

**Program Executive Office (PEO)
Standard Army Management
Information Systems (STAMIS)**



**INTERFACE AGREEMENT
Transportation Coordinators' Automated Information
for Movement System II (TC-AIMS II)
and
Naval Construction Force Management Information System
(NCFMIS)**

Prepared by:
TC-AIMS II Joint Project Management Office (JPMO)
Attn.: SFEA-PS-TC
9350 Hall Road, Suite 142
Fort Belvoir, VA 22060-5526

Approved by:

Signature

Date

Stanford I. Polonsky JR.
Project Officer
JPMO, TC-AIMS II

(signed)

19 Nov 1998

Donald R. Curtis
NCF IT Proponent
NCFMIS

(signed)

19 Nov 1998

**INTERFACE AGREEMENT
BETWEEN TC-AIMS II and NCFMIS
TABLE OF CONTENTS**

1. General.....	1
1.1 Purpose.....	1
1.2 Scope.....	1
1.3 Functional Requirement.....	1
1.4 Interface Overview.....	1
1.5 Responsibilities.....	1
1.6 Procedural and System Changes.....	1
1.7 Life-Cycle Maintenance.....	2
2. TC-AIMS II Attributes.....	2
2.1 System Description.....	2
2.2 Hardware.....	3
2.3 Software.....	3
2.4 Interface Attributes.....	3
2.5 Service Levels.....	3
2.6 Points of Contact.....	3
2.7 Security.....	4
2.8 Communication Verification.....	4
2.9 System Problems.....	4
2.10 Data Requirements (from TC-AIMS II to NCFMIS).....	4
3. NCFMIS Attributes.....	4
3.1 System Description.....	4
3.2 Hardware.....	5
3.3 Software.....	5
3.4 Interface Attributes.....	5
3.5 Service Levels.....	5
3.6 Points of Contact.....	5
3.7 Security.....	6
3.8 Communication Verification.....	6
3.9 System Problems.....	6
3.10 Data Requirements (from NCFMIS to TC-AIMS II).....	6
Appendix A, NCFMIS to TC-AIMS II File Structure and Record Layout Information.....	7
Appendix B, Supply Class Conversion Table.....	8
Appendix C, Acronyms.....	9

INTERFACE AGREEMENT

BETWEEN TC-AIMS II and NCFMIS

1. General

1.1 Purpose.

The purpose of this Interface Agreement (IA) is to define the functional and physical interface established between the U. S. Navy Naval Construction Force Management Information System (NCFMIS) and the Transportation Coordinators' Automated Information for Movement System II (TC-AIMS II).

1.2 Scope.

This IA applies to all functional proponents, assigned responsible agencies, software developers, operators, users, and all others involved with the transfer of data from NCFMIS to TC-AIMS II. It encompasses requirements pertaining to data, physical and logical interfaces, communications, service levels, and security.

1.3 Functional Requirement.

This IA provides for a one-way data exchange from NCFMIS to TC-AIMS II of data files containing Navy Expeditionary Force equipment data used to support movement planning and execution of Navy Expeditionary units.

1.4 Interface Overview.

Data records to be exchanged will be prepared in a DOS formatted American Standard Code for Information Exchange (ASCII) text flat file for 3.5 HD diskette exchange or electronically by a file attachment to an E-mail sent via SMTP.

1.5 Responsibilities.

1.5.1 TC-AIMS II Project Manager.

The TC-AIMS II PMO will incorporate into TC-AIMS II the functionality described in the Program Executive Office (PEO) Standard Army Management Information Systems (STAMIS) Operational Requirements Document (ORD), to include the capability to import and process the data files described in Appendix A.

1.5.2 NCFMIS Project Manager.

The NCFMIS PMO will maintain the capability to export the data file described in Appendix A.

1.6 Procedural and System Changes.

1.6.1 General.

During the life cycles of NCFMIS and TC-AIMS II, the PMO of either system may discover new or changed operational requirements that will affect this interface. All affected parties will be notified in writing 120 days prior to implementing the proposed/required change(s). Notification will clearly describe the intended change(s) and will identify transaction changes that will affect the interface between NCFMIS and TC-AIMS II. The party making the change will initiate the required notification.

1.6.2 Regulatory Changes.

If a procedural change is the result of a Service or Agency regulatory change, both parties to the IA will concur on the implementation actions and an effective date.

1.6.3 Functional or Technical Changes.

Changes that result in functional, technical or procedural changes, or changes to standard data tables and elements affecting only one system will be initiated by the responsible PMO. That system's PMO will propose a mutually acceptable implementation date for the change(s).

1.6.4 Year 2000 (Y2K) Compliance.

The April 1997 Department of Defense (DOD) Year 2000 Management Plan directs system developers and maintainers, along with the system's functional proponent, to certify and document each system's Year 2000 (Y2K) compliance. The TC-AIMS II software suite will be certified Y2K compliant. The interface exchange data requires Y2K compliance or implementation of consistent Y2K corrections to enable correct date data passage between NCFMIS and TC-AIMS II.

1.6.5 Modifications.

Upon agreement, all modifications to this interface will be documented herein and recorded on the change sheet. Revised page(s) will be produced and the IA signed and dated by all concerned parties.

1.7 Life-Cycle Maintenance.

This agreement will be reviewed and augmented as required.

2. TC-AIMS II Attributes

2.1 System Description.

The TC-AIMS II is a top-down directed program aimed at addressing a critical shortfall in the movement of material and personnel in support of DoD transportation operations as defined in the TC-AIMS II Mission Need Statement (MNS). TC-AIMS II falls within the DoD mission area supporting Mobility/Transportation of the DoD Personnel and Cargo. TC-AIMS II will provide unit mobility and Installation Transportation Office/Transportation Movement Office (ITO/TMO) throughout DoD with a single, effective, and efficient Automated Information System (AIS) which provides transportation management of unit movement, passengers, and cargo during day-to-day operations within the Defense Transportation System (DTS).

The TC-AIMS II system is the result of a joint effort of the US Armed Forces and the Joint Project Management Office (JPMO) headed by the US Army as the Executive Agent. TC-AIMS II provides automated support to functions performed by Unit Movement Officers (UMOs) and Installation Transportation Offices (ITOs/TMOs), who previously used a variety of Service automated systems and manual processes. TC-AIMS II goal is to improve and expedite unit movements and Transportation Operating Agency (TOA) actions, providing timely and accurate information for use at all Joint Deployment Communities (JDCs) command levels in support of CONUS (Continental United States), OCONUS (Outside the Continental United States) and in theater RSO&I (Reception, Staging, Onward Movement and Integration) operations.

The TC-AIMS II system includes software and processes installed on Service provided hardware that supports unit movement and sustainment transportation functions, as well as provides access to various load planning functions. These functions are available to the TC-AIMS II user from a client/server

network or stand-alone configuration at the unit/installation level whether in-garrison or deployed. Processing, tracking, and reporting of data from TC-AIMS II will be available to decision-makers at various command levels via the In-transit View (ITV) capability of the Global Transportation Network (GTN).

2.2 Hardware.

The TC-AIMS II program is designed to operate on hardware provided by the Services in both client/server and standalone configurations. The client and standalone workstation hardware platforms require a Pentium II computer or higher with 64 MB of RAM and 4 GB hard disk. The server requires a Pentium II processor or higher with 256 MB RAM and 5GB hard drive.

2.3 Software.

TC-AIMS II client/server and standalone workstation platforms run under MS Windows NT (workstation) supporting a Sybase relational database. The server configuration runs under MS Windows NT (server) supporting a Sybase relational database.

2.4 Interface Attributes.

2.4.1 Procedures.

In response to the data received from NCFMIS, TC-AIMS II will import the data into the Unit Deployment List (UDL) table to support movement planning, material movement and load planning.

2.4.2 Data Exchange.

The intended method of data exchange for this interface is electronically by files attached to SMTP E-mail. The data will be in a DOS formatted ASCII text file without encryption.

2.4.3 Priority.

The processing priority for this interface will default to routine.

2.4.4 Communications.

The actual interfacing will be done manually by files attached to SMTP E-mail.

2.5 Service Levels.

No service levels for this interface will be established. Data will be passed on an as required basis. No special processing is required.

2.6 Points of Contact.

2.6.1 Functional.

LtCol Jim Wakeley, USAF
Attn.: SFEA-PS-TC
9350 Hall Road, Suite 142
Fort Belvoir, VA 22060-5526
Tel: (703) 923-1026

2.6.2 Technical, Communications and Security.

Mr. Willie Jones, JR.
Attn.: SFEA-PS-TC
9350 Hall Road, Suite 142
Fort Belvoir, VA 22060-5526
Tel: (703) 923-1008

2.7 Security.

TC-AIMS II is an unclassified system containing Sensitive But Unclassified (SBU) information. TC-AIMS will operate in the systems high mode in accordance with a C2 level of accreditation based on the DOD 5200.28-STD. The TC-AIMS II architecture has been designed with protective mechanisms that ensure the data confidentiality, integrity and availability of the data being transmitted including:

- Safeguards protecting data from virus or malicious logic
- Diskettes will be handled and controlled per local security policies.

2.8 Communication Verification.

No verification is required for a manual interface. The SMTP software includes verification and notification modules to provide the sender notification of successful/non successful file transfer. Recovery from file transfer problems is built into the various communications protocols. If these built-in recovery functions do not result in successful completion, retransmission of the entire file is required.

2.9 System Problems.

The JPMO will maintain a Help Desk system to coordinate and resolve system problems referred from the Services. The Help Desk will provide a single-track problem resolution interface with the software developers as outlined in the ILSP.

2.10 Data Requirements (from TC-AIMS II to NCFMIS).

No data files will export from TC-AIMS II to NCFMIS.

3. NCFMIS Attributes

3.1 System Description.

NCFMIS is a US Navy system, which contains information on equipment allowances and equipment status for Naval Expeditionary Units. This system consist of three subsystems:

- CESMIS - Civil Engineer Support Management Information System. Used to generate Advanced Base Functional Component (ABFC) requirement data within the Navy. Table of Allowance (TOA) data for the Naval Mobile Construction Battalion (NMCB) along with Type Unit Characteristics (TUCHA) and NSN data from the Inventory Management Data Base (IMDB) will form the basic NCF notional requirement UDL file. Other notional requirements can be provided for other ABFCs.
- SUPMIS - Supply Management Information System. Used to generate material and/or equipment asset information. The Containerization Program will provide packed container material asset information or equipment asset information for UDL asset use.

- CASEMIS - Construction, Automotive and Specialized Equipment Management Information System. Used to generate equipment asset information. The Inventory and Registration (I&R) data will provide equipment asset information for UDL asset use.

3.2 Hardware.

Navy information is resident in three mainframe systems. These Naval Facilities Command (NAVFAC) systems are collectively referred to as the Naval Construction Force Management Information System (NCFMIS). They reside on the Facilities System Office (FACSO) segment of the DMC Mechanicsburg, PA mainframe.

3.3 Software.

Commercial-off-the-shelf (COTS) relational database.

3.4 Interface Attributes.

3.4.1 Procedures.

The Seabee Logistics Center (SLC) creates one data stream that provides the data necessary for the UDL layout regardless of which module contains the data. TC-AIMS II will provide movement planning, load planning and movement execution by creating a UDL from data imported from NCFMIS.

3.4.2 Data Exchange.

The intended method of data exchange for this interface is by means of 3.5" HD diskette or electronically by files attached to SMTP E-mail. The data will be in a DOS formatted ASCII text file without encryption.

3.4.3 Priority.

The processing priority for this interface will default to routine.

3.4.4 Communications.

The actual interfacing will be done manually by means of 3.5" HD diskette or files attached to SMTP E-mail.

3.5 Service Levels.

No service levels for this interface will be established. Data will be passed on an as required basis. No special processing is required.

3.6 Points of Contact.

3.6.1 Functional.

Donald R. Curtis
NAVFACENGR CMD DET
SEABEE Logistics Center
4111 San Pedro Street
Port Hueneme, CA 93043-4410
Tel: (805) 982-3296, DSN 551- 3296

3.6.2 Security.

Terminal Area Security Officers (TASO) by system are:

CESMIS/CASEMIS Toby Jacobs
 4111 San Pedro Street
 Port Hueneme, CA 93043-4410
 Tel: (805) 982-1811 DSN 551- 1811

SUPMIS Steve Wagler
 4111 San Pedro Street
 Port Hueneme, CA 93043-4410
 Tel: (805) 982-5991, DSN 551- 5991

3.7 Security.

Data exchanged through this interface have been established as sensitive but unclassified (SBU) and will be controlled using US Navy and local Security Office procedures.

3.8 Communication Verification.

No verification required for manual interface. The SMTP software includes verification and notification modules to provide the sender notification of successful/non successful file transfer. Recovery from file transfer problems is built into the various communications protocols. If these built-in recovery functions do not result in successful completion, retransmission of the entire file is required.

3.9 System Problems.

Problems encountered will be forwarded to the NCFMIS PMO for resolution.

3.10 Data Requirements (from NCFMIS to TC-AIMS II).

3.10.1 Source File. (Appendix A, Table A-1)

This file contains data to enable the creation of a UDL for Naval Expeditionary Unit material managed in the NCFMIS system.

Appendix A, NCFMIS to TC-AIMS II File Structure and Record Layout Information

Table A-1, Source File

FIELD NAME	POSITIONS	WIDTH	TYPE/CLASS	REMARKS	
UNIT IDENTIFICATION CODE				Will always be "N62583" (not contained in the file)	
NATIONAL STOCK NUMBER	1 – 13	13	A/N		M
SERIAL NUMBER	14 – 33	20	A/N		O
ITEM ID	34 – 46	13	A/N		O
DESCRIPTION	47 – 96	50	A/N	Navy descriptions will be 40 or 50 character	O
WIEGHT	97 – 106	10	N	Pounds	O
LENGTH	107 – 114	8	N	Inches (Used to calculated cubic foot load and square feet)	O
WIDTH	115 – 120	6	N	Inches (Used to calculated cubic foot load and square feet)	O
HIEGHT	121 – 126	6	N	Inches (Used to calculated cubic foot load)	O
MAXIMUM WEIGHT	127 – 136	10	N		O
LTI CODE	137	1	A/N		O
JCS CARGO CATEGORY CODE	138 – 140	3	A/N		O
QUANTITY PER CARGO	141 – 145	5	N		O
SECTION	146 – 147	2	A/N	See note 1	O
SEAL NUMBER	148 – 167	20	A/N		O
PACKAGE LOT NUMBER	168 – 182	12	A/N		O
SHELF LIFE DATE CODE	183	1	A/N		O
UNIT OF ISSUE	184 – 185	2	A/N		O
LOCATION	186 – 210	25	A/N		O
MANUFACTURE CODE.	211 – 215	5	A/N		O
MODEL NUMBER	216 – 226	11	A/N		O
PACK TYPE CODE	227 – 228	2	A/N		O
BUMPER NUMBER	229 – 240	12	A/N		O
UNIT TYPE CODE	241 – 246	6	A/N		O
DEPLOY ECHELON	247 – 248	2	A/N		O
HEAVY LIFT CODE	249	1	A/N		O
IS HAZARD	250 – 251	1	A/N		O
FACILITY/GROUP NUMBER	251 – 260	10	A/N	New Navy data element	O
The following fields will be calculated upon import into TC-AIMS II when data is provided.					
CUBIC FT LOAD				Calculated if length, width, and height exist (Length in inches times width in inches, times height in inches divided by 1728).	C
SQUARE FT				Calculated if length and width exist (Length in inches times width in inches divided by 144).	C
TONS MEASUREMENT				Calculated if CUBE FT LOAD has been calculated (Cubic feet divided by 40 equals Measurement tons)	C
M = Mandatory field C = Conditional A = Alpha O = Optional field N = Numeric					
Note 1 SUPPLY CLASS CODE will be determined from Appendix B, Table B-1 based on the value of source file SECTION field when this data is provided.					

Appendix B, Supply Class Conversion Table

Table B-1, Section Number to DOD Supply Class

TOA Section Number	TOA Section Number Description	DOD Class Of Supply	DOD Supply Class Description
1	Facilities	2	Individual Equipment
2	Installed Facilities	2	Individual Equipment
3	Collateral Equipment	2	Individual Equipment
4	Civil Engineer Support Equip.	7	Major End Items
5	CESE Repair Parts	9	Repair Parts
7	Collateral ISO Container	2	Individual Equipment
8	Central Tool-room Tool Kits	2	Individual Equipment
9	Mount out/Embark	2	Individual Equipment
10	Photographic	2	Individual Equipment
11	Computer/ADP Equipment	2	Individual Equipment
12	Administrative Items	2	Individual Equipment
13	Chaplain	6	Personal Demand Items
14	Weapons	2	Individual Equipment
15	Communication Equipment	2	Individual Equipment
16	CBR Equipment	2	Individual Equipment
17	Medical Equipment	8	Medical Supplies
18	Dental equipment	8	Medical Supplies
19	Infantry Equipment	2	Individual Equipment
20	Organizational Clothing	2	Individual Equipment
21	Extreme Cold Weather Clothing	2	Individual Equipment
22	Cold Weather Support Equip.	2	Individual Equipment
23	Extinguishers	2	Individual Equipment
24	Central Storeroom Supplies	2	Individual Equipment
25	Forms	2	Individual Equipment
26	Publications	2	Individual Equipment
27	Subsistence	1	Subsistence
28	Petroleum, Oil & Lubricants	3	Petroleum, Oil & Lubricants
29	Underwater OPS Equipment	2	Individual Equipment
30-39	Sealift Support Equipment	7	Major End Items
40-42	Unique ABFC Support	2	Individual Equipment

Appendix C, Acronyms

Abbreviation	Description
ABFC	Advanced Base Functional Component
AIS	Automated Information System
ASCII	American Standard Code for Information Interchange
CONUS	Continental United States
DES	Data Encryption Standards
DoD	Department of Defense
DOS	Disk Operating System
DTS	Defense Transportation System
FTP	File Transfer Protocol
GTN	Global Transportation Network
IA	Interface Agreement
ILSP	Integrated Logistic Support Plan
IP	Internet Protocol
ITO/TMO	Installation Transportation Office/ Traffic Management Office
ITV	In-Transit Visibility
JDC	Joint Deployment Community
JPMO	Joint Program Management Office
NCFMIS	Naval Construction Force Management Information System
NMCB	Naval Mobile Construction Battalion
OCONUS	Outside the Continental United States
ORD	Operational Requirements Document
PMO	Program Management Office
RSO&I	Reception, Staging, Onward Movement, and Integration
SMTP	Simple Mail Transfer Protocol
STAMIS	Standard Army Management Information Systems
TC-AIMS II	Transportation Coordinators' Automated Information for Movement System II
TOA	Transportation Operating Agency
TOA	Table of Allowance
TUCHA	Type Unit Characteristics
VPN	Virtual Private Networks
UDL	Unit Deployment List
UMO	Unit Movement Office/Officer