Technical Specifications

Disaster Recovery Plan

1. Objective

 To ensure business continuity and data protection by establishing a robust Disaster Recovery (DR) plan, encompassing data backup, system replication, and service restoration in case of a critical failure or disaster.

2. Scope of Work

- Establish a Disaster Recovery (DR) site capable of hosting critical business applications and services in case of a primary site failure.
- Implement comprehensive backup and replication strategies for all critical data, systems, and applications.

3. Disaster Recovery Site Requirements

• Location: The DR site should be geographically distant enough from the primary site to mitigate risks from regional disasters (e.g., floods, power outages).

Infrastructure:

Server Specifications:

- Minimum of two high-availability servers, each with:
 - Dual Intel Xeon Gold 6226R processors or higher.
 - 256 GB DDR4 RAM.
 - 8 TB SSD storage in RAID 10 configuration.
 - Dual 10 Gbps network interfaces.
 - Redundant power supplies and cooling systems.

o Network:

- Dedicated high-speed connectivity with a minimum of 1 Gbps bandwidth for replication.
- Redundant network paths for failover.

Power and Cooling:

- Redundant power supply with generator backup.
- UPS with a minimum of 4-hour battery runtime.
- Redundant cooling systems to maintain optimal operating temperature.

o Security:

- Physical security measures including biometric access control, 24/7 monitoring, and surveillance.
- Network security with firewalls, intrusion detection systems (IDS), and VPN for secure access.

• Data Replication:

 Real-time data replication between the primary site and DR site using software such as Veeam, Zerto, or Azure Site Recovery.

• Backup:

- Daily incremental and weekly full backups of all critical data, stored at both primary and DR sites.
- o Backup retention policy of at least 30 days with offsite storage for older data.

4. Disaster Recovery Plan Components

DR Strategy:

- Define Recovery Point Objectives (RPOs) and Recovery Time Objectives (RTOs) for all critical systems.
- o Identify key personnel and roles for DR execution.

• DR Procedures:

- o Detailed failover and failback procedures, including:
 - Activation of DR site.

- Data restoration from backups.
- Application and service recovery processes.

• Testing and Maintenance:

- o Bi-annual DR testing to validate the effectiveness of the plan.
- Regular updates to the DR plan and procedures to accommodate changes in the IT environment.

5. Deliverables

- Detailed DR plan documentation including all procedures, configurations, and personnel responsibilities.
- DR site setup and configuration with a proof-of-concept failover test.
- Training for key personnel on DR procedures and failover management.

6. Evaluation Criteria

- Proposals must demonstrate experience in DR site implementation and management.
- Include references for similar DR projects completed in the last five years.
- Technical capability and proposed DR solution scalability and flexibility.