

ANNEX B

COMMUNICATIONS

CITY OF HOUSTON

APPROVAL AND IMPLEMENTATION

Annex B

Communications

Sharon A. Nalls
Emergency Management Coordinator

Date

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ANNEX B
COMMUNICATIONS

I. AUTHORITY

See City of Houston Basic Plan.

II. PURPOSE

This annex provides information about the communications equipment and capabilities available during emergency operations. The entire communications system is discussed and procedures for its use are outlined.

III. EXPANATION OF TERMS

Acronyms

NIMS	National Incident Management System
PIES	Public Information Emergency Services
PW&E	Houston Public Works & Engineering Department
RACES	Radio Amateur Civil Emergency Service
TLETS	Texas Law Enforcement Telecommunications System

Refer to the City's Basic Plan for other acronyms used in this annex.

IV. SITUATION AND ASSUMPTIONS

A. Situation

As noted in the general situation statement in the basic plan, we are at risk from a number of hazards that could threaten public health and safety as well as personal and/or government property. A reliable communications system is essential to obtain information on emergencies, and to direct and control our resources responding to those situations. Equipment is available to provide communications necessary for emergency operations.

B. Assumptions

Adequate communications are vital for effective and efficient warning, and response and recovery operations. A particular hazard or occurrence may neutralize current communications. Additional communications equipment required for emergency operations may be supplemented by citizens, business, volunteer organizations, and/or other governmental agencies.

V. CONCEPT OF OPERATIONS

A. General

1. Communications play a critical role in emergency operations. Extensive communication networks and facilities are in existence throughout the City of Houston. A diagram of the communications network is in Appendix 1. When these capabilities are properly coordinated, response activities become more effective and efficient.
2. The existing City of Houston communications network consisting of telephone, satellite, internet, e-mail, paging, facsimile and radio facilities

will serve to perform the initial and basic communications effort for emergency operations. Land-line circuits, when available, will serve as the primary means of communication with radio as a back-up.

3. During emergency operations, all City of Houston departments will maintain their existing equipment and procedures for communicating with their field operations. They will keep the Emergency Operations Center (EOC) informed of their operations at all times, by whatever means available.
4. The day-to-day capabilities may be insufficient to meet the increased communications needs created by an emergency or disaster; therefore, various state agencies, amateur radio operators and business/industry radio systems may be tasked to provide expanded communication capabilities.
5. Department representatives will be requested to report to the EOC as necessary.

B. Phases of Management

1. Mitigation

- a. Conduct an assessment of vulnerabilities in the communications system.
- b. Establish plans to reinforce identified vulnerabilities.
- c. Identify emergency power requirements if not currently available
- d. Develop contingency plans for interruptions in communications

2. Preparedness

- a. Review emergency notification list of key officials and department heads.
- b. Develop communications procedures that are documented and implemented through communications operating instructions (include connectivity with private-sector and nongovernmental organizations).
- c. Acquire, test, and maintain communications equipment.
- d. Ensure replacement parts for communications systems are available and make arrangement for rapid re-supply in the event of an emergency.
- e. Train personnel on appropriate equipment and communication procedures as necessary.
- f. Conduct periodic communications drills.

3. Response

- a. When the EOC is activated, the Emergency Management Coordinator (EMC) or designee will determine communication personnel requirements. Staff requirements will vary according to the incident.

- b. Warning procedures identified in Annex A, Warning, will be initiated.
- c. All incident management entities will make use of common language during emergency communications. This will reduce confusion when multiple agencies or entities are involved in an incident.

4. Recovery

All activities in the emergency phase will continue until such time as emergency communications are no longer required.

C. National Incident Management System (NIMS)

The National Incident Management System (NIMS) will be used to manage and efficiently mitigate any such incident by integrating a combination of facilities, equipment, personnel, procedures, and communications into a common organizational structure. NIMS is used to organize both near-term and long-term field level operations for a broad spectrum of emergencies, from small to complex incidents, both natural and manmade. Description of the implementation is located within the Basic Emergency Management, Annex I - Public Information, Annex M – Resource Management and Annex N – Directions. Departmental policies and procedures are developed based on these principles.

I. ORGANIZATION AND ASSIGNMENT OF RESPONSIBILITIES

A. Organization

- 1. The emergency communications system at the EOC is organized and coordinated within the Mayor’s Office-OEM. Components of the system include groups from the public and private sector as outlined in Section VI.B.
- 2. Texas Law Enforcement Telecommunications System (TLETS) is a statewide telecommunications network connecting the State Warning Point (State EOC) with city, county, state, federal, and military law enforcement agencies in Texas. Emergency communications between state, district, and local governments will be transmitted through this system. The City of Houston’s warning point is located at the Houston Police Department’s (HPD) Communication Center. TLETS messages for Emergency Management will be forwarded by HPD.
- 2. Other Networks - Individual Amateur Radio Operators “hams” and with liaisons within other jurisdictions in the area
- 3. Texas Medical Center (TMC) – There is a direct telephone and radio link between the TMC and the EOC.

B. Assignment of Responsibilities

1. Department Directors

Department directors that operate communications system vital to public safety will establish representatives within their department to coordinate

communications systems including license and maintenance.

2. OEM

- a. Develop and maintain a communications resource inventory.
- b. Ensure a communications capability exists between the EOC and departmental operation centers and the National Weather Service (NWS).
- c. Coordinate the inclusion of business/industry and amateur radio operators into the communications network.
- d. Develop and maintain an accurate recall roster for essential personnel.
- e. Radio and telephone operators are responsible for the proper use of the equipment and for correct message handling. Messages received by radio and telephone will be recorded on specially designated message forms provided by the OEM (See Appendix 2 for Back-Up Message Procedures and Forms).

VII. DIRECTION AND CONTROL

A. General

1. The EMC is the overall authority for the EOC.
2. The EOC Controller is directly responsible for the activities and establishment of communication capabilities in the EOC.
3. Radio operators from support agencies, while under control of their own office and operating their own equipment in the EOC, will be responsible for knowing and following the procedures outlined in this annex.
4. During EOC operations, the various code systems used for brevity will be discontinued and normal speech will be used to insure comprehension. In addition, local time will be used during transmissions.

B. Existing Communications Systems within the EOC

1. Local Networks

- a. HPD
- b. HFD
- c. PW&E
- d. EAS/PIES
- e. Channel Industries Mutual Aid
- f. Houston Emergency Management
- g. Radio Amateur Civil Emergency Service-RACES
- h. Inter-City
- i. NWS
- j. Metro-Networks Broadcasting
- k. Traffic-Dot-Com

- l. Houston Airport Systems (RACOM)
- m. Downtown Houston Management District

VIII. READINESS LEVELS

- A. Refer to Basic Plan, Section 3.2.2 for Readiness Levels **Green** and **Blue** (Level IV). Part B-D below are specific to this annex and in addition to actions/activities for the identified readiness levels defined in the Basic Plan.
- B. **Yellow** (Level III) - Increased Readiness
 - 1. Alert key personnel.
 - 2. Check readiness of all equipment and facilities and review communications procedures with personnel.
- C. **Orange** (Level II) – High Readiness
 - 1. Alert personnel for possible emergency duty.
 - 2. Monitor situation for possible issuance of warning or alerts.
- D. **Red** (Level 1) – Maximum Readiness
 - 1. Institute 24-hour operations.
 - 2. Conduct periodic communication checks.

IX. ADMINISTRATION AND SUPPORT

- A. Facilities and Equipment
 - 1. The City of Houston operates four primary radio systems:
 - a. Houston Airport System
 - b. HFD
 - c. HPD
 - d. PW&E

Each department is responsible for ensuring adequate equipment is available and operational during emergencies. Numerous repeater sites exist around the City. Links into all systems are available from both the EOC and FEOC.

- 2. Field Emergency Operations Center (FEOC)

This specialized vehicle has been designed to be an extension of the EOC. It is a state-of-the-art field mobile EOC that can be deployed to significant incidents. The FEOC has 2-way radio equipment, computers, satellite/cellular telephones and video down-link capability.

- B. Communications Protection

Generally communications equipment for facilities is installed at a secure facility, climate controlled with emergency power. Mobile communication equipment has been installed per manufacturer recommendation or greater.

1. Radio
 - a. Electromagnetic Pulse
Plans call for the disconnection of radios from antennas and power source when an Attack Warning is issued.
 - b. Wind and Blast
Damaged antennas can be quickly replaced with spare units kept in the OEM.
2. Telephone – SBC (formerly Southwestern Bell) services the EOC is a high priority customer of SBC for emergency restoration of telephone service.

C. Maintenance of Records.

All records generated during an emergency will be collected and filed in an orderly manner so a record of events is preserved for use in determining response costs, and updating emergency plans and procedures.

D. Preservation of Records

Vital records should be protected from the effects of disaster to the maximum extent feasible. Should records be damaged during an emergency situation, professional assistance in preserving and restoring those records should be obtained as soon as possible.

E. Security

Due to the vital role of communications during emergency operations, particularly for Homeland Security purposes, the EMC reserves the right to request that a personal background check be conducted for any radio operator assigned to the EOC.

F. Training

1. Each organization assigning personnel to the EOC for communications purposes is responsible for making certain those persons are familiar with their agency's operating procedures.
2. The EOC staff, if requested, will provide additional training on emergency communications equipment and procedures.

G. Support

1. If requirements exceed the capability of local communications resources, support from state resources will be requested by the Mayor through the Disaster District Committee in Region 2A (DPS).
2. If personnel requirements exceed the capability of the EOC Communications staff, additional representatives will be requested from the Human Resources Department.

X. ANNEX DEVELOPMENT & MAINTENANCE

Refer to the Basic Plan, Volume I, Section 3.2.2.

XI. SUPPORTING DOCUMENTS (On File with Departments)

- A. Duty Officer SOG
- B. EAS/PIES/Cable Override SOG
- C. Hurricane Response and Recovery Plan
- D. Departmental Procedures

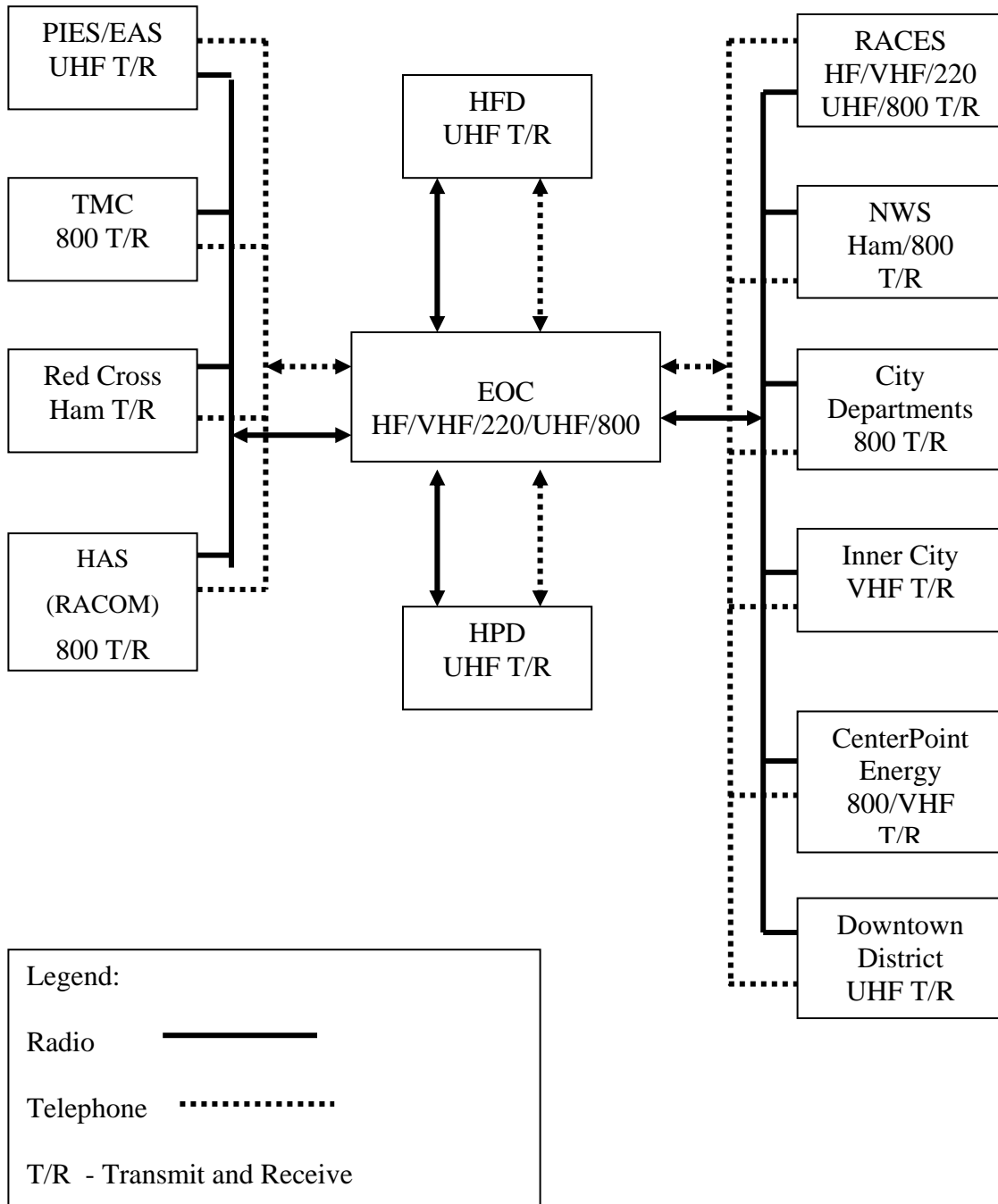
Annex B

APPENDICES

Appendix 1..... Communications Diagram
Appendix 2..... Back –Up Message Procedures and Forms

Appendix 1 to Annex B

Communications Diagram



APPENDIX 2 TO ANNEX B

BACK-UP MESSAGE PROCEDURES AND FORMS

I. Procedures

The primary system for documenting the EOC activation and Emergency Management events is the Regional Incident Management System software (RIMS). In the event RIMS is not available, the EOC will use the following back-up procedures to ensure full documentation of operations.

- A. Major events are to be recorded on the Operations Report Form. Forms will be sequentially number when they are printed. Distribution of the 3-part carbonless form is listed at the bottom. The Follow-up Report will be used to provide updates to the Operations Report Form. The originator will assign the same OpsRep # and put the letter "A" for the first update, "B" or the second update, etc. Distribution of the 3-part carbonless form is at the bottom. The Communication Form will be used for radio (2-way), telephone calls and faxes received that need the attention of EOC personnel. Distribution instructions are located near the top.
- B. The EOC Controller will issue forms to liaisons when primary messaging fails. Since the Operations Report Form will be sequentially numbered, the EOC Controller will keep records of who received numbered forms. If an error is made in completing the Operations Report Form, write VOID across the form and return along with unused forms to the EOC Controller.
- C. Radio and telephone operators must keep logs on incoming and outgoing messages.
- D. The Operations Report and Follow-up Report Forms as well as the Communication Form will be logged as directed.
- E. Message received in Communications Room
 - Radio Operator
 1. Record message using appropriate form
 2. Enter radio log
 3. Forward to EOC Controller
 - EOC Controller
 1. Determine appropriate operations agency
 2. Assign priority
 3. Forward to operating agency
 4. Ensure event is entered into log

F. Message received in Operations Room

Operations personnel

1. Record message using appropriate form
2. Determine capability to respond
Forward to appropriate agency if unable to respond
3. Coordinate and complete response
4. Forward to EOC Controller

EOC Controller

1. Inform EMC regarding significant request for assistance and/or resources
2. Ensure entry made in log.

**APPENDIX 2 TO ANNEX B
CITY OF HOUSTON
Emergency Operations Center
Major Event**

Operations Report Form

OPSREP # _____	Recorded by: _____	Date: _____	Time: _____
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Prepared by: _____	Department/Agency: _____
Day: _____	Date: _____
Time: _____	

Situation:	_____

Department/Agency Impact Statement: (Equipment, Personnel, Service Delivery, Budget etc.)

Public Impact Statement: (Health, Safety Welfare, Service Delivery)

Corrective Actions: (Short Term)

WHITE – Originator YELLOW – EOC Controller PINK – Data Entry

