

**ANNEX O**

**CEEMIS CONTINUITY OF OPERATIONS PLAN**  
**(COOP)**

**CONTINUITY OF OPERATIONS PLAN  
(COOP)**

**for**

**Corps of Engineers Enterprise Management Information System  
(CEEMIS)**

**Developed By:**

**U.S. Army Corps of Engineers  
Accounting Redesign Project Office  
(CERM-A)**

**31 July 1998**

**CONTINUITY OF OPERATIONS PLAN  
(COOP)**

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## SECTION 1 - GENERAL

**1.1 Purpose.** This Continuity of Operations Plan (COOP) provides guidance on the Corps of Engineers Automation Plan (CEAP-IA) platform for emergencies, disasters, mobilization, and for maintaining a state of readiness to provide the necessary level of information processing support commensurate with the mission requirements/ priorities identified by the functional user. The CEAP-IA platform provides computer services to a multitude of in-house and out-of-house business and engineering applications for the Corps of Engineers. This document is an excerpt of the complete CEAP-IA COOP as it specifically relates to the Corps of Engineers Enterprise Management Information System (CEEMIS). The COOP procedures will be exercised after CEEMIS is, or has been considered to be, inoperable for a period of 24 hours. However, preliminary plans should be underway during this time to ensure that support to the user is kept at a minimum. The CEAP-IA COOP must be in concert with the Corps of Engineers Mobilization and Operations Planning System (CEMOPS), and the Corps of Engineers Mobilization Plan (CEMP).

**1.2 Mission.** The mission of CEAP-IA (referred to collectively as the "NETWORK") is to provide automation and data communication hardware, software, and services, whether performed in-house or out-of-house, government-owned or contractor-owned, and general or special purpose, that currently supports both business and engineering applications of the Corps of Engineers. The Corps operates two Regional Processing Centers, Central Processing Center (CPC), Vicksburg, MS, and Western Processing Center (WPC), Portland, OR.

**1.3 Responsibilities.** Any CEEMIS user experiencing problems with the "NETWORK" should first notify the respective points of contact (POCs) per site as listed in Appendix B. After detailed investigation by knowledgeable local administrators, the following steps should be taken.

a. The first step is direct communication with the CEAP-IA Program Manager to obtain guidance in invoking the COOP. The Project Manager at the respective CPC and WPC retains basic responsibility for evaluating emergency situations. In his absence, guidance will be obtained from the Deputy Program Manager, and if necessary, the Director of Information at the CPC or WPC.

b. The Chief, Information Processing Center at CPC and the Chief, Computer Operations at WPC, will initiate pertinent COOP priority procedures after receiving permission/guidance. The CEAP-IA Program Manager or Deputy, the Director of Information Management at each respective site, and the Project Manager will be kept informed of all actions which have been implemented.

**1.4 Contingencies or Risk Analysis.** The CEAP-IA Processing Centers (CPC/WPC) provide general automation information systems services to Corps functional users. Pertinent actions for each respective system/application will proceed depending upon the priorities established by the functional users. The CEEMIS data processed on these configurations are categorized as Unclassified-Sensitive Two (US2). The vulnerability analysis and risk assessment for each site is part of the Risk Management review conducted using the Los Alamos Vulnerability Assessment (LAVA) software system. Copies of the vulnerabilities for each site are

available at the respective sites.

**1.5 Systems/Applications Priorities.** All CEAP-IA systems/applications including CEEMIS have been identified by the respective functional proponent as Priority 1-4 assignments. These assignments have been made to identify system criticalities. The priority explanations follow:

- a. Priority 1. Systems/Applications that are essential to command functions and which must be processed daily.
- b. Priority 2. Mission-essential systems/applications that can be delayed up to 2 days.
- c. Priority 3. Systems/Applications that can be delayed up to 14 days.
- d. Priority 4. Systems/Applications that may be delayed indefinitely or for which manual backup or alternate processing procedures exist.

CEEMIS is a Priority 1 system. A new set of super priority classes may be invoked but will cause no degradation of service to the current users.

**1.6 Succession of Personnel.** Personnel to contact in emergencies in addition to those positions identified in paragraph 1.3 include the following per processing center:

## **CENTRAL PROCESSING CENTER**

(Personnel are subject to change)

<b><u>Title</u></b>	<b><u>Name</u></b>	<b><u>Telephone</u></b>
A/C, Info Proc Ctr	Danny Walters	Office: 601/634-3763 Home: 601/638-4175
CEAP Site Manager	Danny Walters	Office: 601/634-3763 Home: 601/638-4175
Alt CEAP Site Mgr	David Turner	Office: 601/634-3158 Home: 601/638-8269
Site DBA	Maritza Gonzalez	Office: 601/634-2305 Home: 601/636-7955
	Pam Mahnke	Office: 601/634-3638 Home: 601/xxx-xxxx
	David Herring	Office: 601/634-4478 Home: 601/638-3510
LEAD Operator (Gov't)	I.L. Phifer	Office: 601/634-3282 Home: 601/638-2510

## **WESTERN PROCESSING CENTER**

(Personnel are subject to change)

CEAP Project Mgr:	Joe H. Worthington	Office: 503/326-3715 Home: 503/697-9378
Computer Operations: Primary	Shirley Gilman	Office: 503/326-3673 Home: 503/631-2649
Alternate	Randy Lujan	Office: 503/326-3676 Home: 503/774-6400
Systems: Primary	Judith Stephens	Office: 503/326-6587 Home: 503/658-7158

**WESTERN PROCESSING CENTER (Continued)**

Alternate (CYBER)	Russ Keister	Office: 503/326-7209 Home: 503/291-7449
Alternate (CD4000)	Dan Kguyen	Office: 503/326-4142 Home: 503/283-1599
Communications: Primary	Ken Miller	Office: 503/326-8080 Home: 503/631-2750
Alternate	Ali Houdroge	Office: 503/326-2401 Home: 503/646-9784
Database: Primary	Dave Bennett	Office: 503/326-7487 Home: 206/687-6867
Alternate	Ron Jaramillo	Office: 503/326-7495 Home: 503/786-3531

## **SECTION 2 - PROTECTION OF RECORDS AND DOCUMENTATION**

### **2.1 List of Records and Documentation.**

a. The CPC Operations Usage Manual, 1992-08-03, contains procedures for file/catalog restoration including system, family, userid, catalog, filename and multiple objects (catalogs, files, and file cycles). BACKUP SCHEDULES are outlined in the Operations Usage Manual. These procedures will allow access to all systems/applications files necessary to recover from any emergency condition at the local processing center or at an alternate site. A copy of the current Operations Usage Manual will be kept at the off-site storage facility.

b. The WPC Standing Operations Procedures (SOP), 1992-12-01, contains detailed procedural information on the following subjects as they pertain to the COOP:

- List of WPC IM personnel,
- WPC IM security and safety regulations,
- WPC guidelines for off-site storage of tape media,
- Building access information,
- WPC emergency telephone numbers,
- Processing criteria and scheduling,
- Family structures,
- All backup guidelines, and
- All categories of catalog/file/system restores.

This SOP contains the information necessary to recover from any emergency condition at the local site or to rapidly restore all functions at an alternate site. A copy of the current SOP is located at the off-site media storage facility along with a microfiche copy of the full weekly backups.

### **2.2 Procedures for Safeguarding Essential Materials.**

a. All essential CPC information/data files and associated materials identified as COOP resources are saved to removable media in accordance with the back-up schedule as previously described in paragraph 2.1.a. of this document. Upon completion of the schedule back-up procedures, the media (normally magnetic tape) is transported (enclosed in protective containers) to and from the alternate site by the Central Processing Center (CPC) Media Librarians (Operations Staff personnel). A full set of weekly, monthly, and quarterly backup files are stored at the alternate media storage area to provide the capability to fully reconstitute a processing center, if necessary. The alternate media storage site for the CPC COOP is located at the U.S. Army Engineer Waterways Experiment Station, 3909 Halls, Ferry Road, Vicksburg, Mississippi, 39180, Building 1000, Room 708. The media storage area meets all physical requirements stated in AR 380-19; is protected by a Halon fire suppression system; and access is controlled by a cipher lock. Only appropriate operations staff and operations systems analysts are given the door combination.

b. All WPC full system backups (weekly, monthly, and quarterly), and associated COOP defined materials are rotated on and off-site as documented in the COOP procedures. The materials are moved to the alternate off-site location in protective containers by a courier service that has security clearance. A full set of weekly, monthly, and quarterly backup files are stored at the alternate media storage area to provide the capability to fully reconstitute processing centers, if necessary. The alternate media storage site for the WPC COOP is located at the U.S. Army Corps of Engineers, CENPP-IM District Office, Third Floor, 1 Oak Plaza, Portland, OR. The alternate storage site meets all physical requirements as stated in AR 380-19; is protected by a Halon fire suppression system; and access is controlled by an electronic key card system. Access is strictly limited to essential personnel only. All transactions are carefully monitored by CENPD-IM-S-O.

## **SECTION 3 - EMERGENCY RESPONSE**

**3.1 Detailed Emergency Response Procedures.** No detailed response for each contingency is required for this section.

## SECTION 4 - BACKUP OPERATIONS

**4.1 Designation of COOP Site.** In the event of equipment failure on one system at any one of the processing centers, each site manager/chief of operations will attempt to use the remaining operational system by freeing up CPU/Disk space using VE ARCHIVE to accommodate the high priority/mission critical Systems/ Applications. The Emergency Movement Procedures as provided in paragraph 4.6 will be initiated. Availability of resources at the CPC or WPC will be determined at the time of system failure to decide where backup service will be obtained. The list of Families comprising each system will be reviewed for potential moves.

**4.2 Information Processing Equipment (IPE) Configuration.** The minimum IPE required to support emergency workload will be a system configuration compatible with the CPC1/CD4000 and WPC1/CD4000 configuration. There are no unique hardware or software requirements on the CYBER systems at any of the COOP sites. However, there are some unique software requirements on the CD4680 systems. If needed, this information is available in the CEAP-IA COOP.

**4.3 Facilities, Security, Supplies, Communications, and Transportation Requirements.** Initially, the minimum personnel support requirements from the deployed site would be three (3) people. These people should be the most knowledgeable in the areas of systems, operations, and databases. This minimum support may be subsequently augmented by as much as 40% of the deployed sites staff to support normal plus surge requirements in such things as customer assistance, systems/applications, data base, etc. support. Other support is as follows:

a. Sufficient office space, supplies, etc. will be available at each deployed site. Storage of magnetic media will be incorporated with the Host Site procedures. Each deployed site will arrange for their own transportation and hotel accommodations.

b. There are no additional security requirements at the Host site. There is no TEMPEST security required at any of the sites.

c. There are sufficient magnetic media and supplies available at the Host site to support the operations of the deployed site. Replenishment cost for materials, etc. will be accounted for by the CEAP-IA Program Managers office.

**4.4 Personnel Requirements.** The three people identified in paragraph 4.3 will coordinate with the functional users identified in paragraph 1.4 to ensure their requirements are being met at the deployed site. In the event a functional user or additional support staff is needed at the deployed site, arrangements will be made by the deployed Site Manager. All personnel will have a Secret clearance.

**4.5 Planning Coordination.** The CEAP-IA Project Manager at the site to be deployed will notify all users of the affected system as to the anticipated extent of the emergency conditions. The following procedures are used by the Customer Assistance Center, CPC, and should be used as an example:

a. Scheduled Down Time:

- (1) System message is put out on the CPC computers.
- (2) The Program Support Office (PSO) is called to put message on the PSO and WPC computers.
- (3) Depending on the nature of the down time, sometimes Corpsmail messages are sent out to the Family Administrators and Data Base Administrators (DBAs).

b. Unscheduled Down Time:

- (1) Each Family Administrator for the system involved is notified. It is the Family Administrator's responsibility to notify their people and the districts under them of the pending problems.
- (2) Each of the CEAP-IA Processing Centers, Customer Assistance Centers, are called.
- (3) A voice mail message is sent to key individuals at CPC notifying them of the problems.
- (4) Another voice mail message is sent to these key individuals when the systems recover.

**4.6 Emergency Movement Procedures.** The three support personnel identified in paragraph 4.3 will relocate to the deployed site using the most expeditious means available at the time of deployment. These personnel will ensure that all pertinent data files, documentation, etc. are hand-carried to the deployed site. The following procedures will be implemented by the deployed team immediately after the CEAP-IA Program Manager has announced that the COOP should be exercised:

a. Notify the deployment site that emergency support, and estimated level of system requirements (e.g., CPU, disk space) is needed.

b. Provide the deployment site the estimated time of arrival and request local logistics support, if necessary.

- c. Obtain necessary temporary duty (TDY) documents (travel orders, airline tickets, hotel reservations, car rental, etc.).
- d. Obtain all pertinent file (e.g., canisters) documentation, etc. from the Off Site Media Storage Facility and the Processing Center identified to be used in the event of deployment.
- e. Convey all the files, documentation, etc., to the deployment site as rapidly as possible.
- f. Report in to the CEAP-IA Project Manager.
- g. Proceed to work with the CEAP Staff in loading all pertinent files and making necessary system adjustments in order to become operational as soon as possible.
- h. Notify all users of the system that we are operating under a COOP emergency and, consequently, a deterioration of service may prevail.
- i. At the conclusion of the emergency, notify all users that the system is back to normal operation.
- j. The deployed team will download all pertinent files, etc., and return to their respective duty station using the most expeditious means available.

## SECTION 5 - RECOVERY

**5.1 Recovery Plans.** Upon notification that the emergency conditions have been resolved and the systems (including replacements) have been declared ready for continued operations, the local (WPC/CPC) restore procedures outlined in each respective Operations Usage Manual (e.g., CPC Operations Usage Manual, 1992-08-03) will be implemented. The relocated personnel will assemble all current data files/applications, documentation, etc. and return to their respective organizations using the most appropriate means available. The data files/applications which were deployed will receive top restoration priority. All users will be notified that the system is operational and informed of the schedule to resume their processing. The restoration to full service could be extensive depending on how long the system has been inoperative.

## **SECTION 6 - CONTINGENCY OPERATIONS AT HOST SITE**

### **6.1 - 6.6**

Paragraphs 6.1 through 6.6 are essentially a repeat of information/details contained in previous paragraphs plus what is contained in the CEAP-IA Memorandum of Agreement.

**6.7 Evaluation Criteria for COOP and Tests Methods.** An annual test and review of the COOP will be performed. It will consist of declaring one complete CEAP-IA system inoperable at a given site. This test and review will ensure that all Processing Centers are tested in a 2 year period. The deployed site will implement the EMERGENCY MOVEMENT PROCEDURES as outlined in paragraph 4.4 of this document. Appendix C (MOVE FAMILIES SCENARIO) contains details on how Families will be transferred from one processing center to another.

**APPENDIX A**  
**LIST OF ACRONYMS**

## APPENDIX A

### LIST OF ACRONYMS

CEAP-IA	US Army Corps of Engineers Automation Program
CEEMIS	Corps of Engineers Enterprise Management Information System
CEMOPS	Corps of Engineers Mobilization and Operations Planning System
CEMP	Corps of Engineers Mobilization Plan
COOP	Continuity of Operations Plan
CPC	Central Processing Center
DBA	Data Base Administrator
IPE	Information Processing Equipment
LAVA	Los Alamos Vulnerability Assessment
POC	Point of Contact
PSO	Program Support Office
SOP	Standing Operations
TDY	temporary duty
US2	Unclassified - Sensitive Two
WPC	Western Processing Center

**APPENDIX B**

**CEEMIS POINTS OF CONTACT (POCs)**

## CEEMIS POINT OF CONTACT

<u>FOA CODE</u>	<u>POINT OF CONTACT</u>	<u>PHONE NUMBER</u>
A0	Beth Culver	(256) 895-1434
B0	David Turner	(901) 544-3573
B1	David Turner	(901) 544-3573
B2	LaRonda Butler	(504) 862-1134
B3	David Turner	(901) 544-3573
B4	David Turner	(901) 544-3573
C0	Richard Balash	(402) 221-3967
C1	Richard Balash	(402) 221-3967
C2	Richard Balash	(402) 221-3967
D0	Robert Henderson	(617) 647-8128 (P)
D0	James Bradley	(617) 647-8454 (A)
E0	Robert Henderson	(617) 647-8128 (P)
E0	James Bradley	(617) 647-8454 (A)
E1	Dean Hall	(410) 962-2215 (P)
E1	Bill Merritt	(410) 962-2215 (A)
E3	Robert Henderson	(617) 647-8128 (P)
E3	James Bradley	(617) 647-8454(A)
F1	Phyllis Nice	(716) 879-4120
F2	Valerie Williams	(313) 226-6847
F4	Mike Tomlinson	(309) 794-6123
F5	Dave Koepsell	(612) 290-5466
G0	William Simpson	(503) 326-2096
G1	Leigh Bates	(907) 753-2582
G2	William Simpson	(503) 326-2096
G3	William Simpson	(503) 326-2096
G4	Williams Simpson	(503) 326-2096
H0	Ron Saunders	(513-684-3133 (P)
H0	Karen Wilson	(513) 684-3015 (A)
K0	Carolyn J. White	(334) 441-6572 (P)
K0	Brian Ivey	(334) 441-6640 (A)
K5	Carolyn J. White	(334) 441-6572 (P)
K5	Brian Ivey	(334) 441-6640 (A)
K6	Pamela Dale	(912) 652-5285
K7	Eleen S. Gildea	(910) 251-4443
J0	Jim Suster	(808) 438-8497
L1	Linda Okimoto	(213) 894-2456
L1	Sue S. Loo	(213) 894-5364

**CEEMIS POINT OF CONTACT  
(Continued)**

<u>FOA CODE</u>	<u>POINT OF CONTACT</u>	<u>PHONE NUMBER</u>
L2	Ed Hopkinson	(916) 557-7520
M0	Timothy Tynes	(817) 334-2628
M1	Timothy Tynes	(817) 334-2628
M2	Timothy Tynes	(817) 334-2628
M3	Timothy Tynes	(817) 334-2628
M5	Pam Alambar	(918) 669-7293
Q0	Pete Brown	(703) 355-7109
S0	Linda Stoutenburgh	(202) 761-1922 (P)
S0	Herb Drake	(202) 761-1922 (A)
S0	Pete Brown	(703) 355-7109 (A)
U1	Pete Brown	(703) 355-7109
U2	Robert Henderson	(617) 647-8128
U3	Karen Wood	(601) 634-3968
U4	Karen Wood	(601) 634-3968
W2	Pete Brown	(703) 355-7109
W3	Pete Brown	(703) 355-7109

**APPENDIX C**  
**MOVE FAMILIES SCENARIO**

## MOVE FAMILY - KEEP SAME NAME

### A. PRELIMINARY:

#### 1. GENERAL

- a. Notify users of move schedule.
- b. Arrange shipping, if applicable.

#### 2. NOS/VE

- a. Determine if family will reside on a separate set.
- b. Determine if family name is used in any \$SYSTEM.PROLOGS\_AND\_EPILOGS files
- c. Determine if there are changes to scheduling profile specifically for this family.
- d. Determine if the family is small enough to move across the network, rather than shipping on magnetic media.

#### 3. ORACLE

- a. Make sure the Oracle SIDs do not conflict.
- b. Make sure there is enough space available for the new instance(s).
- c. Examine how the database files are distributed across the disks and families.
- d. Determine if there are any special requirements and/or procedures that may need to be migrated.
- e. Update any operational procedures, if necessary. Notify operations of the changes.

### B. AT CURRENT LOCATION:

#### 1. General

- a. Arrange shipping and coordinate with receiving location.

#### 2. NOS/VE

- a. Run backup of family. In order to have a complete backup, be certain the backup is taken on a quiet system (Oracle SIDs are not up and users are not logged in).
  - (1) If the family that is to be moved is the only family on a set, then create a full backup of the set. Check listing to be certain that all files and catalogs were successfully saved.
  - (2) If the family that is to be moved is not the only family on that set, then take the following steps to create a full backup of the family. Check listing to be certain that all files and catalogs were successfully saved.

**MOVE FAMILY - KEEP SAME NAME**  
**(Continued)**

- b. In order to prevent further access of the family on this machine, take the following 2 steps.
    - (1) Remove titles that associate the family with this mainframe.
    - (2) Change the family name.
  - c. Remove any references to the family name from the \$SYSTEM.PROLOGS\_AND\_EPILOGS files.
  - d. If applicable, make changes to the scheduling profile.
  - e. Remove family name from files used to define STORNET.
  - f. When it is determined that the family is successfully running at the new location, delete the family from the old location. Check to be certain that the family has been deleted.
- 3. ORACLE**
- a. Be certain all appropriate instances are down prior to full backup.

**C. AT NEW LOCATION:**

**1. NOS/VE**

- a. Create the set for the new family.
  - (1) If the family that is being moved is to be on a separate set, create the new set. During a deadstart, intervene before activating sets (option #2). The system will be in LCU utility. Repeat INIMV, CHAMC and ADDVTS to create as many disks as needed for the set.
  - (2) If the family that is being moved is to be added to an existing set, it is not necessary to create a set, but it may be necessary to add additional disks to the existing set.
- b. Create family on appropriate set.
- c. Delete Validation File from family that was just created. This is necessary in order to have the backup procedure restore the Validation File from the previous system.
- d. Restore set/family.
  - (1) If restoring the entire set take the following steps.

```
TASK R = 3
RESTORE_PERMANENT_FILES L =
$LOCAL.RESTORE_nnnn
    RESTORE_EXISTING_CATALOG ..
        BACKUP_FILE =$local.tape ..
        CATALOG = :nnnn
```

**MOVE FAMILY - KEEP SAME NAME**  
**(Continued)**

- (2) If restoring (family).
- e. Add titles that associate the family with this mainframe.
- f. Add family name to all define STORNET files.
- g. Notify old location when the family may be deleted.

**2. ORACLE**

- a. Change in the host table will have an affect on users of SQL\*NET TCP/IP. Users will need to be notified if an instance is moved from one machine to another.
- b. The server job file for each instance affected will have to be updated whenever the NOS/VE password for the DBA account is changed.
- c. The SET\_SID\_INFORMATION file for the relevant version of ORACLE will need to be updated. This file may be updated manually or by using the MANage\_Sid\_Definitions (MANSD) command. This file is used by the SET\_Oracle\_Environment (SETOE) command.
- d. The SET\_SIDS\_INFORMATION\_2 file will have to be updated. Use the MANage\_Sid\_Information (MANSI) command to update the ORAcle\_Set\_Environment (ORASE) command.
- e. The SET\_SIDS\_LOGON file will have to be updated. This file is encrypted and can only be updated by the MANage\_Sid\_Logon (MANSL) command. This file also needs to be updated whenever the NOS/VE password for the DBA account is changed. This file is used by some of the backup and maintenance procedures.
- f. Since the family name and the SID have not changed, the data files for the instance can be restored from the backup.
- g. To verify that the instance was restored properly, a full export may be run.

## MOVE FAMILY - CHANGE NAME

### **A. PRELIMINARY:**

#### **1. GENERAL**

- a. Notify users of move schedule.
- b. Arrange shipping, if applicable.

#### **2. NOS/VE**

- a. Determine if family will reside on a separate set.
- b. Determine if family name is used in any \$SYSTEM.PROLOGS\_AND\_EPILOGS files
- c. Determine if there are changes to scheduling profile specifically for this family.
- d. Determine if the family is small enough to move across the network, rather than shipping on magnetic media.

#### **3. ORACLE**

- a. Make sure the Oracle SIDs do not conflict.
- b. Make sure there is enough space available for the new instance(s).
- c. Examine how the database files are distributed across the disks and families.
- d. Determine if there are any special requirements and/or procedures that may need to be migrated.
- e. Update any operational procedures, if necessary. Notify operations of the changes.

### **B. AT CURRENT LOCATION:**

#### **1. NOS/VE**

- a. Run backup of family. In order to have a complete backup, be certain the backup is taken on a quiet system (Oracle SIDs are not up and users are not logged in).
  - (1) If the family that is to be moved is the only family on a set, then create a full backup of the set. Check listing to be certain that all files and catalogs were successfully saved.
  - (2) If the family that is to be moved is not the only family on that set, then take the following steps to create a full backup of the family. Check listing to be certain that all files and catalogs were successfully saved.
- b. In order to prevent further access of the family on this machine, take the following 2 steps.
  - (1) Remove titles that associate the family with this mainframe.
  - (2) Change the family name.
- c. Remove any references to the family name from the \$SYSTEM.PROLOGS\_AND\_EPILOGS files.

**MOVE FAMILY - CHANGE NAME**  
**(Continued)**

- d. If applicable, make changes to the scheduling profile.
- e. Remove family name from files used to define STORNET.
- f. When it is determined that the family is successfully running at the new location, delete the family from the old location. Check to be certain that the family has been deleted.

**2. ORACLE**

- a. Be certain all appropriate instances are down prior to full backup.
- b. The data files for the instance cannot be restored from a full backup. A full export of the database will have to be made prior to moving the instance or changing the family name.
- c. Any change to the instance should be made prior to the export. These changes include dropping or removing any tablespaces or dropping or removing any users and/or applications.
- d. Obtain a copy of the init.ora file for the instance being moved. Ascertain the names and storage parameters for the tablespaces in the instance. Also obtain information about the rollback segments used by the instance.

**C. AT NEW LOCATION:**

**1. NOS/VE**

- a. Create the set for the new family.
  - (1) If the family that is being moved is to be on a separate set, create the new set. During a deadstart, intervene before activating sets (option #2). The system will be in LCU utility. Repeat INIMV, CHAMC and ADDVTS to create as many disks as needed for the set.
  - (2) If the family that is being moved is to be added to an existing set, it is not necessary to create a set, but it may be necessary to add additional disks to the existing set.
- b. Create family on appropriate set.
- c. Delete Validation File from family that was just created. This is necessary in order to have the backup procedure restore the Validation File from the previous system.
- d. Restore set/ family.
  - (1) If restoring the entire set take the following steps.
  - (2) If restoring (family)
- e. Add titles that associate the family with this mainframe.
- f. Add family name to all define STORNET files.
- g. Notify old location when the family may be deleted.