



**Attachment to Data Center Services
Service Component Provider
Master Services Agreement**

DIR Contract No. DIR-DCS-SCP-MSA-003

Between

**The State of Texas, acting by and through
the Texas Department of Information Resources**

and

Xerox Corporation

**Attachment 16-A
Disaster Recovery Plan**

January 23, 2012

TABLE OF CONTENTS

1. DISASTER RECOVERY PLAN CONTENTS.....	3
1.1 Disaster Recovery Plan Information	3
2. STANDARD DISASTER RECOVERY PLAN CONTENTS.....	4
2.1 Background.....	4
2.2 Scope.....	4
2.3 IT Disaster Declaration Criteria	4
2.4 IT Call-Out Procedure.....	4
2.5 Contingency Mode Resource Plan.....	4
2.6 Key Documents and Procedures.....	5
2.7 Notification and Reporting	5
2.8 Mainframe Technical Recovery Guide Activities and Procedures.....	5
2.9 Servers Technical Recovery Guide Activities and Procedures.....	5
2.10 Print-Mail Technical Recovery Guide Activities and Procedures.....	5
2.11 Network Technical Recovery Guide Activities and Procedures.....	5
2.12 Other Cross-Functional Recovery Activities and Procedures.....	5
2.13 Return to Normal Operating Mode	5
2.14 Training and Test Procedures.....	5
3. TECHNICAL RECOVERY GUIDE CONTENTS.....	7
3.1 Technical Recovery Documentation, Distribution, Review & Approval.....	7
3.2 Technical Recovery Procedures.....	7
3.3 Recovery Technology Standards	8

1. DISASTER RECOVERY PLAN CONTENTS

DIR expects the DRP and Technical Recovery Guides to provide sufficient level of detail for the Service Provider to successfully recover within the RTO.

1.1 Disaster Recovery Plan Information

1. DRPs should encompass the following types of information as examples:
 - a. Account Information
 - b. Activation Process Flow
 - c. Activation Procedures
 - d. Locations Notification Report
 - e. Recovery Location Notification Procedures
 - f. Off-site Storage Notification Procedures
 - g. Employee Notification Information
 - h. Recovery Teams Listing
 - i. Vendor Notification Information
 - j. System Recovery Detailed Timeline
 - k. System Recovery Procedures
 - l. System Recovery Problem Reporting Log
 - m. System Recovery Problem Reporting Form
 - n. Baseline Recovery Plan
 - o. Plan Maintenance
 - p. Plan Control
 - q. Technical Recovery Guides Location
 - r. DIR Customer Application List
 - s. DIR Customer Equipment List
 - t. Service Provider Emergency Equipment Acquisition
 - u. Media Communications Policy
 - v. Diagrams (DR Network, etc.)
 - w. Explanation of RTOs
 - x. Business Recovery Plan
 - y. SDC/ADC Vendor Contracts (Enterprise Plans)

2. STANDARD DISASTER RECOVERY PLAN CONTENTS

All DRPs that are developed by Service Provider shall address the following topics unless otherwise directed by DIR:

2.1 Background

2.1.1 Purpose

2.1.2 Goals and Objectives

2.2 Scope

2.2.1 Policies

2.2.2 Overview

2.3 IT Disaster Declaration Criteria

2.3.1 Operational Priorities

2.3.2 Levels of Response

2.3.3 Procedures for Invoking Contingency Mode

2.3.4 Required Authorizations

2.3.5 Notification Procedures

2.3.6 Media Handling Procedures

2.4 IT Call-Out Procedure

2.5 Contingency Mode Resource Plan

2.5.1 Functional Org Chart

2.5.2 Teams Roles and Responsibilities

2.5.3 Recovery Team Director

2.5.4 Command Center Coordinator

2.5.5 Recovery Team Leaders

2.5.6 Recovery Teams

2.5.7 Key Personnel Emergency Contact List

2.5.8 Key Service Providers and Vendors Contact List

2.5.9 Manpower Recovery Strategy

2.6 Key Documents and Procedures

2.6.1 Documents and Records Vital to IT Processes

2.6.2 Emergency Stationery and Office Supplies

2.6.3 Emergency Office Equipment

2.7 Notification and Reporting

2.7.1 Notifying and Mobilizing the Teams

2.7.2 Notifying Management and Key Employees

2.7.3 Handling Personnel Family Notification

2.7.4 Handling Media

2.7.5 Maintaining Event Log

2.7.6 Phase Reporting

2.8 Mainframe Technical Recovery Guide Activities and Procedures

2.9 Servers Technical Recovery Guide Activities and Procedures

2.10 Print-Mail Technical Recovery Guide Activities and Procedures

2.11 Network Technical Recovery Guide Activities and Procedures

2.12 Other Cross-Functional Recovery Activities and Procedures

2.13 Return to Normal Operating Mode

2.13.1 Criteria for Returning to Normal Operating Mode

2.13.2 Procedures for Returning to Normal Operating Mode

2.13.3 Procedures for Recovering Lost or Damaged Information

2.13.4 Detailed Lists, Inventories and Services Required

2.14 Training and Test Procedures

2.14.1 Managing the Training Process

2.14.2 Training Process and Schedule

2.14.2.1 Team Training

2.14.2.2 User Training

2.14.3 Risk Management

2.14.4 Testing of Recovery Plan

- 2.14.4.1 Planning the Tests**
- 2.14.4.2 Scheduling the Tests**
- 2.14.4.3 Conducting the Tests**
- 2.14.4.4 Test Schedule**
- 2.14.4.5 Test Scenario**
- 2.14.4.6 Test Monitoring**

3. TECHNICAL RECOVERY GUIDE CONTENTS

Technical Recovery Guides shall address the following items, unless otherwise directed by DIR and the respective DIR Customer.

3.1 Technical Recovery Documentation, Distribution, Review & Approval

1. Server configurations will be identified, documented, and maintained for each environment ensuring technical recovery to required configurations can be accomplished, such as:
 - a. Hardware
 - b. OS
 - c. Storage
 - d. Network
2. Server and application environment dependencies will be identified, documented, and maintained ensuring technical recover steps are known and can be sequenced appropriately to ensure business services operations can be restored including:
 - a. OS dependencies required to support applications and databases
 - b. Directories, File system and other mount points required such as NFS
 - c. Inter-server environment relationships and dependencies
 - d. Security dependencies
 - e. Interface dependencies
 - f. Application and/or database specific dependencies
 - g. Operations dependencies associated to the server/application such as required job task procedures (processes and services which will be enabled)
3. Technical Recovery Guides will be maintained, reviewed and approved. This will include processes of quality control performed by the Service Provider and review and concurrence with the DIR Customer.
4. The process of maintaining currency of the Technical Recovery Guides will be fully documented and repeatable.
5. Technical Recovery Guides will capture operational elements of the environments including:
 - a. System operational requirements which need to be re-enabled as required to support the business purpose of the environment
 - b. Post boot instructions required
 - c. Integration instructions required for cross teams support in restoring the overall business purpose of the environment

3.2 Technical Recovery Procedures

1. Service Provider will utilize technical recovery approaches based on sequenced recovery events and restoration of associated dependencies for each environment. This sequenced order of recovery events will be documented for every environment and be relevant to end-to-end recovery requirements.
2. Focus of technical recovery will be focused on restoration of business service ensuring all related recovery dependencies are addressed.

3. Backup and recovery technical requirements and related processes in the context of recovering specific environments will be fully described as part of the technical recovery procedures as required to enable end-to-end technical recover of the business purpose for each environment. This includes specifics associated to each environment including distinction of:
 - a. Hardware/OS recovery
 - b. Application software and related OS configuration recovery
 - c. Non-database data recovery
 - d. Database recovery

3.3 Recovery Technology Standards

1. Enterprise recovery technology standards will be fully documented and demonstrate technology standards used to enable technical recovery of all environments supported.
 - a. Hardware/OS recovery for all platforms supported
 - b. Application software and related OS configuration recovery
 - c. Non-database data recovery
 - d. Database recovery (all DB platforms)