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**MIL-STD-974**  
**20 August 1993**

# MILITARY STANDARD

CONTRACTOR INTEGRATED TECHNICAL  
INFORMATION SERVICE (CITIS)



AMSC D6943

AREA IPSC

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**FOREWORD**

1. This military standard is approved for use by all Departments and Agencies of the Department of Defense.
2. Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Director, CALS & EDI, Department of Defense, Room 3D833, Pentagon, Washington, D.C. 20301-8000 by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.
3. Planning for implementation of the Contractor Integrated Technical Information Service (CITIS) requirements began with the development of the CITIS concept which is contained in section 1 of this standard. Criteria for CITIS implementation included the development of a document that could be readily referenced in contracts and that would be adaptable to the international implementation of the Computer-aided Acquisition and Logistic Support (CALS) strategy.
4. In determining the type of document that would best meet the criteria for implementing a CITIS requirement, the following alternatives were considered:
  - a. Rewrite MIL-C-CITIS specification,
  - b. Incorporate CITIS in the MIL-STD-1840B updates,
  - c. Incorporate CITIS in the MIL-HDBK-59B update,
  - d. Develop a new Federal Information Processing Standard (FIPS),
  - e. Develop a new DoD Instruction, and
  - f. Develop a new military standard.
5. Analysis of these alternatives and their ability to meet the established criteria for CITIS implementation resulted in the selection and development of this military standard. Although there is no precedent for standardization of a service for electronic access to and delivery of data contained in a contractor's database, it was determined that standardization of the terms and a set of functions for the CITIS was appropriate.
6. Detailed guidance for CITIS implementation is contained in MIL-HDBK-59 and should be used to develop tailoring alternatives based on specific program or project acquisition needs and life cycle phase.

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## 1. SCOPE

1.1 **Scope.** This standard defines a set of core (see section 4) and tailorable (see section 5) Contractor Integrated Technical Information Service (CITIS) functions which collectively constitute a contractor provided service for electronic access to and delivery of contractually required digital data. It also defines support and ancillary functions necessary to efficiently utilize a CITIS. It does not address the implementation of a system that provides a CITIS, nor the use or content of data accessible via a CITIS.

1.2 **Applicability.** This standard applies to all Defense system and equipment acquisition programs, major modification programs, and related research and development projects throughout their life cycle phases. CITIS is limited to Government Furnished Information (GFI) and data required by the Contract Data Requirements List (CDRL) negotiated for specific contracts.

1.3 **Application guidance.** This standard is part of the Computer-aided Acquisition and Logistic Support (CALs) strategy. The CALs strategy is applied to Defense system contracts in accordance with direction contained in DoDD 5000.1 and DoDI 5000.2. CITIS is generally acquired from prime contractors through a contract line item. When contracting for CITIS, the Government should develop a Government Concept of Operations (GCO). This information not only provides a basis for Statement of Work (SOW) requirements, it also provides offerors with additional information for proposing alternative solutions. The Government will provide the CITIS requirements in the SOW of the Request For Proposal (RFP) that results in the contract for CITIS.

1.4 **Implementation guidance.** Guidance for the implementation of CALs and CITIS is contained in MIL-HDBK-59. MIL-HDBK-59 also provides detailed information for developing the GCO and SOW, and for structuring the RFP to ensure that CITIS requirements are contractually implemented. MIL-HDBK-59 also addresses planned DoD infrastructure programs, such as the Joint CALs (JCALS) program, as gateways to CITIS.

1.5 **Tailoring of this standard.** This standard contains a set of requirements designed to be tailored for each contract by the contracting agency. The tailoring process intended for this standard is the deletion of non-applicable requirements.

## 2. REFERENCED DOCUMENTS

### 2.1 Government documents.

2.1.1 **Specifications, standards, and handbooks.** The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DODISS) and supplement thereto cited in solicitation.

#### STANDARDS

##### FEDERAL INFORMATION PROCESSING STANDARDS (FIPS)

- |          |   |                                                          |
|----------|---|----------------------------------------------------------|
| FIPS 127 | - | Database Language SQL.                                   |
| FIPS 146 | - | Government Open Systems Interconnection Profile (GOSIP). |
| FIPS 161 | - | Electronic Data Interchange (EDI).                       |

(Copies of the Federal Information Processing Standards (FIPS) are available to Department of Defense activities from the Standardization Documents Order Desk, Building 4D, 700 Robbins Ave., Philadelphia, PA 19111-5094. Others must request copies of FIPS from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161-2171.)

##### MILITARY

- |              |   |                                                 |
|--------------|---|-------------------------------------------------|
| MIL-STD-1777 | - | Internet Protocol.                              |
| MIL-STD-1778 | - | Transmission Control Protocol.                  |
| MIL-STD-1840 | - | Automated Interchange of Technical Information. |

#### HANDBOOK

##### MILITARY

- |             |   |                                                                                                    |
|-------------|---|----------------------------------------------------------------------------------------------------|
| MIL-HDBK-59 | - | Department of Defense Computer-aided Acquisition and Logistic Support (CALS) Implementation Guide. |
|-------------|---|----------------------------------------------------------------------------------------------------|

(Copies of federal and military specifications, standards, and handbooks are available from the Standardization Documents Order Desk, Building 4D, 700 Robbins Ave., Philadelphia, PA 19111-5094.)

**2.1.2 Other Government documents, drawings, and publications.** The following other Government documents, drawings, and publications form a part of this document to the extent specified herein. Unless otherwise specified, the issues are those cited in the solicitation.

- DoD 8320.1-M-1 - Data Element Standardization Procedures.
- DoD Federal Acquisition Regulation Supplement, Subpart 227.4 - Rights in Data and Copyrights.

(Copies are available from the Standardization Documents Order Desk, Building 4D, 700 Robbins Ave., Philadelphia, PA 19111-5094.)

**2.2 Non-Government publications.** The following document forms a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents which are DoD adopted are those listed in the issue of the DODISS cited in the solicitation. Unless otherwise specified, the issues of documents not listed in the DODISS are the issues of the documents cited in the solicitation.

CONSULTATIVE COMMITTEE ON INTERNATIONAL TELEGRAPHY AND TELEPHONY (CCITT)

- CCITT X.400 - Series of Recommendations for Message Handling Systems.

(Application for copies should be addressed to the American National Standards Institute, Customer Service, 11 West 42nd Street, New York, NY 10036.)

**2.3 Order of precedence.** In the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.



### 3. DEFINITIONS

3.1 **Acronyms used in this standard.** The acronyms used in this standard are defined as follows:

a. <b>AMSDL</b>	Acquisition Management Systems and Data Requirements Control List
b. <b>ANSI</b>	American National Standards Institute
c. <b>CAC</b>	Contractor's Approach to CALS
d. <b>CALS</b>	Computer-aided Acquisition and Logistic Support
e. <b>CALSIP</b>	CALS Implementation Plan
f. <b>CCITT</b>	Consultative Committee on International Telegraphy and Telephony
g. <b>CDRL</b>	Contract Data Requirements List
h. <b>CITIS</b>	Contractor Integrated Technical Information Service
i. <b>DFARS</b>	Defense Federal Acquisition Regulation Supplement
j. <b>DID</b>	Data Item Description
k. <b>DoD</b>	Department of Defense
l. <b>DODISS</b>	Department of Defense Index of Specifications and Standards
m. <b>EDI</b>	Electronic Data Interchange
n. <b>FIPS</b>	Federal Information Processing Standard
o. <b>GCO</b>	Government Concept of Operations
p. <b>GFI</b>	Government Furnished Information
q. <b>GOSIP</b>	Government Open Systems Interconnection Profile
r. <b>IEEE</b>	Institute of Electrical and Electronics Engineers
s. <b>IP</b>	Internet Protocol
t. <b>JCALs</b>	Joint CALS
u. <b>OSI</b>	Open System Interconnection

v. <b>RFP</b>	Request For Proposal
w. <b>SOW</b>	Statement of Work
x. <b>SQL</b>	Structured Query Language
y. <b>TCP</b>	Transmission Control Protocol

3.2 **Access.** A user's ability to communicate with a system.

3.3 **Acknowledge.** The automatic confirmation by a receiving computer that electronically transmitted CITIS data has been received at the users interface (see 4.7.1).

3.4 **Approved data.** That version of the data which has been identified by the contractor as being the master version of the data subject to contractor configuration management, which the contractor has submitted to the Government for approval, and which has been approved by the Government (see 4.3).

3.5 **CITIS.** A contractor developed service which provides electronic access to and/or delivery of contractually required Contract Data Requirements List (CDRL) data to users. CITIS, and consequently the contract provisions for CITIS, does not include the databases to which access is granted, the database process, or the format of data to be accessed through CITIS.

3.6 **CITIS data.** All data maintained by a contractor for access through CITIS whether developed by the contractor enterprise or by the Government (see 4.1).

3.7 **Contractor enterprise.** The prime contractor, teamed contractors, subcontractors, suppliers, and vendors working together.

3.8 **Data.** The Defense Federal Acquisition Regulation Supplement (DFARS) subpart 227.401(7), defines data as recorded information, regardless of form or method of the recording.

3.9 **Data dictionary.** A repository of information describing the characteristics of data elements used in information systems and databases (see 4.2.5).

3.10 **Data directory.** A repository of information describing location of data items and data item instances in information systems and databases (see 4.2).

3.11 **Data element.** A basic unit of information representing characteristics (attributes) of a data item instance.

3.12 **Data item.** Deliverable data as specified by the CDRL in which format and content is defined by the Data Item Description (DID).

3.13 **Data item index.** The discrete list of elements for all data item instances available through CITIS (see 4.5).

3.14 **Data item instance.** A discrete part of a data item such as a single drawing from the data item set of engineering drawings and associated lists or a specific version of a technical report (see 4.5).

3.15 **Delivery.** Data items are deemed to be delivered either when they are electronically transmitted to the Government or when they are made available for Government access, and the contractor has given notice of delivery to the Government.

3.16 **Government Concept of Operations (GCO).** A Government document that is prepared during the acquisition planning and RFP development process. It is used to communicate to potential offerors information about the Government infrastructure and CALS implementation strategy for Defense systems.

3.17 **Released data.** The configuration management controlled version of the data that has been released in accordance with Government configuration management standards, after contractor internal review and approval. Released data may be provided to the Government for purposes such as design review (see 4.3).

3.18 **Submitted data.** Data formally provided to the Government in accordance with contractual requirements (see 4.3). Data made available for access is submitted data.

3.19 **User interface.** The set of hardware, software, and procedures that enable a user to give directions to a computer, and receive information from a computer (e.g., command language, function key assignments, menus, icons, mouse, and other similar input and output devices) (see 4.2.6).

3.20 **Users.** Contractually specified individuals or activities authorized to use CITIS.

3.21 **Working data.** Deliverable data for work in progress that has not yet been delivered to the Government. This data is provided for information purposes with the understanding that it is preliminary and subject to further iteration (see 4.3).

#### 4. GENERAL REQUIREMENTS

4.1 **CITIS management.** CITIS shall provide Government electronic access to contractor maintained data and GFI as specified by the contract. CITIS shall include information services, data configuration management, CITIS security, data item index, and core CITIS functions. CITIS shall provide controlled access to the data specified in the contract. CITIS shall maintain the validity and integrity of contractor generated CDRL items provided through CITIS. Data accessible through CITIS shall be annotated on the CDRL.

4.2 **Information services.** Each implementation of CITIS shall provide information services readily accessible to users performing authorized tasks. Information services shall include data directory and data dictionary services and shall provide data administrative and maintenance functions.

4.2.1 **Availability and accessibility.** CITIS shall be available to users for access to CITIS data at the times specified in the contract. Notices of scheduled events which affect CITIS operations, such as system maintenance, shall be made available to all users in advance of any such event.

4.2.2 **Government Furnished Information (GFI).** CITIS shall include provision for storage, access, and protection of GFI received by the contractor in digital form as required. Detailed information concerning the size, format, and content of GFI will be as specified in the contract. CITIS shall provide for receipt of data by electronic transmission or on electronic storage media. GFI submitted to the contractor shall be included in the data item index and made available to users.

4.2.3 **Multi-user access.** CITIS shall provide for simultaneous access to CITIS by a contractually specified number of users.

4.2.4 **Electronic mail.** Each Government user shall have the capability to communicate with the contractor and other users of CITIS via electronic mail in accordance with the requirements of CCITT X.400 Series of Recommendations for Message Handling Systems.

4.2.5 **Data dictionary.** Standardization conventions in accordance with DoD 8320.1-M-1 shall be used in the development of the CITIS data dictionary.

4.2.6 **Interface compatibility.** CITIS shall be compatible with the Government's receiving system and user interface as specified in the contract.

4.2.7 **Communication protocols.** Communication of data between sites shall be in accordance with one or more of the following protocols as specified in the contract (see 6.3.3):

- a. When specified, use of GOSIP shall be in accordance with FIPS 146.
- b. When specified, use of Transmission Control Protocol/Internet Protocol (TCP/IP) shall be in accordance with MIL-STD-1778 and MIL-STD-1777.
- c. The contractor shall obtain Government approval for the use of nonstandard protocols (see 6.3.3.1).

**4.2.8 Training support.** Training, orientation, and familiarization services for Government CITIS users shall be provided as specified in the contract. The contractor shall maintain and revise/update these services to keep current with system changes.

**4.2.9 Telephone support.** CITIS shall include telephone support to assist users with problem resolution and to answer questions regarding CITIS. The hours of telephone support shall be as specified in the contract.

**4.2.10 On-line help.** CITIS shall provide on-line command and function level explanations and instructions to users such that any user connected to the service can access instructions for that portion of the service for which the user has authorized access.

**4.3 Data configuration management.** CITIS shall provide for data configuration management to be applied to all CITIS data. CITIS shall maintain data relationships that account for multiple configurations, versions, revisions, and relationships to approved changes. CITIS shall facilitate the promotion of data from one status to the next (working, released, submitted, approved). The Government user shall not be able to replace contractor or GFI data.

**4.4 CITIS security.** Information provided by CITIS may include a combination of privileged, proprietary, unclassified, classified, and sensitive data. All CITIS data and accessible applications shall be marked for security purposes. To protect CITIS data, security features of the CITIS shall be documented and provided as specified in the contract (see 6.3.5).

**4.4.1 Access controls.** An access rule set and associated controls and procedures shall be used to ensure that only users gain access to CITIS and to ensure that each user is able to access only the CITIS data and applications for which that user is authorized. Examples of defining parameters for the access rule set are provided in 6.3.6. Designated administrators and security officers shall be notified of all actions and sources of the actions which violate the access rules.

**4.4.2 Contamination control.** CITIS shall provide controls to protect the data and the system from contamination by unauthorized computer programs or data such as viruses. Designated administrators and security officers shall be notified of all violations of CITIS integrity.

**4.5 Data item index.** CITIS shall provide the user with the capability to view the discrete elements of the data item index for each data item instance. Each user shall also have the capability to search for data item instances by the following discrete elements, as a minimum:

- a. Name
- b. Unique identifying number
- c. Status (working, released, submitted, approved)
- d. Date of most recent change

**4.6 Data exchange standards.** The transfer of data between sites (see 4.7.5 and 5.1.4) shall be provided through one or more of the following alternatives as specified on form DD 1423 for all appropriate CDRL items (see 6.3.2).

**4.6.1 CALS interchange standard.** CITIS shall be capable of the transfer of data between the contractor and the Government in accordance with MIL-STD-1840.

**4.6.2 Electronic Data Interchange (EDI) transactions.** EDI transactions shall conform to FIPS 161. Transactions shall be in accordance with the functional requirements as specified in the contract.

**4.7 Core CITIS functions.** CITIS shall provide access to and delivery of CITIS data consistent with the functional requirements defined herein (see 6.3.7).

**4.7.1 Acknowledge.** CITIS shall provide an authorized Government representative with the capability to electronically acknowledge delivery of instances of data items.

**4.7.2 Approve or disapprove.** CITIS shall provide an authorized Government representative with the capability to electronically signify approval or disapproval of data items. Such action shall be recorded and the record of authorized Government user providing approval or disapproval, the date of approval or disapproval, and an indication of validity shall be accessible through CITIS.

**4.7.3 Comment.** CITIS shall provide the user with the capability to comment on CITIS data in association with the view function. Comments resulting from such review shall be included in the CITIS either separately or as appended to the reviewed data and made available to users. Comments shall be controlled to establish and maintain an audit trail to identify the source of the comments and to maintain version control.

**4.7.4 Notice of delivery.** CITIS shall provide the Government with an electronic notice of delivery for each CITIS data item made available for access.

**4.7.5 Receive.** CITIS shall provide the capability to electronically receive data transmitted by the Government.

**4.7.6 Search.** CITIS shall provide the user with the capability to automatically locate data item instances by the associated elements specified in 4.5.

**4.7.7 Store.** CITIS shall provide the user with the capability to request that data be saved on-line for subsequent use in the performance of the contract.

**4.7.8 View.** CITIS shall provide the user with the capability to display CITIS data on-line.

## 5. DETAILED REQUIREMENTS

**5.1 Tailorable CITIS functions.** The following capabilities are tailorable functions which may be required in addition to the core capabilities described in 4.7. Each function in this section is considered independent and may be tailored out without affecting the remaining functions (see 6.3.8). Specific capabilities for each tailorable function shall be as specified in the contract.

**5.1.1 Applications.** In addition to providing other CITIS functions, CITIS shall provide access to contractor application software for users subject to the applicable software licensing restrictions.

**5.1.2 Archive.** CITIS shall provide the user with the capability to request that data items be placed in and retrieved from off-line archival storage.

**5.1.3 Combine.** CITIS shall provide the user with the capability to develop combinations of data to generate new information products.

**5.1.4 Download.** CITIS shall provide the user with the capability to retrieve data item instances for processing on Government computers.

**5.1.5 Edit.** CITIS shall provide the user with the capability to change and manipulate a copy of a data item instance to prepare it for publication or other use.

**5.1.6 Forward.** CITIS shall provide the user with the capability to send CITIS data to other users subject to distribution limitations.

**5.1.7 Package.** CITIS shall provide the user with the capability to group user selected CITIS data items under a common name to facilitate their being considered or acted on collectively.

**5.1.8 Query.** CITIS shall provide the user with the capability to request specified data item instances and elements as described in the CITIS data dictionary in accordance with one or more of the following query languages as specified in the contract:

a. Structured Query Language (SQL). When specified, the underlying query language shall be compatible with FIPS 127.

b. Industry and national standard languages. When specified, the query language shall be a recognized industry or national standard such as the American National Standards Institute (ANSI) object oriented database management system query language.

c. The contractor shall obtain Government approval for the use of nonstandard query language (see 6.3.9).

**5.1.9 Sort.** CITIS shall provide the user with the capability to sort data item indices by the discrete elements specified in 4.5.

5.1.10 **User groups.** CITIS shall provide the capability of establishing user groups to encourage and enable informal training and problem solving.

5.2 **Implementation planning.** Post-award CALS and CITIS implementation planning to conform to contract requirements and in consideration of the GCO shall be documented in accordance with DI-IPSC-81353. For pre-contract award planning, see 6.2.1.



**6. NOTES**

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

**6.1 Intended use.** This standard applies to all DoD acquisition programs including new starts, mature programs, retrofit, and system modifications. The determination of the applicability of CITIS should be based on the extent and usefulness of electronic access to data and not only on consideration of program size or complexity. The usefulness of CITIS will increase as Government operations are streamlined and industry capabilities are developed. Therefore, it is imperative that acquisition managers, Government users, and potential contractors conduct detailed discussions of the match between the contractors' capabilities and the Government's requirements throughout the acquisition cycle.

**6.1.1 Purpose of CITIS requirements.** This standard is designed to be incorporated into a contract to define the functional requirements for a computer-based service to provide access to information. CITIS is intended to be an efficient, contractually implementable means for providing the Government with on-line access to contractor generated data and GFI and the electronic transfer of such data. Ultimately, CITIS will replace most, if not all, contractor delivery of hard copy information currently required by the Government throughout the program life-cycle. The requirements are specified in terms of information services and information functions which must be selected to meet the needs of each DoD acquisition program.

**6.1.2 Information integration.** The Government encourages industry to utilize a high degree of information integration across the enterprise and among business partners. However, information integration capabilities are evolving within industry and, as each CITIS application is initiated, it will be necessary to establish baseline integration requirements and to allow for improved integration as the program progresses and new technologies become available. Therefore, the process to select specific functions and standards must be coordinated with contractors and Government users throughout the program life cycle.

**6.1.3 Data item rights.** The Government shall not, in consequence of the delivery of a data item, acquire ownership of the data item or any rights or license to use, copy, or disclose such data item. The extent and nature of rights which the Government may acquire to use, copy or disclose data items shall be as expressly stated in the contract.

**6.2 Data requirements.** The following Data Item Description (DID) must be listed, as applicable, on the Contract Data Requirements List (DD Form 1423) when this standard is applied on a contract, in order to obtain the data, except where DFARS subpart 227.405-70 exempts the requirements for a DD Form 1423.

Reference Paragraph	DID Number	DID Title	Suggested Tailoring
5.2	DI-IPSC-81353	CALS Implementation Plan	SOW

The above DID was cleared as of the date of this standard. The current issue of DoD 5010.12-L, Acquisition Management Systems and Data Requirements Control List (AMSDL), must be researched to ensure that only current, cleared DIDs are cited on the DD Form 1423.

**6.2.1 Contractor's Approach to CALS (CAC).** Typically, a CAC should be submitted by a potential contractor in response to section L (Instructions to Offeror) of the RFP, in order to outline the contractor's abilities to develop and perform CALS-related initiatives (e.g., data automation and integration, on-line access, concurrent engineering, digital data delivery in accordance with CALS standards). MIL-HDBK-59 provides guidance for the preparation of RFP requirements for contractor development of a CAC.

**6.3 Tailoring alternatives.** The following are presented in the sections 4 and 5 of this standard as alternatives which must be tailored to be specific for each acquisition.

**6.3.1 Approach.** The recommended approach to tailoring is to follow the guidance of MIL-HDBK-59 to determine what data is to be acquired through CITIS and how to modify the acquisition documents which will cite this standard.

**6.3.2 Data exchange formats.** Open-systems or industry standard approaches are the preferred alternative when appropriate CALS standards do not exist. EDI, as specified by FIPS 161, is applicable primarily to business (non-product) oriented transactions.

**6.3.3 Communication protocols.** Tailoring should only be done to obtain a better match in capabilities between the Government and its contractors. Some data items may place additional requirements on a CITIS and, therefore, may require special handling. For example, some data files may be large enough to unacceptably tie up communication lines. MIL-STD-1840 specifies methods for transferring files on physical media.

**6.3.3.1 Nonstandard communication protocols.** Software and equipment that do not adhere to standard protocols as defined in 4.2.7 at all points along the communications path are considered "nonstandard". The contractor shall provide rationale or justification if proposing to use the services of an existing, non-standard network for communications with the Government.

**6.3.3.2 Communication protocol documentation.** Documents describing various aspects of telecommunications should do so in CCITT, Institute of Electrical and Electronics Engineers (IEEE), and ANSI standard terminology, unless otherwise directed in the contract. Protocol layers and transactions should be expressed within the framework and terminology of the Open System Interconnection (OSI) reference model. Specifications referenced should be cited by military publication number and authority, CCITT recommendation number, IEEE standard number, ANSI standard number, and (where feasible) suitable paragraph or section references as applicable.

**6.3.4 User support.** The type and quantity of user support should be tailored to be appropriate to the complexity of the CITIS being acquired. In particular, telephone support (see 4.2.9) and user groups (see 5.1.10) are highly advantageous if it is anticipated that there will be a large and varied group of

users, but may be less significant if CITIS data is limited and anticipated use is only among a small group.

**6.3.5 CITIS security.** The following security references may be beneficial in specifying CITIS security features in the contract: DOD 5200.28-STD, DoDD 5200.28, CSC-STD-003-85, DOD 5220.22-M.

**6.3.6 Parameters for the access rule set.** Examples of parameters that define the access rule set include: information type; information access strategy; data status level; type of access; classification and sensitive data limitations; distribution limitations; distribution statements per MIL-STD-1806; maximum allowable number of unsuccessful or improper access attempts; and the authorized user's security clearance, organization, location, CITIS read/write authorizations, and access profile.

**6.3.7 Core CITIS functions.** Core functions listed in 4.7 and its subsections are not intended to be tailored. If 4.7 is tailored, it should be done only after rigorous analysis of the cost and effectiveness of any alternatives and of the remaining CITIS capability.

**6.3.8 Tailorable CITIS functions.** Each of the functional capabilities described in section 5 should be viewed as independent of the other capabilities. Tailoring should be used to remove those functions that are not practical or economical for a specific acquisition. Specific requirements for each tailorable function should be specified in the contract.

**6.3.9 Nonstandard query languages.** Tailoring should only be done to obtain a better match in capabilities between the Government and its contractors. If query languages are not specified or are not appropriate for the specified CITIS, the contractor shall propose appropriate query languages.

**6.4 Subject term (key word) list.** The following subject terms (key words) are applicable:

- CALS Implementation Plan
- Computer-aided Acquisition and Logistic Support
- Contractor Integrated Technical Information Service
- Data formats
- Data integration
- Electronic Data Interchange
- Government Concept of Operations
- Government Furnished Information
- Government Open Systems Interconnection Profile
- Internet Protocol
- Open System Interconnection
- Security
- Structured Query Language
- Telecommunications
- Transmission Control Protocol

CONCLUDING MATERIAL

**Custodians:**

Army - SC  
Navy - OM  
Air Force - 16  
DLA - DH

**Preparing Activity:**  
OUSD(A) - DO

(Project IPSC - 0267)

**Review activities:**

Army - CR  
Air Force - 08, 14, 17, 24, 90  
Navy - NC  
NSA - NS  
DISA - DC  
NASA - NA  
Other - DOE

**User activities:**

OASD - IR  
Army - AM  
Navy - SA  
Air Force - 19, 70, 99

# STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

## INSTRUCTIONS

1. The preparing activity must complete blocks 1, 2, 3, and 8. In block 1, both the document number and revision letter should be given.
2. The submitter of this form must complete blocks 4, 5, 6, and 7.
3. The preparing activity must provide a reply within 30 days from receipt of the form.

NOTE: This form may not be used to request copies of documents, not to request waivers, or clarification of requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

<b>I RECOMMEND A CHANGE:</b>	<b>1. DOCUMENT NUMBER</b> MIL-STD-974	<b>2. DOCUMENT DATE (YYMMDD)</b>
<b>3. DOCUMENT TITLE</b> <p style="text-align: center;">Contractor Integrated Technical Information Service (CITIS)</p>		
<b>4. NATURE OF CHANGE</b> <i>(Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as needed.)</i>		
<b>5. REASON FOR RECOMMENDATION</b>		
<b>6. SUBMITTER</b>		
<b>a. NAME</b> <i>(Last, First, Middle Initial)</i>	<b>b. ORGANIZATION</b>	
<b>c. ADDRESS</b> <i>(include Zip Code)</i>	<b>d. TELEPHONE</b> <i>(include Area Code)</i> (1) Commercial (2) AUTOVON	<b>7. DATE SUBMITTED</b> (YYMMDD)
<b>8. PREPARING ACTIVITY</b>		
<b>a. NAME</b> Mr Don Langkamp	<b>b. TELEPHONE</b> <i>(include Area Code)</i> (1) Commercial (703) 756-2554      (2) AUTOVON 289-2554	
<b>c. ADDRESS</b> <i>(include Zip Code)</i> OUSD (A) CALS/PPD 5203 LEESBURS PIKE SUITE 1609 FALLS CHURCH VA 22041-3466	IF YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT: Standardization Program Division 5203 Leesburg Pike, Suite 1403, Falls Church, VA 22041-3466 Telephone (7030 756-2340 DSN 289-2340	

**INSTRUCTIONS:** In a continuing effort to make our standardization documents better, the DOD provided this form for use in submitting comments and suggestions for improvements. All users of military standardization documents are invited to provide suggestions. This form may be detached, folded along the lines indicated, taped along the loose edge (DO NOT STAPLE), and mailed. In block 4, be as specific as possible about particular problem areas such as wording which required interpretations, was too rigid, restrictive, loose, ambiguous, or was incompatible, and give proposed wording changes which would alleviate the problems. Enter in block 5 any remarks not related to a specific paragraph of the document. If block 6 is filled out, an acknowledgment will be mailed to you within 30 days to let you know that your comments were received and are being considered.

**NOTE:** This form may not be used to request copies of documents, nor to request waivers, deviations, or clarification of specification requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

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**DIRECTOR CALS & EDI  
DEPARTMENT OF DEFENSE  
RM 3D833, PENTAGON  
WASHINGTON DC 20301-8000**

**DIRECTOR CALS & EDI  
DEPARTMENT OF DEFENSE  
RM 3D833, PENTAGON  
WASHINGTON DC 20301-8000**

<b>DATA ITEM DESCRIPTION</b>			Form Approved OMB No. 0704-0188	
Public reporting burden of this collection of information is estimated to average 110 hours per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comment regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.				
1. TITLE  COMPUTER-AIDED ACQUISITION AND LOGISTIC SUPPORT IMPLEMENTATION PLAN (CALSIP)		2. IDENTIFICATION NUMBER  DI-IPSC-81353		
3. DESCRIPTION/PURPOSE  3.1 The CALSIP describes the way in which Computer-aided Acquisition and Logistic Support (CALS) techniques are to be applied throughout the life of the contract to satisfy service, infrastructure, media, and format requirements identified in the contract.  3.2 The CALSIP implements an ongoing forum to communicate the contractor's ability to integrate and provide the digital data services and products throughout the life of the contract.				
4. APPROVAL DATE (YYMMDD)  930716	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)  DO	6a. DTIC APPLICABLE	6b. GIDEP APPLICABLE	
7. APPLICATION/INTERRELATIONSHIP  7.1 This Data Item Description (DID) contains the format and content preparation instructions for the data resulting from the work task described by MIL-STD-974.  7.2 It is not intended that all requirements contained herein should be applied to every program or program phase. Portions of this DID are subject to deletion tailoring depending upon the program phase in which it is applied in the contract.  7.3 The CALSIP serves as a record for the contractor's CALS implementation activities at a fixed date in the life of the contract. Periodic Government and contractor reviews of the CALSIP over the life of the contract are necessary to determine if an (Continued on Page 2)				
8. APPROVAL LIMITATION		9a. APPLICABLE FORMS	9b. AMSC NUMBER  D6944	
10. PREPARATION INSTRUCTIONS  10.1 <u>Format</u> . The CALSIP format shall be contractor selected. Unless effective presentation would be degraded, the initially used format shall be used for all subsequent submissions.  10.1.1 <u>Pagination</u> . Each page shall be uniquely numbered.  10.1.2 <u>Document Control Numbers</u> . All pages shall contain the document control number and date of the document.  10.1.3 <u>Paragraph Numbering</u> . Sections and paragraphs shall be numbered.  10.1.4 <u>General CALSIP Structuring</u> . General information that aids in understanding the CALSIP (e.g., background information, glossary, acronyms, abbreviations, and their meanings as used in the CALSIP), shall be located in a Notes section. Information pertinent to multiple topic areas (e.g., methodology description) shall be located in appendices and provided with a cross reference in the text to the appendix.  10.2 <u>Content</u> . The CALSIP shall contain detailed information of how the CALS strategy is to be implemented by the contractor. The plan shall include the following:  a. Introduction of the plan's purpose and scope. b. Reference documents, definitions, and points of contact. (Continued on Page 2)				
11. DISTRIBUTIONS STATEMENT  DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.				

## Block 7, Application/Interrelationship (Continued)

7.3 (Continued) update is required to incorporate current changes in computer technology, process improvements, or CALS infrastructure requirements.

## Block 10, Preparation Instructions (Continued)

c. Description of the CALS program management approach including: program objectives, strategy, product quality program, test and evaluation program, schedule/timeline, and risk; contractor's responsibilities; Government responsibilities; and GCO summary.

d. Listing of the CALS hardware and software architecture to be used, description of the CITIS system, including source and destination systems, and relationships with government receiving systems.

e. Identification of contractor's capabilities for integrating applications and data bases to improve engineering, manufacturing, and support processes.

f. Description of the contractor's prior experience in the creation, management, use, and exchange of digital information including generation, storage, indexing, and distribution.

g. Description of the procedures which eliminate data redundancy.

h. Description of the methodology to be used for tracking actual versus projected cost for the proposed CALS implementation.

i. Description of proposed CITIS on-line capabilities. The description shall include:

- Linkages among engineering, manufacturing, logistics, and program management.
- Number and location of sites to be served, hours of operation, and system response requirements.
- Telecommunications issues including selection of Government data network(s) or third parties lease for communications, and the period of performance that includes each service location as the requirement varies.

j. Description of telecommunications data protection and integrity, including risk assessment and system security certification. The data protection description shall include the following: (1) classified data, (2) unclassified sensitive technical data subject to marking under Section 1217 of P.L. 98-94 via MIL-STD-1806 Distribution Statement(s) and, where appropriate, an Export Control Warning Notice, (3) limited and restricted rights status data, either classified or unclassified.

k. Outline of the proposed actions and upgrade capabilities that may be pursued in subsequent life-cycle phases.