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<td>Engineer Pamphlet 25-1-6</td>
<td>COMMAND DATA MODEL AND DICTIONARY</td>
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<td>EP 25-1-6</td>
<td>11 February 1991</td>
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Command Data Model and Dictionary

Information Systems Modernization Program
Foreword

The U.S. Army Corps of Engineers has developed a product that will help manage information in such a way that it can be shared throughout the organization. The Corps recognizes the importance of information as a growing resource. The use of technology to collect, store, and disseminate information is increasing. Thus, the importance of managing information is paramount.

Historically, there have been many systems in place for logically organizing and controlling information and data. For instance, libraries use systems to catalog and track books, periodicals, videos, and other information. As a result of our Command resolve to treat data as a corporate resource in the same manner that we do our personnel, materiel, etc., the Corps has developed a system to store and locate data using computer technology and manual systems. This system is the Corps of Engineers Data Encyclopedia developed by HQUSACE CEIM-PD.

At the center of the Encyclopedia is the Command Data Dictionary (CDD). The Command Data Dictionary is a special kind of database which acts as a repository of information about data we use to manage our programs and projects.

ROBERT L. HERNDON
Colonel, Corps of Engineers
Chief of Staff
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Chapter 1

Introduction

1-1. Purpose

This pamphlet provides to users the structure of the Corps’ shared data and their definitions. Included herein are the business rules expressed in the data relationships and the dictionary of data elements. The graphic depiction of the entities, data elements, and their relationships is the Command Data Model (CDM). See Appendix A for a description of the CDM. The Command Data Dictionary (CDD) in Appendix B contains the definitions of the data entities and data elements. This model forms the basic framework for all business systems development that envisions sharing of data. The goal of this pamphlet is to facilitate functional user involvement in Information System development and to ensure maximum consistency and shareability of data by providing:

a. The means by which functional users identify data currently managed within the Corps.

b. The means to assure common definitions of data collected and reported throughout the Corps.

c. The mechanism to document the Data Architecture Control Committee’s (DACC) consensus of the Corps’ data and definitions.

1-2. Applicability

This pamphlet is applicable to all HQUSACE/OCE elements, Major Subordinate Commands (MSC), Districts, Laboratories, and Field Operating Activities (FOA).

1-3. References

a. AR 25-1.

b. AR 25-9.

1-4. Objectives

The objectives of the Command Data Model and Dictionary are:

a. Facilitate user involvement in information system requirements and development.

b. Document the business rules and relationships that govern the Corps’ data.

c. Facilitate communications among users by establishing common data structures and definitions.

d. Provide a basis to solicit MSC participation in the Corps’ data administration (new proposals, changes, refinements, etc.).

e. Publish a record of decisions by the functional representatives of the Data Architecture Control Committee.

f. Control data redundancies.

g. Encourage adherence to data policies.
h. Provide a structured approach to the development of databases and applications.

1-5. Scope

a. This Command Data Model is based on the recently developed "baseline" concepts for accounting and work management. It will eventually represent all that we know about the Corps' shared data requirements.

b. The Command Data Model was originally created in March 1989, by the integration of the three baseline Prototype Development Concept (PDC) data models: Work Breakdown Structure, Work Item Resource Structure, and Accounting Structure. It was augmented by data from the Design PDCs and by reverse engineering the Automated Management and Progress Reporting System (AMPRS) and Project and Resource Information System for Management (PRISM) databases.

c. At this stage it includes data about project management and some about other functions closely related to project management. The early accounting baseline structure will be updated by the Accounting PDC. Team when validated.

d. The key concept of the Command Data Model is that our business is related to managing work, whether it be a large multiyear project or a smaller task. Our objective is to get the work done on time and within budget. So naturally, the data model is driven by the entities: WORK-ITEM FUNDING ACCOUNT, RESOURCE ESTIMATE, COST-ACCOUNT, and MILESTONE. This version also includes those data elements that the AMPRS and PRISM functional users felt represented the current AMPRS and PRISM databases.

1-6. Corrections, Inquiries and Improvements

Questions concerning any inconsistencies, inquiries, and recommendations for improvements regarding this pamphlet should be sent to HQUSACE, CEIM-PD, Washington, D.C. 20314-1000.
Chapter 2

General Concepts

2-1. General

These concepts define and describe the components which constitute the Command Data Model (CDM) environment. A basic, Corps-wide understanding of these concepts is necessary to ensure consistency when referring to the Command Data Model and Dictionary. The importance of a common structure and definition of data cannot be overemphasized. The Corps must share its data, must communicate its data, and must understand its data.

2-2. Information and Data

The Corps defines information as a representation of facts, concepts, and assumptions that are derived from data for use in performing the various Corps' missions. Data is defined as meaningful facts about persons, places, things, concepts, events, and activities in a defined format and structure from which information may be derived. Data is considered a Command resource that is shared among many users as appropriate. Data is manipulated and processed to create information from which business decisions can be made. Identifying the role that the data plays in determining the Corps' business rules is an essential part of identifying reliable data.

2-3. Data Objects

Data objects are entities, data elements, relationships, and data models and their characteristics when structured, combined, and analyzed, provide an understanding of the business process.

2-4. Entities

a. Entities are the persons, places, things, concepts, events, or activities about which we want to collect data. The data object, entity, is a logical place to store the characteristics of the real world objects. Analysts show the relationships between entities and the rules affecting their relationship graphically. The entities and their relationships are the building blocks used to depict, or model, the data needed to support a business process.

b. The USACE has categorized data into areas or classes of information. See Appendix C "USACE Data Classes," for an explanation and a listing of USACE Data Classes.

2-5. Data Elements

a. Data elements are uniquely defined and identifiable characteristics of the person, place, or thing defined by an entity. When values are given to these data elements, the values represent facts about specific instances of an entity important to the business. Data elements are the smallest unit of meaningful data.

b. The definition of a data element includes a description of the characteristic that it represents, such as CONTRACT-START-DATE, the date that the contractor may begin work under a specific contract. The definition also includes the Domain which is the set of values that a data element may assume, usually defined by the data element's length and
format, or by a specific list of values. (Refer to Appendix D for lists of Common and Standard Domains.)

c. To provide continuity from current (legacy) data systems to the Command Data Model (CDM), it is helpful to see the correlation between the Legacy System Data Elements and the Command Data Elements. This is further discussed in Appendix E, “Legacy System to CDM Correlation.”

2-6. Naming Conventions

When dealing with data objects (e.g., entities and data elements), it is important to understand and agree on the object’s name and definition. As a system is developed, the structure and definition of all data should be stored in the Data Encyclopedia or Dictionary. The Data Encyclopedia is a valuable tool for organizing, tracking, and controlling the vast amounts of data used by the Corps. In order to effectively use this tool, naming conventions have been established that help users to quickly locate data objects and identify duplicate data objects. The Corps of Engineers “Data Element Defining and Naming Conventions” appear in Appendix F of this document.

2-7. USACE Data Encyclopedia

a. The USACE Data Encyclopedia addresses the Corps' needs by providing users with an information sharing tool, a repository of metadata (information about data), and an automated cross reference resource tool (for cross referencing activity and data models) used in the information resource methodology adopted by the Corps.

(1) The methodology for Information Systems development includes:

   (a) Requirements Analysis Planning
   (b) Conceptual Design
   (c) Iterative Application Development

(2) Throughout the process of this methodology, the data administrative functions will occur as follows:

   (a) In concert with the modeling of the business, the information needed by the various business activities is defined. This information includes the Inputs, Controls, Outputs, and Mechanisms (ICOMs) used by the business people in their activities.

   (b) Entities are identified which will contain the fundamental data elements represented in the inputs, controls, outputs and mechanisms as well as other data that needs to be kept; then an Entity-Relationship (E-R) Data Model is developed.

   (c) The entities are defined.

   (d) The entities key data elements are determined and the relationships among entities reviewed.

   (e) The non-key data elements that describe the entity are identified.

   (f) All data elements are defined.

b. The Data Encyclopedia will facilitate each stage of this process. It will: Improve
system documentation; provide accurate, timely metadata during system development; provide extensive cross references of corporate data; help coordinate the documentation needs of all users; and assist in enforcing standards.

c. The inquiries and listings available from the Data Encyclopedia will enable management and users to spot redundant data. Redundant data are likely to cause inconsistencies in the information derived from it. The same piece of data may have different formats or many versions, resulting in inconsistent, or even inaccurate business decisions.

d. The benefits provided by the USACE Data Encyclopedia during system development include: The minimization of data redundancy; ease in developing and maintaining current documentation (therefore, minimizing change impact); and extensive cross references and multiple views of existing Corps data sources.

2-8. IDEF Modeling Technique

The U.S. Air Force's Integrated Computer Aided Manufacturing (ICAM) invented a technique required on many of its projects which evolved into the Integrated Computer Aided Manufacturing Definition, ICAM Definition (IDEF) Modeling Technique. The IDEF Modeling Techniques have been adopted by the Corps of Engineers to be used during system development. The Corps uses the IDEF Modeling Techniques in the development of activity and data models which graphically and descriptively depict the Corps' business processes. The IDEF Modeling Techniques provide: An effective means for displaying the current (AS-IS) and the planned (TO-BE) environments; a means to accomplish interaction and consensus between user groups as part of system development; consistency, which facilitates data integration and sharing; and the use of documentation and audit trails during system conceptual design.

2-9. Command Data Dictionary CDD

a. The Command Data Dictionary is a printed glossary of data terms. Its information can also be retrieved online from the Encyclopedia system. If Webster's dictionary is essential to clear communication in the English language, then data structures and definitions in the Encyclopedia are essential to clear communication within systems design, development, and use.

b. The Data Encyclopedia provides a mechanism to define and use information about data. It is a central repository of this information about data called metadata. Consistent with the increase in the efficiency of methods used to collect, compute, and disseminate mission data is the need to understand the characteristics and relationships of the data itself. The Encyclopedia provides the technology to record, analyze, and share this. The data dictionary is a report of the metadata about the Corps' data. The Corps' CDM and CDD are based on the IDEA Modeling Techniques.

2-10. Command Data Model (CDM)

a. The Command Data Model is a graphical representation of the structure of the USACE corporate data. It contains the
entities, relationships, and data elements of the Corps' data. Like the Command Data Dictionary, it is a representation of the metadata that describes the important shared data of the Corps. This metadata is stored in the Encyclopedia. For the CDM, it is a graphical representation. It serves as a communication tool between functional and technical users.

b. Because it is graphical, it best shows the structure and, of course, the complexity of the totality of the Corps' data that has been defined as of a particular point in time. But, because it is graphical, the full definitions cannot be shown on it without destroying its structural message. Thus, the Command Data Dictionary report or the many Encyclopedia search and retrieval functions are used to present this detail.

c. The Command Data Model and Command Data Dictionary (CDM/CDD) are the base from which shared information will evolve in the Corps. The model flow (in Figure 2-10) shows how the CDM/CDD serves to:

(1) Provide a starter model for a new project.
(2) Integrate project final data models after they have been validated and have passed the In-Process Reviews (IPRs) and alpha tests.
(3) Interface legacy systems to the CDM.
(4) Provide a physical database design from a conceptual project final model.

NOTE: Sequencing numbers denote normal development cycle.

2-11. Extracting a Data Model View

a. The Encyclopedia has the capability to extract a subset from a model. This feature is invoked by first creating a Data Model Header for the new model, then following the instructions for extracting a data model which is accessed under the Encyclopedia menu of "Other Data Model Functions."

b. The new data model is populated by selecting the relationships that are going into it which indirectly selects the entities of choice. If the entities selected are "Registered" or "Approved," they can be only borrowed or shared because they represent Corps-wide entities, approved and controlled by the DACC. A new project can create "Candidate" entities and relationships. Relationships can be deleted only if they do not affect the key structure of the CDM.

2-12. Fundamental and Derived Data

Fundamental data is the lowest level, basic piece of information or fact. The data model and dictionary deal with basic or fundamental data. Derived data is information prepared by algorithms, conditional extractions, or formulas, such as "the sum of costs from 7/89 thru 10/89" or "inflation adjusted project estimate." The latter is derived using the data elements PROJECT-ESTIMATE and INFLATION-RATE.
2-13. Conceptual Data Models vs Physical Data Models

a. The Conceptual Data Model (or Command Data Model in the Corps) is the normalized basic structure of the business rules, entities, and data elements that describe the things the Corps needs to operate. A conceptual model deals with the fundamentals, following specific rules for accuracy and communication. The conceptual data model is a neutral view of the data. For example, an "inflation adjusted cost estimate" has the same meaning whether it is seen from an accounting viewpoint, a project manager's viewpoint, or the viewpoint of virtually any function within the Corps.

b. When a subset of the CDM (Command Data Model) is formed into a specific database to support one or more applications, the may be adaptations made for
performance or security reasons. The result is called a physical model. The physical model may contain derived values, may combine or split entities into records that suit the performance requirements better, or may even repeat data elements in different records.

c. The following CDD and CDM relate to physical models in that:

(1) They provide the conceptual metadata which includes the fundamental data and definitions, the building blocks, of the physical model.

(2) Many (or most) entities will become a table in the physical model without change.

(3) The fields of the physical model usually correspond to data elements in the conceptual model although sometimes there may be derived fields in the physical model that combine multiple conceptual data elements algorithmically (such as: summation, ratio, or complex formula).

(4) The domain attributes specified in the dictionary are recommended for use in physical models throughout the Corps and provide the rules for input editing.

2-14. How are the CDM and the CDD Used in Routine MSC Work?

a. The IDEF Modeling Techniques and the continuing evolution of the Command Data Model and the Command Data Dictionary will assist the MSCs in these ways:

(1) Help the field Information Management (IM) staffs develop better systems.

(2) Help information users throughout the Corps to better understand the data with which they are dealing.

(3) Facilitate data sharing and the interchange of data.

(4) Identify and promote the use of a common set of data structures that represent the way the Corps does business.

(5) Standardize data definitions and do-mains, including data type, size, and standard lists of values where appropriate (such as, organization code, project status code, etc.)

b. In the pursuit of happiness and better Information Systems throughout the field, you will find it useful to:

(1) Familiarize yourself with the overall structure of the CDM. Use it as a roadmap of the CDD.

(2) If you are beginning a new application development, see if you can extract a starter data model from the CDM in order to first make your job easier, and second, tie in to the structures that other Corps IM projects are using.

(3) Browse through the CDM and CDD to see if there are entities or data elements that have already been defined that you can use in your systems development.
(4) Check any system or database that you must interface with to see if any of the data that you will be sharing is already defined in the CDM/CDD. If not, contact Data Administration because you have just discovered data that needs to be shared. That data needs to be incorporated into the CDM/CDD so the two known users and any more that come along can be assured of consistency.

(5) If the CDM/CDD structures or definitions don’t work for you, let Data Administration know. The evolution and quality of the CDM/CDD can only occur if you make it happen.

c. Later, after the next development phase of the Encyclopedia, we will include suggestions for the inclusion of current and legacy systems into the Encyclopedia.
Chapter 3

USACE Data Administration Procedures and Change Control

3-1. General

a. The activities involved in managing the Command Data Model (CDM) and thereby the Command Data Dictionary (CDD) are depicted in the following activity diagrams:

(1) The Context Diagram in Figure 3-1 (activity AO) represents the overall activity of managing Data Administration for the U.S. Army Corps of Engineers (USACE).

(2) Figure 3-2 is the decomposition or graphical representation of the AO subactivities performed to accomplish managing the USACE Data Administration activity.

(3) Figure 3-3, Activity Descriptions, lists the activity number, name, and description of activities displayed on the AO Decomposition Diagram.

(4) Figure 3-4, ICOM Descriptions, defines the Inputs, Controls, Outputs, and Mechanisms involved on the AO Decomposition Diagram.

b. There are three sources of change to the Command Data Model: Project Requirements discovered by an Information System Development Project, requests from users, and data administration technical requirements arising as the HQ Data Administration works to integrate all the field proposals. The first two are shown as inputs on the left side of the activity model while the third is internal to activity A3.

c. A development project, shown as activity Al creates new entities and data elements as it proceeds, or it may wait until the end and submit a Project Final Model. Throughout the design process, the team will check the Encyclopedia to see if the CDM or some other project's data model has already discovered and defined the data they require. If so, they can arrange to share it.

d. The responsible data proponents participate in the reviews of development projects in activity Al and fulfill their responsibilities of managing the definition of the data in their assigned data classes.

e. The proposed changes that are not already addressed are forwarded to HQ Data Administration (activity A3) for QA and integration with the CDM and other proposed changes.

f. Any user of data may submit a request for change or addition to the appropriate data proponent who will revise and approve it (activity A2) and pass it on to the HQ Data Administration for integration. If the proponent rejects a user request, the user can "appeal" to the HQ DA directly.

g. In activity A3, the HQ Data Administrator accepts Project Final Models or the changes that have been approved by the proponents and checks them for standard adherence, quality definitions, appropriate entity placement of data elements, and nonredundancy. If they pass these QA checks, then they
are sent to the Data Architecture Control Committee (DACC). The Command DBA will negotiate any conflicting proposals as much as possible to reach a suitable compromise. Any unsolved issues are forwarded to the DACC for resolution.

h. The DACC is made up of data proponents who have active modernization projects in process. Since changes that are genuine improvements and pass all the QA checks may still have impact on existing users, the DACC must evaluate the benefits versus the impact of these changes (activity A4). The DACC is the user’s checkpoint.

i. When the DACC approves a set of changes or a new CDM, the Command Data Administrator makes the updates in the Encyclopedia and a new CDM is available online (activity A5). Periodically, an updated EP 25-1-6 is released that summarizes major milestones in the evolution of the CDM/CDD.
Figure 3-1: Manage Data Administration for the U.S. Army Corps of Engineers (USACE)

Context Diagram
Figure 3-2: Manage Data Administration for the U. S. Army Corps of Engineers (USACE)

Decomposition Diagram

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<th>ID</th>
<th>ACTIVITY NAME</th>
<th>DESCRIPTION</th>
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<tr>
<td>A1</td>
<td>Administer-Data-at-Application-Development-Project</td>
<td>The administration of data at the MSC (Division, District, or other) or HQ directorate as part of an Information System Project. The range of activities goes from requesting change of a data element definition to developing a full scale Project Final Model.</td>
</tr>
<tr>
<td>A2</td>
<td>Coordination-of-Data-Definition-by-Proponents</td>
<td>The proponents who are responsible for their business areas coordinate changes to the CDM or CDD that are requested, implied, or demanded</td>
</tr>
<tr>
<td>A3</td>
<td>Administer-Data-at-HQ</td>
<td>The administration and integration of Corps’ data definitions, structure, and usage. This will include review of proposed new data entities and data elements, mediating different viewpoints, registering the data entities and data elements, integrating new models, as well as administering the change procedures, and chairing the Data Architecture Control Committee (DACC). Project Starter Data Models may also be generated for new IS projects.</td>
</tr>
<tr>
<td>A4</td>
<td>Review-and-Approval-by-DACC</td>
<td>The DACC Proponents review proposed new entities, data elements, and models, as well as changes to the Command Data Model and the Command Data Dictionary.</td>
</tr>
<tr>
<td>A5</td>
<td>Update-CDM-and-CDD</td>
<td>The actual encyclopedia metadata defining the CDM and the CDD are updated, and appropriate diagrams and reports are published.</td>
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**Figure 3-3: Activity Descriptions**
<table>
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<th>ICOM NAME</th>
<th>DESCRIPTION</th>
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<tr>
<td>Appeal</td>
<td>An Appeal may be generated by a user or IM person when the proponent of an entity or business area rejects his proposed change. This usually occurs across business areas. The appeal goes to the Corps Data Administrator who will consider it and process it through the full DACC, if appropriate.</td>
</tr>
<tr>
<td>CORPS-Data-Guidelines</td>
<td>The regulations and guidelines issued by USACE HQ to implement the Corps’ data management policy.</td>
</tr>
<tr>
<td>Command-Data-Administrator</td>
<td>The headquarters office responsible for recommending Data Administration policies, preparing guidelines, and providing support to the MSCs in their staffing and operation of the Data Administration function. This Command DA is also responsible for the management of the Corps’ Data Encyclopedia, providing starter models to IM projects, registering entities and data elements within the Corps’, acquiring Army approval where required, maintaining the Command Data Model and Dictionary, as well as integrating new MSC models into the CDM.</td>
</tr>
<tr>
<td>DA-Approved-Entities-DE-Updates</td>
<td>Updates to Data Entities and Data Elements that have been reviewed by the HQ Data Administrator and approved. They must yet be reviewed and approved by the DACC before they are officially incorporated into the CDM.</td>
</tr>
</tbody>
</table>

Figure 3-4: ICOM Descriptions
<table>
<thead>
<tr>
<th>ICOM NAME</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>DA-Integrated-CDM</td>
<td>A CDM that integrates some new entities, data elements, or Project Final Models with the current version of the CDM. It is not yet the new version of the CDM until the DACC reviews and approves it.</td>
</tr>
<tr>
<td>DACC-Approved-Ent-DE-Updates</td>
<td>Updates to the current entities and data elements of the CDM that have been approved by the DACC for inclusion in the next update.</td>
</tr>
<tr>
<td>DACC-Approved-Integrated-CDM</td>
<td>An integrated CDM including changes and new Project Final Models that has been reviewed and approved by the DACC.</td>
</tr>
<tr>
<td>DACC-Proponents</td>
<td>Those data proponents who serve as voting members of the DACC for the resolution of definition issues and who review and approve CDM updates.</td>
</tr>
<tr>
<td>DACC-Rejections</td>
<td>These are proposed model entity or data element changes whose impact is considered untenable at the present time.</td>
</tr>
<tr>
<td>Data-Proponents</td>
<td>Functional users who are designated by their directorates or MSCs as the individual (or office) responsible for the definition of data that is assigned to that office for caretaking.</td>
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**Figure 3-4: ICOM Descriptions (cont’d)**
<table>
<thead>
<tr>
<th>ICOM NAME</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encyclopedia-System</td>
<td>The software, supporting hardware, and network that provide a repository for the metadata about the Corps’ data. The Encyclopedia System includes PC Modeler, the Host Encyclopedia modules, and the Leverage model analysis package. There is a central repository in an SQL relational database accessed through a nationwide network.</td>
</tr>
<tr>
<td>Field-DAs</td>
<td>Data Administrators at the Divisions, Districts, or HQ Directorates who support users and IM staff in the definition and sharing of data. They are particularly involved in new application development and upgrading of legacy systems.</td>
</tr>
<tr>
<td>HQ-DA-Rejections</td>
<td>These are proposed model entity or data element changes that do not pass quality assurance checks.</td>
</tr>
<tr>
<td>New-CDM</td>
<td>The newest, now the current, version of the CDM which has been updated with the DACC approved changes or new model integrations.</td>
</tr>
<tr>
<td>New-Entities-and-Data-Elements</td>
<td>Updated Entities and Data Elements (or their metadata) that have been added to the CDM/CDD following approval by the DACC.</td>
</tr>
<tr>
<td>Old-CDM</td>
<td>The current, or previously current version, of the CDM that will be changed or expanded.</td>
</tr>
</tbody>
</table>

Figure 3-4: ICOM Descriptions (cont’d)
<table>
<thead>
<tr>
<th>ICOM NAME</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project-Final-Model</td>
<td>An IDEF, fully attributed, data model which represents the final result of the conceptual design phase of a project</td>
</tr>
<tr>
<td>Project-Requirements</td>
<td>The requirements of the users, or requirements inherent in the business process, for data to be stored and possibly shared.</td>
</tr>
<tr>
<td>Project-Starter-Model</td>
<td>A selected subset of the Command Data Model extracted to provide an application development project with a nucleus of registered and defined data entities and data elements. The purpose is to facilitate data sharing and to assure consistency of data structure and definition.</td>
</tr>
<tr>
<td>Proponent-Accepted-Changes</td>
<td>Proposed changes to entities, data elements, and relationships that have been reviewed by proponents and are being forwarded to the Command Data Administrator for a quality assurance check and final approval by the DACC.</td>
</tr>
<tr>
<td>Proponent-Rejection</td>
<td>A requested change to the CDM or CDD that a data proponent has rejected as not consistent with the intent and meaning of the data for which he is the shepherd.</td>
</tr>
<tr>
<td>Reg-Laws-Ext-Agency-Requirements</td>
<td>Requirements from new or revised laws, regulations, or external agency requirements.</td>
</tr>
</tbody>
</table>

Figure 3.4: ICOM Descriptions (cont’d)
**ICOM NAME** | **DESCRIPTION**
--- | ---
Registered-Entities-Data-Elements | Entities and data elements that have been quality checked by the Command Data Administrator and whose status has then been raised to Registered.
STAMIS-and-Legacy-Systems-Requirements | Requirements imposed on the data entities, data elements, or structure imposed by STAMIS or legacy systems.
User-Request | Requests from users for additions or changes to the CDM or CDD.

*Figure 3-4: ICOM Descriptions (cont’d)*
Chapter 4

Accessing the Corps Central Data Encyclopedia

4-1. To Access the Encyclopedia:

Use Vistacom and the CEIM-PD provided Script (see the Encyclopedia Users Manual or the Data Administration/Data Encyclopedia course Participants Guide for detailed instructions in using the script).

a. Enter RUNE to execute the Run Encyclopedia batch file on the PC. It will prompt you for host identifiers and passwords. After successful connection to the host, it will prompt you for your Encyclopedia identifier and password. Figure 4-1, Encyclopedia Network Configuration, depicts the remote work station connected to the central computer where the Host Encyclopedia operates.

b. Following the security checks, the main menu of the Encyclopedia system will be displayed. At this time you can use any of the maintenance or search and retrieval functions of the Encyclopedia.

c. Most of the functions display results on the screen in a mini-report format. Some generate reports into files in your VMS directory. The screens that you use to initiate these longer reports have options you can specify which will cause the Encyclopedia system to download the report file to the ENCVCOM directory on your PC, where you can peruse it or print it.

![Diagram of Encyclopedia Network Configuration]

Figure 4-1: Encyclopedia Network Configuration