CMSC 447

Software User Manual (SUM)

# Scope

This section shall be divided into the following paragraphs.

## Identification

This paragraph shall contain a full identification of the system and the software to which this document applies, including, as applicable, identification number(s), title(s), abbreviation(s), version number(s), and release number(s).

## System overview

This paragraph shall briefly state the purpose of the system and the software to which this document applies. It shall describe the general nature of the system and software; summarize the history of system development, operation, and maintenance; identify the project sponsor, acquirer, user, developer, and support agencies; identify current and planned operating sites; and list other relevant documents.

## Document overview

This paragraph shall summarize the purpose and contents of this manual and shall describe any security or privacy considerations associated with its use.

# Referenced documents

This section shall list the number, title, revision, and date of all documents referenced in this manual. This section shall also identify the source for all documents not available through normal Government stocking activities.

# Software summary

This section shall be divided into the following paragraphs.

## Software application

This paragraph shall provide a brief description of the intended uses of the software. Capabilities, operating improvements, and benefits expected from its use shall be described.

## Software inventory

This paragraph shall identify all software files, including databases and data files, that must be installed for the software to operate. The identification shall include security and privacy considerations for each file and identification of the software necessary to continue or resume operation in case of an emergency.

## Software environment

This paragraph shall identify the hardware, software, manual operations, and other resources needed for a user to install and run the software. Included, as applicable, shall be identification of:

1. Computer equipment that must be present, including amount of memory needed, amount of auxiliary storage needed, and peripheral equipment such as printers and other input/output devices
2. Communications equipment that must be present
3. Other software that must be present, such as operating systems, databases, data files, utilities, and other supporting systems
4. Forms, procedures, or other manual operations that must be present
5. Other facilities, equipment, or resources that must be present

## Software organization and overview of operation

This paragraph shall provide a brief description of the organization and operation of the software from the user’s point of view. The description shall include, as applicable:

1. Logical components of the software, from the user’s point of view, and an overview of the purpose/operation of each component
2. Performance characteristics that can be expected by the user, such as:
   1. Types, volumes, rate of inputs accepted
   2. Types, volume, accuracy, rate of outputs that the software can produce
   3. Typical response time and factors that affect it
   4. Typical processing time and factors that affect it
   5. Limitations, such as number of events that can be tracked
   6. Error rate that can be expected
   7. Reliability that can be expected
3. Relationship of the functions performed by the software with interfacing systems, organizations, or positions
4. Supervisory controls that can be implemented (such as passwords) to manage the software

## First-time user of the software

This paragraph shall be divided into the following subparagraphs.

### Equipment familiarization

This paragraph shall describe the following as appropriate:

* + 1. Procedures for turning on power and making adjustments
    2. Dimensions and capabilities of the visual display screen
    3. Appearance of the cursor, how to identify an active cursor if more than one cursor can appear, how to position a cursor, and how to use a cursor
    4. Keyboard layout and role of different types of keys and pointing devices
    5. Procedures for turning power off if special sequencing of operations is needed

### Access control

This paragraph shall present an overview of the access and security features of the software that are visible to the user. The following items shall be included, as applicable:

1. How and from whom to obtain a password
2. How to add, delete, or change passwords under user control
3. Security and privacy considerations pertaining to the storage and marking of output reports and other media that the user will generate

### Processing reference guide

This section shall provide the user with procedures for using the software. If procedures are complicated or extensive, additional Sections 6, 7, ... may be added in the same paragraph structure as this section and with titles meaningful to the sections selected. The organization of the document will depend on the characteristics of the software being documented. For example, one approach is to base the sections on the organizations in which users work, their assigned positions, their work sites, or the tasks they must perform. For other software, it may be more appropriate to have Section 5 be a guide to menus, Section 6 be a guide to the command language used, and Section 7 be a guide to functions. Detailed procedures are intended to be presented in subparagraphs of paragraph 5.3. Depending on the design of the software, the subparagraphs might be organized on a function-by-function, menu-b- y-menu, transaction-by-transaction, or other basis. Safety precautions, marked by WARNING or CAUTION, shall be included where applicable.

## Capabilities

This paragraph shall briefly describe the interrelationships of the transactions, menus, functions, or other processes in order to provide an overview of the use of the software.

## Conventions

This paragraph shall describe any conventions used by the software, such as the use of colors in displays, the use of audible alarms, the use of abbreviated vocabulary, and the use of rules for assigning names or codes.

## Processing procedures

This paragraph shall explain the organization of subsequent paragraphs, e.g., by function, by menu, by screen. Any necessary order in which procedures must be accomplished shall be described.

### (Aspect of software use)

The title of this paragraph shall identify the function, menu, transaction, or other process being described. This paragraph shall describe and give options and examples, as applicable, of menus, graphical icons, data entry forms, user inputs, inputs from other software or hardware that may affect the software’s interface with the user, outputs, diagnostic or error messages or alarms, and help facilities that can provide on-line descriptive or tutorial information. The format for presenting this information can be adapted to the particular characteristics of the software, but a consistent style of presentation shall be used, i.e., the descriptions of menus shall be consistent, the descriptions of transactions shall be consistent among themselves.

## Related processing

This paragraph shall identify and describe any related batch, offline, or background processing performed by the software that is not invoked directly by the user and is not described in paragraph 5.3. Any user responsibilities to support this processing shall be specified.

**Notes**

This section shall contain any general information that aids in understanding this document (e.g., background information, glossary, rationale). This section shall include an alphabetical listing of all acronyms, abbreviations, and their meanings as used in this document and a list of any terms and definitions needed to understand this document.

# Appendixes

Appendixes may be used to provide information published separately for convenience in document maintenance (e.g., charts, classified data). As applicable, each appendix shall be referenced in the main body of the document where the data would normally have been provided. Appendixes may be bound as separate documents for ease in handling. Appendixes shall be lettered alphabetically (A, B, etc.).