and will identify which EOC Communications Branch positions will be necessary in order to best facilitate the EOC mission. The extent of activation and needed positions will be directly correlated with the needs and scope of the event (e.g. during a small, uncomplicated event only certain positions may be activated, while a large-scale event may require the activation of all positions). Conditions in which ESF #2 may be activated include:

- During an event (natural or manmade) of such magnitude that the need for citywide communications coordination is self-evident
- Immediately following a terrorist attack in the Bay Area
- During any event that requires close coordination and monitoring of CCSF communications systems in order to guarantee successful event management.

Activation Authorities

San Francisco DEM has primary authority to activate ESF #2 at the EOC level during any situation where the need for consistent, interoperable communications is critical to the management of an event. Activation of ESF #2 may also be requested by any department by contacting the DEM Duty Officer.



2.3.3 Communications Branch Response Actions

Step 1: Assess Communications Systems and Notify Public

- Determine status of primary and alternate communications systems
- Notify DT to initiate repair if system failures exist
- Identify public safety messaging needs; coordinate public warning message with ESF #15: Joint Information System and DT
- If immediate public warning is necessary:
 - Select appropriate public warning system(s)
 - Coordinate public warning message with ESF #15, DT (System Watch), and DEM

Step 2: Coordinate with EOC

- Identify and assign Communications Branch positions
- Determine specific communications requirements for the EOC
- Ensure support for EOC information systems
- Initiate reporting processes to EOC Management and appropriate authorities
- Establish and maintain communications with ESF #2 supporting departments and other relevant departments/ESFs as necessary
- Implement the TICP as necessary
 - Activate and staff the Communications Leader position
- Communicate internal incident response information to EOC Planning Section
- Provide frequent communications status updates to EOC Management and other relevant entities (CCSF authorities, State/Federal Liaisons, etc.)
- Coordinate response actions with the EOC in support of ESF emergency management actions
- Report and document event activities by completing and submitting required forms, reports, documentation, and follow-up notations on immediate response communications
- Coordinate communications with Regional and State entities
- Facilitate communications with local private sector and community partners to assist in awareness, prevention, response, and recovery communications activities

Step 3: Coordinate Communications Systems

- Develop an Incident Communications Plan (ICS 205 or equivalent) that identifies all systems in use, ensures enough frequencies are allocated to facilitate operations, and lists specific frequencies allotted for the emergency
- Distribute Incident Communications Plan to relevant department representatives and authorities



- If moving to alternate communications system, ensure that affected departments are notified through dispatch operations
- Ensure redundant communications circuits/channels are available for use

Step 4: Manage Resources

- Maintain, manage, and ensure protection of interoperable communications assets
- Coordinate the acquisition and deployment of communications resources
- When local resources will be exhausted, coordinate resource requests or requests for communications assets through the EOC Logistics Section
- Assess the need for mobile and transportable telecommunications assets (e.g., communications or incident command vans, gateways, etc.)
 - Coordinate the deployment of CCSF transportable communications assets to needed locations
 - If CCSF assets are unavailable, determine the availability of mutual aid transportable communications assets

Step 5: Continue to Monitor, Track, and Inform

- Maintain communications with ESF #2 supporting departments and other relevant department(s)/ESF(s) as necessary
- Provide communications status updates to relevant department(s)/ESF(s)
- Provide situation updates, as necessary
- Re-evaluate the current situation status
- Determine future needs, as appropriate



2.3.4 Deactivation

ESF #2 will be deactivated when the need for additional communications coordination has either diminished or ceased. ESF #2 functions may be deactivated or scaled back at the discretion of the EOC Manager or Operations Support Section Chief, as appropriate. After the decision to deactivate has been determined, the following activities may be necessary:

- Complete or transfer remaining ESF #2 responsibilities to the appropriate department(s)
- Provide deactivation information to all involved response departments and supporting ESF departments
- Issue a final status report to the Operations Support Section Chief
- Coordinate deactivation with Operations Support Section Chief, to include staff release, equipment return, and inventory

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Section 3: Planning Assumptions

The following planning assumptions for ESF #2: Communications apply:

- A natural or manmade disaster may severely damage the communication infrastructure in the impacted area
- Even if no infrastructure damage occurs, the nature of most disasters will quickly overwhelm the capacity of the regular communications systems in place.
- Damage to communications equipment may influence the means and accessibility level for relief services and supplies
- Initial damage reports may be fragmented and provide an incomplete picture concerning the extent of damage to telecommunications facilities
- Weather and other environmental factors may restrict the ability of suppliers to deploy mobile or transportable telecommunications equipment into the affected area
- Communications assistance will be provided according to the requirements of this plan and the *San Francisco Tactical Interoperable Communications Plan (TICP)*.

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List of Abbreviations and Acronyms

The following abbreviations and acronyms are used in this annex:

211	HelpLink Social Services Hotline
311	San Francisco Customer Service Center
ACS	Auxiliary Communications Service
ACS	Auxiliary Communications Service
CAD	Computer-Aided Design
CalEMA	California Emergency Management Agency
CALWAS	California Warning Alert System
CCSF	City and County of San Francisco
CERS	Citywide Emergency Radio System
CESRS	California Emergency State Radio System
CORD 9/10	Control 9 / Control 10
DEC	Division of Emergency Communications
DEM	Department of Emergency Management
DES	Division of Emergency Services
DOC	Department Operation Center
DPW	Department of Public Works
DT	Department of Technology
EAS	Emergency Alert System
EDIS	Emergency Digital Information Service
EOC	Emergency Operations Center
ESF	Emergency Support Function
FCC	Federal Communications Commission
GETS	Government Emergency Telecommunications System
HAM	Handheld Amateur Radio
HEARNET	Hospital Emergency Administration Radio Network
ICS	Incident Command System
JIC	Joint Information Center
JIC	Joint Information Center
METS	Mayor Emergency Telephone System
MTA	Municipal Transit Authority
MUNI	San Francisco Municipal Railway
NAWAS	National Warning Alert System
NCS	National Communications System
NERT	Neighborhood Emergency Response Team
NOAA	National Oceanic and Atmospheric Administration



OPWS	Outdoor Public Warning System
PERS	Public Works Emergency Radio System
POTS	Plain Old Telephone System
PSAP	Public Safety Answering Point
PSTN	Public Switched Telephone Network
PUC	Public Utilities Commission
REOC	Regional Emergency Operations Center
SFFD	San Francisco Fire Department
SFGTV	San Francisco Government Television
SFO	San Francisco International Airport
SFPD	San Francisco Police Department
SFSD	San Francisco Sheriff's Department
TICP	Tactical Interoperable Communications Plan
VOIP	Voice Over Internet Protocol
WiFi	Wireless Fidelity
WPS	Wireless Priority Access