**ITA Special Report**

**Emergency Planning**

**Updated March 1, 2012**

Tornadoes, hurricanes, fires and other recent disasters have caused businesses to question how they would handle similar emergencies. We have all heard accounts of how phone companies lost the use of their switch, central office, or even key personnel. Many telcos have starting thinking about how a similar event would impact their ability to provide telecommunications services to their customers, or how long it would take to get back to “business as usual.”

Organizations, consultants, and governmental entities have stressed the importance of emergency planning, disaster recovery, service restoration and business continuity plans. Preparation is the key to effectively handling these events.

In January 2007, the Iowa Utilities Board notified all ITA members it will ask each telecom carrier in Iowa to state whether it has updated emergency response plans as part of the upcoming Annual Report due April 1, 2007 (and every April 1st through 2012).

The IUB has been working as part of a broad group of representatives assembled by Homeland Security and Emergency Management to seek input from business, industry, emergency services, and government representatives on how to prepare for disasters, terrorist attacks, epidemic outbreaks, and other events. During their planning and table-top exercises, these groups invariably ask a foundational question: “How do we assure continuity of the communications network in case of emergency or natural disaster?”

Recognizing the importance of communications in times of distress, the IUB recommends all Iowa carriers prepare emergency plans. ITA joins the IUB and we urge all carriers to implement and regularly update and train and improve their emergency planning. We recognize that telephone companies commonly repair outages and respond to local emergencies. Most companies likely have thought about what they will do in the event of a severe emergency, but many likely have yet to create formal or written plans to prepare for major disasters.

To help you begin the process of establishing your plan, or to help you improve any plans you have already prepared, the ITA Industry Relations Committee has prepared this guidance, summary and series of checklists.

According to industry experts, there are two pieces to disaster planning and recovery –

1. Service Restoration -- restoring telecommunications services to your customers; (page 2 and 3 and Appendix C)
2. Business Continuity – resuming normal operations inside your business. (pages 4 to 7 and Appendix B)

We have guidance for each of these plans on the following pages.

**Service Restoration Plan**

**Restoring Telecommunications Services to your Customers**

What if your central office is destroyed by tornado or fire? What happens if your switch is destroyed or damaged? How would your company restore services to your customers?

Here are some questions and tools to help you develop an emergency plan to restore your services after a natural or man-made disaster.

Your plans do not have to be long and complicated. In fact, sometimes, simpler or shorter plans are better, so all your employees understand and know what to do. Any planning that is documented is better than nothing when disaster strikes.

To help you get started, we have compiled some suggested information you should consider assembling and some questions to ask yourself. We have also included some additional resources you may want to reference in Appendix A.

Now is the best time to start to consider the “worst case scenario” and how your company can prepare that unfortunate time when disaster strikes.

**Step 1: Create a list of KEY contact persons and phone numbers**

* Insurance carrier – may be your first point of contact
* Switch Vendor
* Billing vendor
* Engineer
* Consultants
* Cable splicers
* Central Office Technicians
* Data Technicians
* Installation and Repair Technicians
* Line persons
* Company emergency response coordinators
* Local and state emergency response coordinators
* Local PSAP
* 911 coordinator
* Iowa Utilities Board
* ITA, INS
* Banks
* Newspaper and Radio
* Fuel suppliers
* Gas and electric utilities
* Electrical contractors
* Restaurants and hotels

**Step 2: Create a list of available assets from your company**

* Central Office and outside plant test equipment
* Fault locators
* Fiber optic equipment
* Trucks
* Construction equipment, trenchers, tractors and backhoes
* Trailers
* Copper and fiber optic cable supplies
* Pedestals
* Poles
* Generators and battery chargers
* Spare switch parts
* Building layouts for all buildings
* List of electrical service providers for rural nodes
* Shut-down and start up procedures for all facilities
* Keys
* Emergency meeting places

**Step 3: Create a list of available assets from other sources or nearby telcos, or vendors**

* Central Office and outside plant test equipment
* Fault locators
* Fiber optic equipment
* Trucks
* Construction equipment, trenchers, tractors and backhoes
* Trailers
* Copper and fiber optic cable supplies
* Pedestals
* Poles
* Generators and battery chargers
* Spare switch parts

**Step 4: Create a Service Restoration Plan**

The lists you make in steps 1, 2 and 3 do much of the work in creating your written plan for service restoration. In addition, your plan should include steps to make sure appropriate calls are made to the key contact persons identified in step 1, and all possible personnel and equipment needed from step 2 and step 3 are dispatched. Don’t forget the all-important need to keep open lines of communication with your team leaders and your employees.

We have attached a sample Service Restoration Plan from one of the ITA independent companies that you may wish to use for a start. Please refer to Appendix C.

# Business Continuity

# Resuming “Normal” Operations after an Emergency

What happens if you lose buildings, equipment, supplies, business and customer account records, or -- worst case scenario – people during an emergency? Restoring service is a top priority. After you have restored service to your customers, how long would it take to resume business operations such as taking new service orders, bill payments, and render bills?

Have you thought about how your company would identify and prioritize the most critical tasks to getting your business back up and running so you can operate your normal business once again?

All of these questions are part of a Business Continuity Plan. This plan comes into place after you have restored service to your customers, and focuses on your internal operations.

# Step 1: Identify Types of Disasters

Take some time to identify what types of emergencies, events, or hazards could seriously disrupt your operations or force you or your employees to conduct their job duties from a location other than your central office. In other words, what types of events pose the greatest threat to your business? These might include:

Fire

Flood

Weather-related

Explosion

Medical

Hazardous-substance

Threats/Violence

Terrorism

Natural Disasters

Technological Disasters

Utility outages

# Step 2: Identify your Readiness

# Create a chart of the types of events identified in Step 1, and analyze your ability to handle the events that might cause disruptions of your business operations.

# We have included a sample checklist of topics (Appendix B) you may want to use as an example to identify the possible frequency and severity of potential hazards.

**Step 3: Take Proactive Steps Now to Reduce the Impact of a Disruption**

Develop a plan to begin proactively addressing the areas where you feel your readiness needs improvement, starting with the most critical areas first. Here are some critical tasks you may wish to start with:

**Offsite Storage of Electronic Information**. One key component is to have your database backed up and stored offsite. This can be done either via electronic storage or with tapes or CDs.

**Offsite Storage of Key Paper Documents**. In addition to offsite backups, you will want to have some of your hardcopy documents stored offsite. Prepare a package of key documents, information and other business applications that can be stored offsite and easily retrieved in the event of serious business disruption. Make sure to grant access to proper personnel. Here are some key documents you may want to locate in secure offsite locations. You may have to create copies of some of these documents or items.

Articles of Incorporation

Bylaws

Lease

Critical Documents (insurance, contracts)

Customer lists and billing records

Building and plant maps

Passcodes and Account Numbers

Employee/Payroll Information

Accounting Data

Department Procedure Guides

Keys

Evacuation Procedures

Records relating to your switch

Emergency Planning/Service Restoration and Business Continuity Plans

**List of Important Phone Numbers.** Refer to steps 1, 2, and 3 from the Service Restoration Plan to generate this list.

**Temporary Work Location/Emergency Operations Center**. You may also consider identifying a temporary work location or emergency operations center where you can conduct business if your building is no longer able to be used.

### First responders list. Another suggestion is to develop a “First Responders” list to identify key personnel that can assist in emergencies. These would include members of emergency communications centers, emergency medical services, fire and rescue services, HAZMAT teams, law enforcement agencies, bomb squads, hospitals, public health departments, transportation and public works, gas, water and electric companies, and the American Red Cross.

**Emergency power**. Test your emergency generators under load for extended periods of time. Make sure they are secure (from theft or damage) and operational in the event of an emergency.

**Step 4: Create Your Written “Business Continuity Plan”**

After you have identified the resources, created lists of key personnel, and taken steps to secure important documents and data offsite, you are already much of the way toward completing your service Restoration plan.

In addition to incorporating your work from Step 3, here are some suggested steps to include in your plan. Be sure to identify which steps you will take 1st, 2nd and 3rd to prepare to handle each type of emergency.

1. Notify the pre-identified leader of the Business Continuity Event
2. Communicate with your employees. Activate a phone tree or other mechanism to gather your team together.
3. Notify state and local emergency response agencies (police, fire, hospital, Red Cross, etc.)
4. Notify the IUB 515-725-7321.
5. Assess the emergency and initiate your pre-determined emergency backup plans
6. Communicate the event to employees/Board members/customers/vendors
7. Develop your event-specific plan and delegate assignments
8. Notify ITA at 515-867-2091 and INS at 515-830-0110 to help mobilize assistance for your company.
9. Prioritize your business functions and suspend or postpone non-essential functions. Focus your personnel on the most essential segments of your business.
10. Begin to restore service. Locate necessary equipment, supplies and personnel and mobilize your plan.

In fact, OSHA requires all employers with more than 10 employees to have an emergency plan in writing.

**Step 5: Involve your Employees and Communicate!**

It should go without saying, but we’ll say it anyway. You must keep your employees involved throughout this whole process. Communicate your plans with them, and highlight the importance of pre-disaster planning. Seek input on how to improve your plans. Continue to train and educate your employees, so they know what to do when an actual event arises.

Determine chain of command during an emergency. Who is authorized to declare a disaster? Which people are responsible for implementing the various portions of your plan? What happens if those key persons are not available? Who is authorized to talk to the media?

**Step 6: Disaster Strikes – Response and Recovery**

When a serious event occurs, it is time to activate your plan. The success or failure of your response will be determined in large part by your commitment to plan ahead of time. Some disasters provide time to prepare, and others happen without warning. Having an emergency plan and business continuity plan in place before the event occurs is the best way to assure that your company will respond well.

**Step 7: Follow Up and Improve your Plans**

After you have responded to the disaster, restored service to your customers, and resumed normal business operations, it is time to look back on the effectiveness of your plan. Look to see what you would have done differently. How can you improve your ability to survive this crisis? What lessons did you learn? Evaluate the success of your planning. If needed, change vendors. Now you know the importance of communicating your plan, and updating our systems and records regularly.

**Appendix A -- Additional Resources**

For more information or assistance, you may wish to consult with your insurance carrier, switch vendor, professional consultants, local police and fire departments, state or national associations, community colleges, or other trusted parties to gather additional knowledge and resources.

Additional Resources:

1. <http://www.ready.gov/business>
2. [www.continuityplanner.com](http://www.continuityplanner.com)
3. Check with your local community college. For example, DMACC has an emergency planning document.

**Appendix B – Readiness Checklist**

|  |  |
| --- | --- |
| **Service Restoration and** **Business Continuity Checklist** | **Readiness** |
|  | **A** | **B** | **C** |
| Fire Protection |  |  |  |
| Security System |  |  |  |
| Energy/Water Backup |  |  |  |
| Identification of Critical Functions/Resources |  |  |  |
| Written procedures of each department’s functions |  |  |  |
| IT Systems/Resources |  |  |  |
|  Hardware |  |  |  |
|  Software |  |  |  |
|  Network/Internet  |  |  |  |
|  Other |  |  |  |
| Create Business Continuity Team |  |  |  |
| Consider all types of Emergencies |  |  |  |
| Gather Contact Information |  |  |  |
|  Employee/Payroll |  |  |  |
|  Board of Directors |  |  |  |
|  Vendors |  |  |  |
|  Customers |  |  |  |
|  Media |  |  |  |
| Develop Communications Tree |  |  |  |
| Secure Offsite Backup Facility |  |  |  |
|  Office/Work from home |  |  |  |
|  Production |  |  |  |
|  Storage |  |  |  |
| Inform/Train Employees |  |  |  |
|  Safety Captains/Teams |  |  |  |
|  Drills |  |  |  |
| Collect above information in binder and store offsite |  |  |  |
| Ongoing Evaluation and Regular Updating |  |  |  |
|  |  |  |  |
| Additional Items |  |  |  |
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**APPENDIX C – SAMPLE SERVICE RESTORATION PLAN**

The telecommunications network is susceptible to a wide range of natural and man‑made outages that might be beyond the capability of the individuals in the affected area to restore service within a reasonable time.

The emergency restoration plan outlined in this document is designed to:

* Make maximum use of the affected Telco's resources.
* Make all of \_\_\_\_\_\_\_\_ TELEPHONE COMPANY’S resources available for use in an emergency restoration effort.
* Attain a uniform approach to the restoration effort.
* Provide a status of equipment and plant conditions prior to and at the conclusion of the restoration effort.

Emphasis must be applied equally to quality as well as quantity of work and the maintenance of records that support the restoration effort.

To meet the needs of any emergency situation, all employees must apply the following elements in thinking and planning:

* Make human health and safety the most important priority.
* Maintain the integrity of customer opinion by providing visible evidence of \_\_\_\_\_\_\_\_ TELEPHONE COMPANY’S commitment to service and the community.

Documentation is a critical element during the restoration. Accurate and timely record keeping of hours spent, equipment used and expenses must be tracked and reported to the accounting representatives. These documents are critical for insurance filing.

**EMERGENCY COORDINATING CENTER (ECC)**

**GENERAL RESPONSIBILITIES:**

In the event of a major emergency or disaster, the established “Outage Restoral Procedures” will be followed:

# *Outage Restoral Procedure*

1. Contact the Dispatch Center at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	1. The Dispatch Center will follow their procedures in notifying the Dispatch Supervisor, I&R Supervisor , Central Office Supervisor, Central Office Technician and Network Reliability
2. Contact 911 Coordinators –
	1. \_\_\_\_\_\_ County 911
	2. \_\_\_\_\_\_\_County Sheriff – (Home and Cell #)
	3. \_\_\_\_\_\_\_ Fire Chief – (Home and Cell #) Cell
	4. Assistant Chief -- (Home and Cell #)
3. Contact INS Iowa Network Service Monitor and Support at 515-830-0440.

4. Contact \_\_\_\_\_\_\_\_\_ Telephone Co. (Neighboring telco)

5. Contact Switch Vendor: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Dispatch for all possible personnel and equipment needed. It is better to have too much equipment and personnel on site than to require additional support later, which could lengthen the duration of the outage.

## Fiber Outages

* 1. Fiber splicing personnel are needed at cut location.

2. A backhoe and other device will be needed to expose the fiber.

1. OTDR meters with personnel able to operate the meters should

 be at the offices on either end of the cut..

1. A management person should be at the cut site providing

 updates to the bridge

1. Follow 911 Outage Procedure

## Switch Outages

1. Dispatch a switching tech to the site.

* 1. If outage is power related, reference to AC power outages.
	2. A management person should be at the site if the outage will be

 for an extended period of time.

* 1. Follow 911 Outage Procedure

## Toll Isolations

1. Dispatch a switching tech to the site.

1. Determine if isolation is caused by a cable cut or office equipment.
2. Determine if isolation is from our facilities or from alternate

 company facilities

1. If outage is caused by our facilities, reference to fiber

 outages or switch outages as required.

* 1. A management person should be at the site
	2. Follow 911 Outage Procedure

## AC Power Outages

1. Contact Power Company at \_\_\_\_\_\_\_\_\_\_

2. If outage is during after hours contact: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Fixed Generator is located \_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. Follow 911 Outage Procedure

##  911 Outages

1. Contact the Dispatch Center at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

2. In the event the 911 Coordinator does not check into the bridge, the outage manager will be responsible for assuming the duties of the 911 Coordinator.

3. Current PSAP contact information and contact numbers can be found at: \_\_\_\_\_\_\_\_\_\_\_\_

4. Conditional routing options should be addressed as soon as possible with the PSAP any requested conditional routing for 911 calls either from PSAP Network Operations at \_\_\_\_\_\_\_\_\_. This information should also be relayed to the conference bridge if the bridge is set up.

5. Contact the PSAP Center when the outage is over.

## Major Outages

Toll Isolations and Central Office Outages

1. Dispatch/Repair is notified of outage.
2. The Dispatch Clerk or Customer Service Analyst (CSA) creates a trouble ticket.
	1. If Dispatch Center is open, proceed to 3.
	2. If Dispatch Center is closed, proceed to 4.
3. If necessary the CSA contacts the dispatch center with the ticket information. The dispatch clerk proceeds to contact the following individuals.
	1. Central Office (CO) technician for the affected exchange or I&R if toll cable cut.
	2. Local Supervisor – Provide status of who has been dispatched thus far.
	3. Central Office Supervisor – Provide assistance to the Local Manager.
	4. Page \_\_\_\_\_\_\_\_
4. The CSA refers to the call out list and proceeds to contact the following individuals:
	1. Central Office (CO) technician for the affected exchange or I&R if toll cable cut. Utilize normal call out procedures.
	2. Local Supervisor – Provide status of who has been dispatched thus far.
	3. Central Office Supervisor – Provide assistance to the Local Manager.

Note: At each call out attempt add a log entry to the ticket noting the results.

## Call Out Procedures

1. Customer Services Associate (CSA) is notified of a call out needed.
2. The CSA creates a trouble ticket if necessary and determines if Central Office (CO) or I&R need to be called out.
3. The CSA refers to the call out list and makes call out attempt in the following order:
	1. 1st choice technician for the exchange.
	2. 2nd choice technician for the exchange (and so on until list is exhausted for the exchange).
	3. Attempt to contact the other technicians in the same supervisor’s area beginning with the closest technician.
	4. Attempt to contact the technicians in nearby supervisors’ areas beginning with the closet technician.
	5. If no call out attempt was successful, contact the on call supervisor and relay ticket information and call out attempt information.

Note: At each call out attempt add a log entry to the ticket noting the results.

1. When successfully called out, change the administrative organization and the administrative organization assigned to fields if necessary.
2. When the technician has cleared the trouble, the technician should clear (and close) the ticket or call the dispatch number to have a dispatch clerk or CSA clear (and close) the ticket.

## Major Alarms

1. Network Operations Center (NOC) calls the Dispatch Center number with alarm information.
2. The Dispatch Clerk or Customer Service Analyst (CSA) creates a trouble ticket.
	1. If dispatch center is open, proceed to 3.
	2. If dispatch center is closed, proceed to 4.
3. The dispatch clerk contacts the Central Office (CO) technician responsible for the exchange either by paging or telephone call and adds a log entry to the ticket. Go to 5.
4. If the NOC advises a call out, the CSA refers to the call out list and attempts to call out the alarm utilizing the normal call out procedure. At each call out attempt, add a log entry to the ticket noting the results.
5. When successfully dispatched, relay alarm information to CO technician (if necessary), add a log entry or change the administrative organization and administrative organization assigned to fields.
6. When the alarm is cleared the CO technician should contact the NOC to close their ticket.
7. The CO technician should clear (and close) his/her ticket or call the dispatch number to have a dispatch clerk or CSA clear (and close) the ticket.

## Building Alarms

1. Network Operations Center calls the Dispatch Center number with building alarm.
2. The Dispatch Clerk or Customer Service Analyst (CSA) creates a trouble ticket.
3. Refer to Building Alarms Contact List and Call Supervisor for the exchange.
	1. If after regular business hours and on weekend, try the home number.
	2. During regular business hours and if no answer at home, try the pager number.
	3. If no result on either home or pager, try the cellular number.
	4. If unable to reach the supervisor proceed to call the technician and the backup technician if necessary.
	5. If unable to reach any of the previous 3 individuals, contact the HVAC Contractor for the exchange.
4. Give the necessary information to the contact including the NOC’s number and ticket number.
5. The building technician should contact the building supervisor for clearing the NOC alarm as well as the TBS trouble ticket.

***Internet Outage Procedure (If using INS)***

1. Call \_\_\_\_\_\_\_\_ TELEPHONE COMPANY Repair Number **\_\_\_\_\_\_\_\_\_\_** so they can open a trouble ticket.
2. Inform INS which exchanges are affected by this outage.
	* Let them know where our central office tech needs to be sent so they can page the appropriate tech.
	* Give them INS's trouble ticket number **if** possible.
	* Please give your name and call back number so our tech can call when they arrive on site.
3. You may call our Central Offices direct; some of our offices are manned during the day.
4. Call \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ for assistance.

***(CREATE A MASTER LIST OF EMERGENCY CONTACT NUMBERS)***

**Emergency Coordinating Center/Chain of Command**

In the event of an emergency or disaster, the General Manager has the decision as to the need to activate the Emergency Coordinating Center (ECC). When activated, the ECC will initiate the following emergency plan reporting procedures:

The first staff member to arrive will initiate the conference bridge telephone.

* + The District Manager the affected Area will assign a Local Manager and/or CO Manager to establish contact with the ECC in order to coordinate the restoration efforts.
	+ A copy of the Emergency Restoration Plan will be located in the Center to provide instructions for the centers functioning in the event of a disaster. Additionally, members of the ECC will be provided copies of the Emergency Restoration Plan to familiarize themselves with the emergency operations.

The District Manager for the affected area will:

* + Gather and coordinate status reports from the Field Response Groups.
	+ Reports the status from the Field Response Groups.
	+ Assists in coordinating current resources and determining additional requirements.
	+ Monitors and reports on the status of the surrounding communities.
	+ Appoints an Emergency Preparedness Coordinator responsible for maintaining the ECC:
	+ Procedures
	+ Equipment
	+ Supplies
* At a minimum, the ECC should be equipped with:

         Multiple Telephone Lines

         Multiple Wireless Smartphones

         Multiple Laptops with Email Access

         Emergency Generator Power

         Multiple TV’s with Cable TV Service

**FIELD RESPONSE GROUPS**

This group is composed of all management employees that respond to the emergency in the affected area.

The Field Response Groups:

* + Directs the safety and welfare of employees.
	+ Perform emergency response team responsibilities.
	+ Report status and damage assessments to the ECC.
	+ Direct local service restoral operations.
	+ Respond to local community needs.
	+ Report employee status to the ECC.

**EMERGENCY COORDINATING CENTER**

**CONTROL GROUP**

NAME, TITLE

Office: NPA-NXX-XXXX

Home: NPA-NXX-XXXX

Cell: NPA-NXX-XXXX

NAME, \_\_\_\_\_\_\_\_\_\_\_\_

Office: \_\_\_\_\_\_\_\_\_\_\_\_\_

Home: \_\_\_\_\_\_\_\_\_\_\_\_\_

Cell: \_\_\_\_\_\_\_\_\_\_\_\_

NAME, \_\_\_\_\_\_\_\_\_\_\_

Office: \_\_\_\_\_\_\_\_\_\_\_

Home: \_\_\_\_\_\_\_\_\_\_\_\_

Cell: \_\_\_\_\_\_\_\_\_\_\_