

**ETS LIMITED**



**EUROPEAN COMMISSION**

DIRECTORATE-GENERAL  
CLIMATE ACTION

# **EU Registry**

## **Disaster Recovery Plan**

Contact:

VELGHE Ronald, Telephone:84052, [ronald.velghe@ec.europa.eu](mailto:ronald.velghe@ec.europa.eu)

## **1. ROLES AND RESPONSABILITIES**

Please refer to **[Roles and Responsibilities]**.

## **2. DISASTER RECOVERY STRATEGY**

Please see the Crisis Management procedure in **[Joint Business Continuity Plan]**

## **3. MINIMUM HARDWARE AND SOFTWARE REQUIREMENTS**

The EU Registry is a Java EE applications which must be deployed on a Weblogic 11 cluster composed of at least 2 nodes. Its operations require also an Oracle 11 database and a load balancer. The machines hosting the Weblogic nodes and the database should be Solaris servers. Finally the system would need a file system with at least 500 GB of free space.

## **4. PROCEDURE FOR BACKUP ROLLBACK**

In the case where the disaster has resulted in a data corruption in the main site then the following procedure must be applied for restoring the data; it is assumed that the ITL and EUTL service desk have already been informed of the disaster and have temporarily suspended the right of the EU-ETS member states to submit requests:

1. Request the backup and restore team to restore the latest backup and provide the timestamp of this restored backup
2. Request the ITL Service Desk to provide a list of all the transactions involving a member state which have been updated between the backup timestamp and now. The status history and the transaction block must be provided along
3. Review the provided list in order to find transactions missing in the restored database or which have a different status. For each found transaction:
  - a. If the transaction was not yet completed in the ITL then cancel it
  - b. If the transaction is completed in the ITL then manually apply it in the EU Registry's database
4. Request the EUTL of all the processes (ETS transactions, account creation or update, NAP update, etc.)
5. If a review of those process records shows unknown process records or processes in a different status then manually apply the changes in the EU Registry's database.
6. Perform a successful ITL reconciliation with each member state (if a reconciliation fails, perform the required correction and restart a new one until successful completion)
7. Perform a successful ETS reconciliation (if the reconciliation fails, perform the required correction and restart a new one until successful completion).
8. Inform the ITL and EUTL service desks that the EU Registry is ready to go back in operation

The executant of this procedure is the Central administrator.

## **5. LOCATIONS OF SITES**

The production EU Registry is hosted at the DIGIT Luxembourg primary site while the DRP EU Registry is hosted at the DIGIT Luxembourg Backup site. Both sites meet the minimum operating requirements which have been presented in section 3. Copies of the crisis management documents are available at those sites through the EC's Intranet, furthermore the officials are

required to have copies of those documents on their personal computers. The actual address of those sites is a sensitive information and cannot be communicated.

## **6. ROLES AND RESPONSABILITIES AT DRP SITE**

### **6.1. IT Team leader backup, storage, and infrastructure**

This role is ensured by a main responsible and a backup. The responsibilities are the supervisions of the infrastructure and the procedures set in place by the European Commission in order to ensure the data storage, the backup and the disaster recovery of the applications hosted by the Commission.

### **6.2. IT system engineer**

This role is ensured by a team of people. Their responsibility is the maintenance and support of the infrastructure set in place by the European Commission in order to ensure the data storage, the backup and the disaster recovery of the applications hosted by the Commission.

## **7. DATA REPLICATION TOOL**

The data of the EU Registry can be separated in 2 parts:

- The database
- The file system which contains all the log files generated by the application

The file system is automatically replicated between the main site and the DRP site by EMC MirrorView while the database is replicated by Oracle Streams.

## **8. RECOVERABLE DATA**

The EU Registry is considered as a critical system and thus as presented in page 10 of **[Service Level Agreement]**:

- Disasters which do not impact the integrity of data do not result in a loss of more than 1 hour of data
- Disasters which impact the integrity of data do not result in a loss of more than 1 day of data

In case of data loss, part of the database loss could be compensated by reconciling with the databases of the ITL and of the EUTL.

## **9. COMMUNICATION MECHANISMS**

When a crisis affecting the EU Registry has been declared as described in section 3 of **[Joint Business Continuity Plan]**, the Central Administrator who is part of the crisis management team contacts by e-mail or phone each of the registry administrators to inform him or her of the crisis. Whenever a significant change of the crisis situation occurs, the Central Administrator will once again communicate it to the registry administrators. The registry administrators are free to decide whether or not they transmit the information to their users and the communication mean for doing so.

The registry administrators must provide their contact information to the Central Administrator and inform him of any change in their team composition.

**10. RETURN TIME TO OPERATIONS**

The EU Registry is a critical application for the trading of emission units; consequently the crisis management will strive to have the system back in operation within 48 hours as presented in page 10 of [Service Level Agreement].