U.S. Marine Corps

INTEGRATION SUPPORT CONTRACT USER'S GUIDE

From: Commandant of the Marine Corps

Subj: INTEGRATION SUPPORT CONTRACT USER'S GUIDE

Ref: (a) Integration Support Contract, N66032-89-D-0001
        (b) MCO 5271.1

Encl: (1) IRM-5236-04

1. PURPOSE. To provide standards and guidelines in the use and implementation of the Integration Support Contract as required by reference (a).

2. AUTHORITY. This publication is published under the authority of reference (b).

3. APPLICABILITY. The guidance in this publication is applicable to all Marine Corps personnel who intend to use the Integration Support Contract as well as Contractors that will implement procedures that are directly related or performed under the auspices of the contract. This publication is also applicable to the Marine Corps Reserve.

4. SCOPE

    a. Compliance. Compliance with the provisions of this publication is required unless a specific waiver is authorized.

    b. Waivers. Waivers to the provisions of this publication will be authorized only by CMC (CCI) on a case by case basis.

5. RECOMMENDATIONS. Recommendations concerning the contents of this technical publications should be forwarded to CMC (CCI) via the appropriate chain of command. All recommended changes will be reviewed upon receipt and implemented if appropriate.

6. SPONSOR. The sponsor of this technical publication is CMC (CCI).

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UNITED STATES MARINE CORPS

Information Resources Management (IRM) Standards
and Guidelines Program

INTEGRATION SUPPORT CONTRACT USER'S GUIDE
IRM-5236-04

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<u>RECORD OF CHANGES</u>

Log completed change action as indicated.

Change Number	Date of Change	Date Received	Date Entered	Signature of Person Entering Change

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GENERAL

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Chapter 1

BACKGROUND

1.1. PURPOSE. The purpose of this document is to provide guidance and information on the use of the Integration Support Contract (ISC), Contract N66032-89-D-0001.

1.2. BACKGROUND. On 13 December 1988, the ISC was awarded to Computer Sciences Corporation (CSC) of Falls Church, Virginia. The ISC will allow the Marine Corps, through one contract, to obtain comprehensive Automated Data Processing (ADP) services to support the development, implementation and maintenance of Marine Corps Automated Information System (AIS) projects. The ISC is a **Cost-plus-award-fee, indefinite quantity, indefinite delivery** contract. Delivery Orders will be placed by Headquarters Marine Corps (HQMC) and the three central design activities (Quantico, Kansas City, and Albany). This is a one year contract with seven one year options. A minimum of $150,000 must be expended each contract year with a ceiling of 740,000 labor hours per year.

1.3. SCOPE. This guidance is not intended to supersede any contracting or financial guidance, regulation, or laws. The information presented is intended to be supplemental assistance in the use of the ISC only. The ISC is available for use, within the confines of contract limitations, by any Marine Corps organization. The following are examples of the type of services that can be performed under the contract:

AIS Program Management	AIS Documentation
AIS Program Planning & Control	Technical Training
Subcontractor Support	LCM Support
Software/Hardware Acquisition	Data Administration
Quality Assurance	AIS Security
Configuration Management	AIS Modification
AIS Interface Definition & Control	Tech Pub Development
Operation of AIS's	AIS Management Studies
Office Automation	Local Area Networks
AIS Design, Development, Test, Implementation, Migration	Telecommunications

FIGURE 1-01
Services Available Under the ISC

Appendix C provides a thorough list of the contract services as outlined in the ISC.

1.3.1. Benefits. Utilization of the ISC is envisioned to improve the availability of data processing personnel, standardize development efforts, achieve savings through volume discounts associated with economies of scale, and reduce contracting efforts.

1.4. GUIDANCE

1.4.1. Statement of Work (SOW) Preparation. Upon determination of the user requirements, a SOW must be prepared. A clear statement of contract requirements is a prerequisite for defining and achieving program goals. The SOW provides the basic framework for this effort. The SOW must be carefully prepared to specify basic responsibilities and minimum program requirements. The SOW is the document by which all nonspecification requirements for contractor efforts are established and defined. Chapter Three provides guidance in the preparation of a SOW. Appendix D is an example of a completed SOW.

1.4.2. Cost Estimate. In addition to the SOW, the user must calculate and submit an estimate of the labor hours by labor category and other direct costs. The cost estimate is developed by the user to assist the COTR in contract negotiations with the contractor. Chapter three provides guidance on developing a cost estimate. Appendix E is an example of a completed cost estimate.

1.4.3. Delivery Orders. A Delivery Order specifies and authorizes work to be accomplished by the contractor to satisfy a Government requirement. All supplies and/or services to be furnished under the ISC shall be ordered by the issuance of a Delivery Order by the appropriate contracting officer. A Delivery Order shall be "issued" for the purpose of this contract at the time the Government deposits the order in the mail.

1.4.4. Funding and Contractor Performance. The organization requesting the work to be performed is responsible for providing the funding required, for initiating the tasking, and for administering the Contractor's performance. All funded Delivery Orders are applied against the MCCDPA's spending threshold. Because of the overall ISC spending threshold, each central design activity has a yearly spending threshold based upon the number of functional areas supported. The spending thresholds for the MCCDPAs are:

MCCDPA Quantico	$10 Million
MCCDPA Albany	5 Million
MCCDPA Kansas City	5 Million

FIGURE 1-02
Funding Thresholds

In the event that an MCCDPA exceeds its threshold, CMC, (Code CC) and/or the Information Systems Steering Committee (ISSC) will determine the appropriate channel by which to satisfy the requirements as stated in the SOW. This could result in the SOW being processed by either one of the two remaining MCCDPAs or the spending thresholds of the MCCDPAs being realigned within the total ceiling of the contract. The Contractor's performance is rated by the responsible COTR and the results are forwarded to

the Performance Evaluation Board (PEB) for Award Fee
Determination.

1.4.5. Use of Standards and Guidelines. To ensure compliance
with regulations, standardization of deliverables, and efficiency
of efforts, Marine Corps Standards and Guidelines, detailed in
Information Resources Management (IRM) Technical Publications and
established under MCO P5271.1 should be used in specifying tasks
to be performed. Use of these standards and guidelines promotes
clear communication between contractor, the requesting
organization and other using organizations within the Marine
Corps.

1.5. REFERENCES AND DEFINITIONS. A list of references is
contained in Appendix A. A list of terms and corresponding
definitions is provided in Appendix B. These appendices are
provided to assist the reader in gaining an understanding of some
of the references and terms unique to the ISC.

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Chapter 2

ROLES AND RESPONSIBILITIES

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Chapter 2

ROLES AND RESPONSIBILITIES

2.1. GENERAL. This chapter details the ISC management concept
and provides a synopsis of the roles of those organizations
involved in the management and utilization of the ISC.

2.1.1. Procurement Integrity. Individuals who will serve the
Government as procurement officials on or after December 1, 1990
must sign a certification stating that they are familiar with,
and will not engage in conduct prohibited by, Subsections 27(b),
(c), and (e), and that they will report any information
concerning a violation or possible violation of Subsections
27(a), (b), (d), or (f) of the Office of Federal Procurement
Policy Act (41 U.S. Code 423). Figure 2-01 contains an example
of the certification required from each procurement official.

2.1.2. Protection of Contracting Data. All data pertaining to
the Delivery Order process, negotiations, costs, contractor
performance evaluations and other related subjects are considered
sensitive unclassified information. The Computer Security Act of
1987 requires that this information will be protected. IRM-
5239-08, Computer Security Procedures, Appendix E discusses
sensitive unclassified information. Minimum protection
requirements are:

    a. Appropriate marking.

    b. Access control over processes, files, segments, and
devices.

    c. Identification and authentication (user ID and password).

    d. Audit (system and file access).

    e. Protection of systems as a resource and protection
against fraud, waste and abuse.

2.1.3. Marine Corps Central Design and Programming Activity
(MCCDPA). The supporting MCCDPA reviews all of the ISC SOWs and
is responsible for the following:

    a. Making the determination if a specified requirement can
be performed with available assets.

    b. Ensuring that the proposed tasks are compatible with
Marine Corps IRM plans, programs, standards, and guidelines.

    c. Ensuring that there is no duplication of effort.

    d. Providing technical assistance if necessary.

PROCUREMENT INTEGRITY CERTIFICATION
FOR PROCUREMENT OFFICIALS

As a condition of serving as a procurement official, I
_____**TYPE OR PRINT NAME**_____ hereby
certify that I am familiar with the provisions of Subsections
27(b), (c), and (e) of the Office of Federal Procurement
Policy Act (41 USC 423) as amended by Section 814 of Public
Law 101-189. I further certify that I will not engage in any
conduct prohibited by such Subsection and will report
immediately to the contracting officer any information
concerning a violation or possible violation of Subsections
27(a), through (f) has been made available to me. I
understand that, should I leave the Government during the
conduct of a procurement for which I have served as a
procurement official, I have a continuing obligation under
Section 27 not to disclose proprietary or source selection
information relating to that procurement and a requirement
to so certify.

_____   _____
SIGNATURE OF PROCUREMENT OFFICIAL   DATE

_____   _____
DEPARTMENT OR AGENCY   OFFICE PHONE

FIGURE 2-01
Procurement Integrity Certification

e. Issuing a Statement of Non-availability of Computer Resources (SNCR) when justified.

The MCCDPA will also assist the user to ensure that the proper CDRLs are applied. As the tasks defined in the SOW are conducted by the contractor, the MCCDPA will assist the user, upon request, in the review of deliverables, resolution of disputes, and modifications to the Delivery Order. (Development and/or modifications to the SOW, Cost Estimate, or Delivery Orders are the responsibility of the user.)

2.2. GOVERNMENT ROLES AND RESPONSIBILITIES. The following roles and responsibilities defines how the Marine Corps will manage the ISC.

2.2.1. Functional Managers/Field Activities. The Functional Managers and Field Activities are the individuals and organizations requesting the work to be performed. They are ultimately responsible for preparing the SOW, providing the funding required, initiating the tasking and administering the Contractor's performance of that work. It is necessary that these users be familiar with the Contract and have read this User's Guide before any ISC work is initiated. The user must establish explicitly what work is to be performed and have that information reflected accurately in the SOW. The appropriate Contract Data Requirements Lists (CDRLs) and Data Item Descriptions (DIDs) must be attached to the SOW. Refer to Chapter Three of this document for further information on CDRLs and DIDs. The Local contracting office will provide assistance in developing CDRLs. In addition to the SOW, the user must calculate and submit an estimate of the labor hours by labor category and other direct costs. When applicable, all documents produced must reflect the name and phone number of the individual nominated to be the Contracting Officer's Technical Representative (COTR.) Cost estimation is covered further in Appendix E of this User's Guide.

2.2.2. Successor Contracting Officer (SCO). The Deputy Chief of Staff for Installations and Logistics (DC/S, I&L) has designated the Contracts Division (LBC) as the SCO. The SCO shall be responsible to the DC/S, I&L for resolving legal issues, determining contract scope matters, interpretation of contract issues, and other contract problems which cannot be resolved at a lower level. The SCO is the Marine Corps Contracting Office responsible for overall contract management. The SCO will assist the Headquarters USMC Contracting Officer's Representative (HQCOR) (Code CCI), when requested, in reviewing SOWs with an estimated or proposed cost that exceeds $800,000.

2.2.3. Site Contracting Officer (SKO). The Site Contracting Officer (SKO) is responsible for reviewing the proposed tasking to ensure that the SOW requirements are within the scope of the contract. If the estimated cost of the proposed Delivery Order is less than $800,000, the SKO will forward the SOW to the

Contractor and request that the Contractor provide a technical
and cost proposal. Upon receipt of the Contractor's technical
and cost proposal, the SKO will forward it to the requesting
office with a copy to the supporting MCCDPA for review and
comment. The SKO will then negotiate any changes with the
Contractor and issue the Delivery Order. The SKO will ensure
funding data is provided by the appropriate functional
manager/field activity. Funding data is required to execute the
Delivery Order. The SKO is required to forward all SOWs with
estimated costs exceeding $800,000 to the HQCOR (Code CCI) for
review. In the event that a Delivery Order is expected to exceed
the $800,000 limit due to cost growths, forward the appropriate
information to the HQCOR (Code CCI) for review and approval.

**2.2.4. Headquarters USMC Contracting Officer's Representative
(HQCOR).** The HQCOR is responsible for the coordination of AIS
development throughout the Marine Corps. The HQCOR is
responsible for providing to SKOs and contracting officers at the
Headquarters level AIS program guidance and information; making
recommendations to the SCO concerning contract renewal;
monitoring overall contractor performance through reports from
the Site Contracting Officer's Representatives (SCORs); assisting
the SCO and SKOs with the resolution of disputes concerning
contract scope; and enforcement of contract provisions and award
fee determination. The HQCOR (Code CCI) is responsible for
review/approval of all SOWs with estimated costs exceeding
$800,000. Before approving the proposed tasking, the HQCOR will
review the SOW to ensure compatibility with Marine Corps IRM
plans, programs, standards and guidelines and to prevent
duplication of effort. This review is intended to ensure that
appropriate LCM practices and procedures are being followed for
AISs.

2.2.5. Site Contracting Officer's Representative (SCOR). The
SKO shall designate SCORs for this contract. An SCOR is
responsible for the coordination of one or more AIS's
development. An SCOR also provides to SKOs AIS program guidance
and information; makes recommendations to the HQCOR concerning
contract renewal; monitors overall contractor performance through
reports from the COTRs; assists the SCO and SKOs with the
resolution of disputes concerning contract scope and enforcement
of contract provisions.

2.2.6. Contracting Officer's Technical Representative (COTR).
The SCO and the SKO will designate the COTRs for this contract.
The COTR must be appointed by letter for each Delivery Order or
project. The appointment letter must include all the duties and
responsibilities. Additional information about the appointment
letter can be found in Chapter 4 of this publication. The COTRs
prepare task orders, accept deliverables from the contractor,
certifies invoices, and evaluates contractor performance. A COTR
is designated for each project.

2.2.7. <u>Government Program Manager (GPM)</u>. The HQCOR will designate the GPMs for this contract. A GPM is responsible with the Director of the central design activity for deciding whether or not the information resources required for each AIS are available within the central design activities. They also are responsible for reviewing task orders, reviewing deliverables produced under the contract, and monitoring overall satisfaction with contractor performance.

2.3. <u>CONTRACTOR ROLES AND RESPONSIBILITIES</u>. The following management roles and responsibilities define how the Marine Corps expects a contractor to designate contractor personnel in order to manage the ISC.

2.3.1. <u>Integration Support Contractor-Program Manager (ISC-PM)</u>. The ISC-PM shall be the individual with overall responsibility for the performance of all contractor efforts. This individual will also be the primary point of contact for key personnel associated with the ISC.

2.3.2. <u>Integration Support Contractor-Project Team (ISC-PT)</u>. The ISC-PT shall be comprised of personnel needed by the ISC-PM to successfully provide guidance and direction to all contractor personnel working in support of the Marine Corps AIS requirements.

2.3.3. <u>Information System-Site Manager (IS-SM)</u>. The ISC-PM shall designate an IS-SM when directed by the HQCOR. An IS-SM shall coordinate and supervise the efforts of several IS-PM's. The IS-SM position is separate from and senior to the IS-PM. The IS-SM may be collocated at an AIS Project Office. As requirements change, the decision to retain the IS-SM will be at the discretion of the HQCOR.

2.3.4. <u>Information System-Project Manager (IS-PM)</u>. Each IS-PM will be the individual with overall responsibility for the performance of those contractor provided information resources associated with the AIS under their purview. This individual will be the Contractor's primary point of contact for the respective site COTRs. There shall be a one-to-one ratio between the Marine Corps AIS's supported by this contract and the IS-PMs. In the case of very large Class I Systems, more than one IS-PM may be required. This decision will be made by the GPM.

2.3.5. <u>Information System-Project Team (IS-PT)</u>. The IS-PT will be comprised of that staff required by each IS-PM to successfully meet the requirements of task orders. Contractor personnel assigned to an IS-PT shall not work concurrently on another IS-PT without the prior approval of the respective COTR.

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Chapter 3

INITIAL ISC PROCEDURES

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Chapter 3

INITIAL ISC PROCEDURES

3.1. GENERAL INFORMATION. A clear statement of contract requirements is a prerequisite for defining and achieving the program goals. Before writing anything, a user must be familiar with the ISC, MIL-HDBK-245B and this User's Guide. There is no specific formula for developing a SOW. Each one is unique and must be tailored to the specific project at hand. The SOW must be carefully prepared to specify the basic responsibilities and the minimum program requirements. The SOW becomes the standard for measuring a contractor's effectiveness. The text of the SOW tasks shall not include the description and delivery requirements for data. The role of the SOW is to define those work tasks which cannot be contained in a specification. Typical SOW tasks include:

    a. Designing and programming a system to contract specification.

    b. Analyzing the results of cost, schedule, and performance trade-offs.

    c. Implementing a quality assurance program.

    d. Analyzing and planning in order to identify resource requirements for production and to achieve a required level of production readiness.

    e. Quality program planning and implementation.

    f. Designing test plans, procedures and reports.

3.2. PLANNING THE SOW

    a. Procedures. Upon determination of the user requirements, a SOW must be prepared which will be forwarded to the SKO for review. Figure 3-01 is a graphic flow of the SOW process. The SOW describes the technical requirements, description of work, acceptance criteria, benchmarks, and labor categories required. After reviewing the SOW, the SKO then forwards it to the contractor omitting any reference to staff-hours or labor categories. A detailed analysis for tasks and subtasks to be performed should be provided so that the contractor has sufficient data in which to develop a technical proposal to estimate the type of labor categories anticipated to fulfil the requirements, the number of staff-hours per labor category, a task completion date and a total proposed price.

    b. Prerequisites. The necessary prerequisite for preparing a SOW is a complete understanding of what work has to be done. It is necessary to understand the circumstances in which a requirement is born. How these requirements ultimately evolve

ISC SOW GENERATION

USER IDENTIFIES A NEED

PREPARES A SOW AND COST ESTIMATE

PACKAGE IS FORWARDED TO THE MCCDPA FOR REVIEW

DISAPPROVED

APPROVED

SNCR

RETURN TO USER/GPM

SITE CONTRACTING OFFICER REVIEW

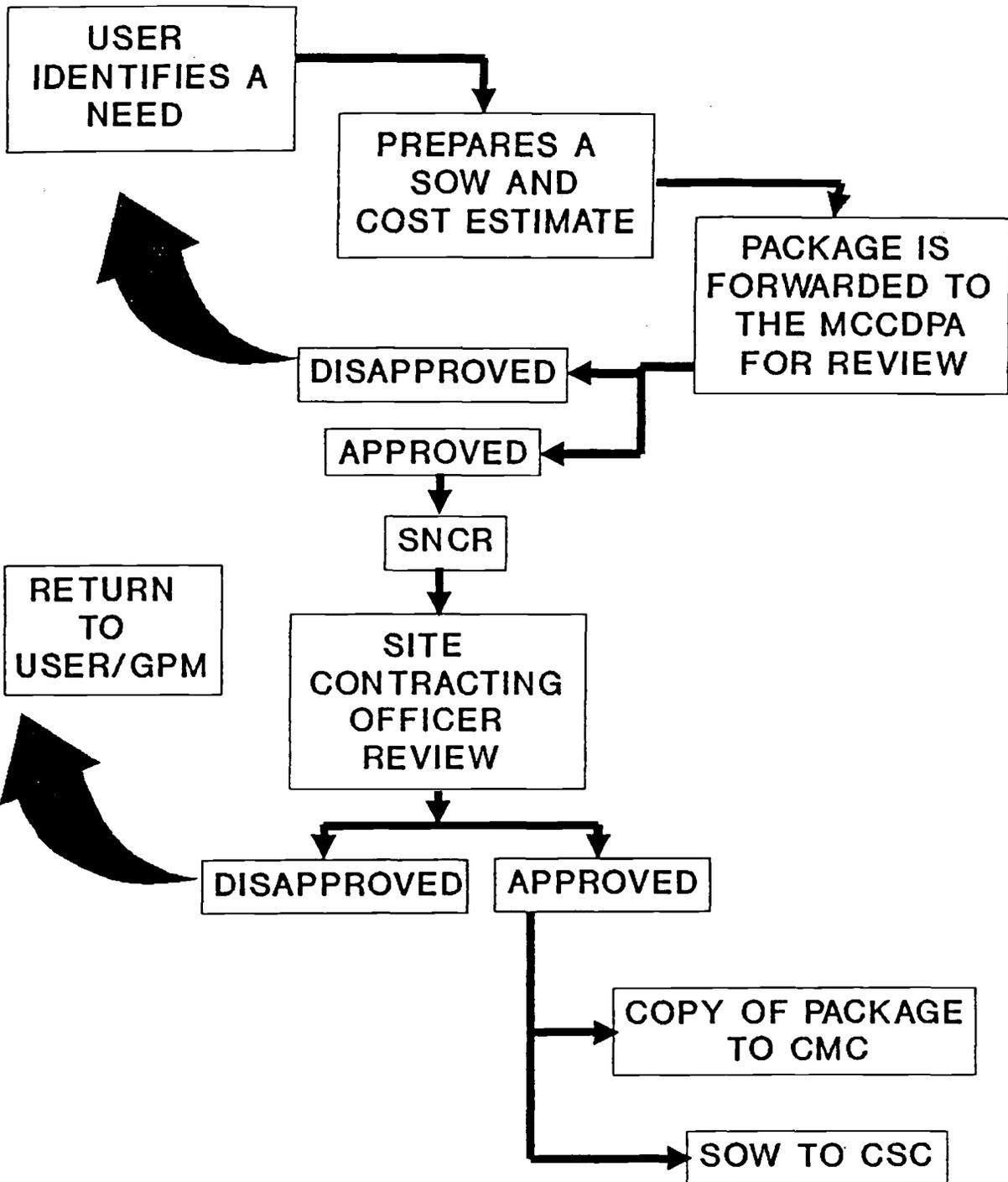DISAPPROVED

APPROVED

COPY OF PACKAGE TO CMC

SOW TO CSC

FIGURE 3-01
ISC SOW Generation Process

into a SOW will be of singular value to all individuals involved in preparing the SOW. The SOW preparer will:

(1) Review the requirement and directive documents which define its basic objectives.

(2) Prepare a bibliography citing all the regulatory material which should be used in preparing the SOW.

(3) Identify the potential cost drivers and ensure that only those necessary for proper program operation are included in the resulting SOW and that they are scoped to the minimal needs of the program.

(4) Prepare preliminary Work Breakdown Structure (WBS.) Included should be cost analysis, scheduling, configuration management, financial management, logistics, testing, quality assurance, personnel, and training. The WBS is the framework that provides a uniform approach to structuring the program throughout the project's life cycle phases. The WBS defines work from the highest level to the lowest level of detail necessary to describe the project tasks to be accomplished. Further information and an example of the WBS can be found in IRM-5231-19A, PROJECT MANAGEMENT PLAN.

(5) Identify all personnel and organizations that will participate in preparing the SOW and determine their responsibilities.

(6) When stating tasks or subtasks in the SOW, ensure that the phrase "The contractor SHALL...." The use of anything other than the word "shall" is not legally binding on the contractor. The phrase, "The Government will..." is legally equivalent to "may" and is not binding on the Government. Try to avoid using terms such as "when required," "as necessary," or "if needed." Review the list of "work words", Appendix F. Never describe work tasks in terms of data to be delivered. Be explicit as to what the Government's needs are, expressed in terms of what work is to be accomplished. Use "work words" that are clear and distinct and identify what is expected.

(7) Ensure that the SOW specifies what is required, not how it should be accomplished. Ensure all documents referenced are thoroughly reviewed and do not imply any additional requirements.

3.3. DEVELOPMENT APPROACH. After reviewing the significant documentation on the subject and obtaining guidance from the responsible managers, professionals and specialists, the following developmental approaches should be considered:

a. Divide the subject matter to be covered into logical component parts. Specify the deliverables that are expected to be received. This is done through the use of CDRLs and DIDs. There must be a CDRL and DID for each deliverable that the

contractor is expected to produce. The IRM Technical Publications can help in determining what deliverables are necessary for a particular segment of work.

b. The drafter of the SOW should determine, based on the nature of the work to be performed, which contract line item number (CLIN) from Section B-3 of the ISC, is applicable to the work being performed. The applicable CLIN should be explicitly identified in the "Requirements" section of the SOW. For example, if the SOW is being prepared at MCCDPA Quantico for work to be performed during the option year two, the applicable CLIN should be reflected on page B-14 of the ISC. If the SOW covers information system design, development, testing, implementation and migration then the applicable CLIN should be 0215. The purpose of identifying the CLIN is to insure that the work is germane to the overall scope of the contract. If the work cannot be defined within the context of one of the CLINS listed in Section B-3 then it probably should not be performed under the ISC.

c. Develop an outline on how the subject will be covered. A period of time should be set that allows the contractor a reasonable amount of time to complete the work. Normally, the contractor has three weeks from the date of the delivery order to gear up for the project.

d. Identify those component tasks required that are already defined in existing military or Federal specifications and standards or current practices. Ensure that these documents are contained in the list of reference documents.

e. Isolate those tasks that require additional or special research or have unique design problems.

f. Identify those tasks that have time factors involved or deadlines and critical target dates.

3.4. <u>PREPARATION RESPONSIBILITIES</u>. The responsible Functional Manager or Field Activity is responsible for establishing the definitive parameters for the SOW. They must also ensure that the SOW format and composition is standardized IAW MIL-Hdbk-245B. The SOW states what work the contractor must perform, not what the deliverables are. Ensure that each task or subtask is a measurable piece of work. Ideally, a task or subtask should result in a deliverable, but this may not always be the case. In any case, there must be some means in order to determine if and when the contractor has successfully completed the work/task. The SOW must state explicitly what the requirements are and it cannot be left up to the contractor to make the decisions for the Government. Appendix H is a SOW Checklist to ensure compliance with the SOW requirements. Adopting the mindset that the contractor must be told what to do, and not how to do it will prevent potential confusion later in the project.

3.5. CONTRACT DATA REQUIREMENTS LIST (CDRLS) AND ASSOCIATED DATA ITEM DESCRIPTIONS (DIDS). Once the work requirements have been identified in the SOW, the functional representative must then describe the items that result from that work and the delivery instructions for those items in a form that is appropriate for contractual use. This is accomplished through two documents: CDRLS and DIDs. A set of CDRLs and DIDs, which enforce the Government's data and documentation rights pertaining specifically to the ISC, will be maintained at the following activities:

HQ Marine Corps	Code: CCIS and LBC
MCCDPAs	Quantico/Kansas City/Albany
Contracting Offices	Quantico/Kansas City/Albany

FIGURE 3-02
CDRLs and DIDs Locations

3.5.1. CDRLS. The CDRLs or DD Form 1423 provides delivery instructions for each deliverable. Normally, CDRLs and DIDs are used in pairs, (every DID must have a corresponding CDRL). However, occasions may arise when no DID exists that meets a requirement. In that case, prepare a CDRL and refer to the appropriate IRM standard in Block 16 of the DD Form 1423. Figure 3-03 is an example of a DD Form 1423 and Figure 3-04 are instructions for completion.

3.5.2. DIDS. The DID or DD Form 1664 (Figure 3-05) is used to describe a deliverable that the contractor will produce as a result of a work requirement in the SOW. The Department of Defense (DoD) has standardized the DIDs that can be used. All of the approved DIDs are listed in the Acquisition Management Systems Data List (AMSDL). Standard DIDs have been approved for both tactical computer systems under DOD-STD-2167 and non-tactical computer systems under DOD-STD-7935A. Unfortunately, DoD has not approved standard DIDs that correspond to the documents described in the various IRM Technical Publications. There will be situations that will arise when there simply is not an approved DID that meets your requirements. Instructions have been included under CDRLs to cover these cases. The cognizant Marine Corps Contracting Officer will provide ISC users with the CDRLs and DIDs or will help users to develop a tailored DID that meets unique data requirements. Appropriate DIDs should be listed in each SOW with a copy of the CDRLs attached.

FIGURE 3-03
Contract Data Requirements List (DD Form 1423-1)

1. **ATCH NR:** Leave Blank

2. **TO EXHIBIT:** Leave Blank

3. **SYSTEM/ITEM:** Enter the name if the appropriate system discussed in the SOW.

4. **TO CONTRACTOR/PR:** Leave Blank

5. **CATEGORY:** This corresponds to the DID Functional Category and can be determined by looking at the DID number. For example, the category for DI-MGMT-80277 is MGMT. The codes used most frequently are:

ADMN	Administrative Data
CMAN	Configuration Management
IPSC	Information Processing Standards for Computers
MCCR	Mission Critical Computer Resources
MGMT	Management
MISC	Miscellaneous

   Within a category, CDRLs are numbered sequentially in Block 1 of the CDRL.

6. **CONTRACTOR:** Leave blank.

7. **SEQUENCE NUMBER:** Enter a four character sequence number for each CATEGORY group of CDRLs. For example, the first group is A001, A002, etc. The second group is B001, B002, etc.

8. **TITLE OR DESCRIPTION OF DATA:** Enter the exact title of the DID to which the CDRL refers. Titles that exceed the space allocated can be abbreviated or continued in the REMARKS Section be entering the words "Block 2:" followed by the rest of the title.

9. **SUBTITLE:** Use this section to further clarify the title especially when the title does not adequately describe the data or when DIDs match the CDRL.

10. **AUTHORITY (DATA ITEM NUMBER):** Enter the DID number exactly as it appears on the DID.

11. **CONTRACT REFERENCE:** Enter the exact paragraph number from the SOW that requires deliverable described by this CDRL.

12. **TECHNICAL OFFICE:** Enter the responsible functional office.

FIGURE 3-04
Instructions for DD Form 1423-1

13. **DD FORM 250 REQUIREMENTS:** Enter either DD, if the deliverable is to be accompanied by a DD Form 250, or LT, if the deliverable is to be delivered via a Letter of Transmittal.

14. **APPROVAL CODE:** Items of critical data requiring specific advanced written approval, such as a test plan, should be identified by placing an "A" in this block. Most of these items require submission of a preliminary draft prior to publication of the final document. When this block is used, indicate in the REMARKS block when the draft is due, how long the Government has for review and when the final document is due. If advance approval is not required, leave this block blank.

15. **INPUT TO IAC:** Leave Blank.

16. **FREQUENCY:** Enter the appropriate code from the following:

DAILY		ANNLY	Annually
WEKLY	Weekly	SEMIA	Each 6 Months
BI_WE	Each 2 Weeks	OTIME	One Time
MTHLY	Monthly	ONE/P	1 Time with
BI_MO	Each 2 Months		preliminary draft
QTRLY	Quarterly	ONE/R	1 Time and revisions
BI_AN	Each 2 Years	R/ASR	Revisions as Require
2 TIME	Two Separate	ASREQ	As Required
	Submittals		
DFDEL	Deferred Delivery		

The following codes required further explanations:

ONE/P Use this code to require a draft before the final submission.

ONE/R This entry indicated that the data will be submitted one time - in final form - but may require revisions throughout the contract.

R/ASR This is used when the data currently exists but may require revisions during the contact.

ASREQ If this is used, the specific delivery dates must be included in the REMARKS Section.

17. **AS OF DATE:** Leave Blank.

18. **DATE OF FIRST SUBMISSION:** Enter "SEE BLK 16". In the REMARKS Section specify the exact delivery dates for the data. The due dates should be identified as "XX working/calendar days following award of the Delivery Order" where XX is the number of days, unless the deliverable is required to meet a specific calendar date

FIGURE 3-04 (Cont.)
Instructions for DD Form 1423-1

When determining the Government review period, allow
sufficient time for a thorough review to include user
comments, when appropriate.

19. **DATE OF SUBSEQUENT SUBMISSION/EVENT IDENTIFICATION:** If
the data is submitted more than once, enter the date(s)
of each subsequent submission in the same form as number
18 above.

20. **DISTRIBUTION AND ADDRESSEES:** Enter the responsible
Functional Area in the Block labeled 14. On the next
line, enter the number of copies required. Indicate any
explanations in the REMARKS Section. For example, "5/1"
in this block would need an explanation stating that 5
paper copies and one magnetic copy be submitted.

21. **TOTAL:** Enter the total number of copies required.

22. **REMARKS:** Enter any remark required to clarify or
continue entries in Blocks 1 through 15 or any other
remarks necessary to clearly identify the data item or
delivery requirements.

23. **PREPARED BY:** Preparers signature.

24. **DATE:** Enter the date the CDRL was prepared.

25. **APPROVED:** This is usually the signature of the Head of
the Functional Area. The same individual cannot sign in
both places.

26. **DATE:** Enter the date the CDRL was approved.

FIGURE 3-04 (cont.)
Instructions for DD Form 1423-1

DATA ITEM DESCRIPTION		*Form Approved* *OMB No. 0704-0188* *Exp. Date: Jun 30, 1986*
1. TITLE		2. IDENTIFICATION NUMBER
3. DESCRIPTION/PURPOSE		

4. APPROVAL DATE (YYMMDD)	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)	6a. DTIC REQUIRED	6b. GIDEP REQUIRED
7. APPLICATION / INTERRELATIONSHIP			

8. APPROVAL LIMITATION	9a. APPLICABLE FORMS	9b. AMSC NUMBER
10. PREPARATION INSTRUCTIONS		

DD Form 1664, FEB 85   *Previous edition is obsolete.*   PAGE _____ OF _____ PAGES

FIGURE 3-05
Data Item Description (DD Form 1664)

Chapter Table of Contents

Chapter 4

DELIVERY ORDER REVIEW, APPROVAL, AND PROCESSING

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Chapter 4

DELIVERY ORDER REVIEW, APPROVAL, AND PROCESSING

4.1. DELIVERY ORDER PROCESS. Once the SOW and the Cost Estimate are completed by the user they must be forwarded to the appropriate MCCDPA. Figure 4-01 is a descriptive flow of the Delivery Order process. If the MCCDPA determines that the proposed work cannot be performed in-house, a Statement of Nonavailability of Computer Resources (SNCR) will be prepared and forwarded with the SOW and Cost Estimate to the Contracting Office within five working days. Each order issued under this contract shall include a statement concerning all elements of the following accounting data:

a. Appropriation Symbol and Subhead

b. Object Class

c. Bureau Control and Sub-allotment Number

d. Authorization Accounting Activity

e. Type

f. Property Accounting Activity

g. Cost Code

4.1.1. Delivery Orders. Written Delivery Orders will be issued to the Contractor by the SKO for all work to be performed. The total amount of any Delivery Order issued shall not exceed the negotiated cost and award fee.

a. Delivery Orders of $25,000 or More. Each Request For Proposal (RFP) will include a description of the specified work required; the desired delivery schedule; the place and manner of inspection and acceptance and any other pertinent information. The Contractor shall, within 10 working days, provide the contracting officer a Proposal to Perform the Delivery Order. The proposal shall include the required number of labor hours by labor category and overhead rates for each end product or task; overtime hours, by labor category if required; proposed completion date; direct material, travel, subsistence and similar costs; dollar amount and type of any proposal subcontract; total cost; and certification of conflict of interest. The contracting officer will review the estimates to ensure acceptability to the Government and may issue an executed Delivery Order.

b. Delivery Order Less than $25,000. The contracting officer shall issue a fully funded, unilaterally executed task order representing a firm order for the total requirement. In the event that the Contractor cannot perform in accordance with the terms and conditions and within the estimated cost of the

DELIVERY ORDER PROCESS

CSC DEVELOPS A TECHNICAL/ COST RESPONSE

USER/CONTRACTING OFFICER REVIEW

DISAPPROVED

APPROVED

NEGOTIATIONS

FINAL PACKAGE

ISSUE DELIVERY ORDER

COPY OF PACKAGE TO CMC
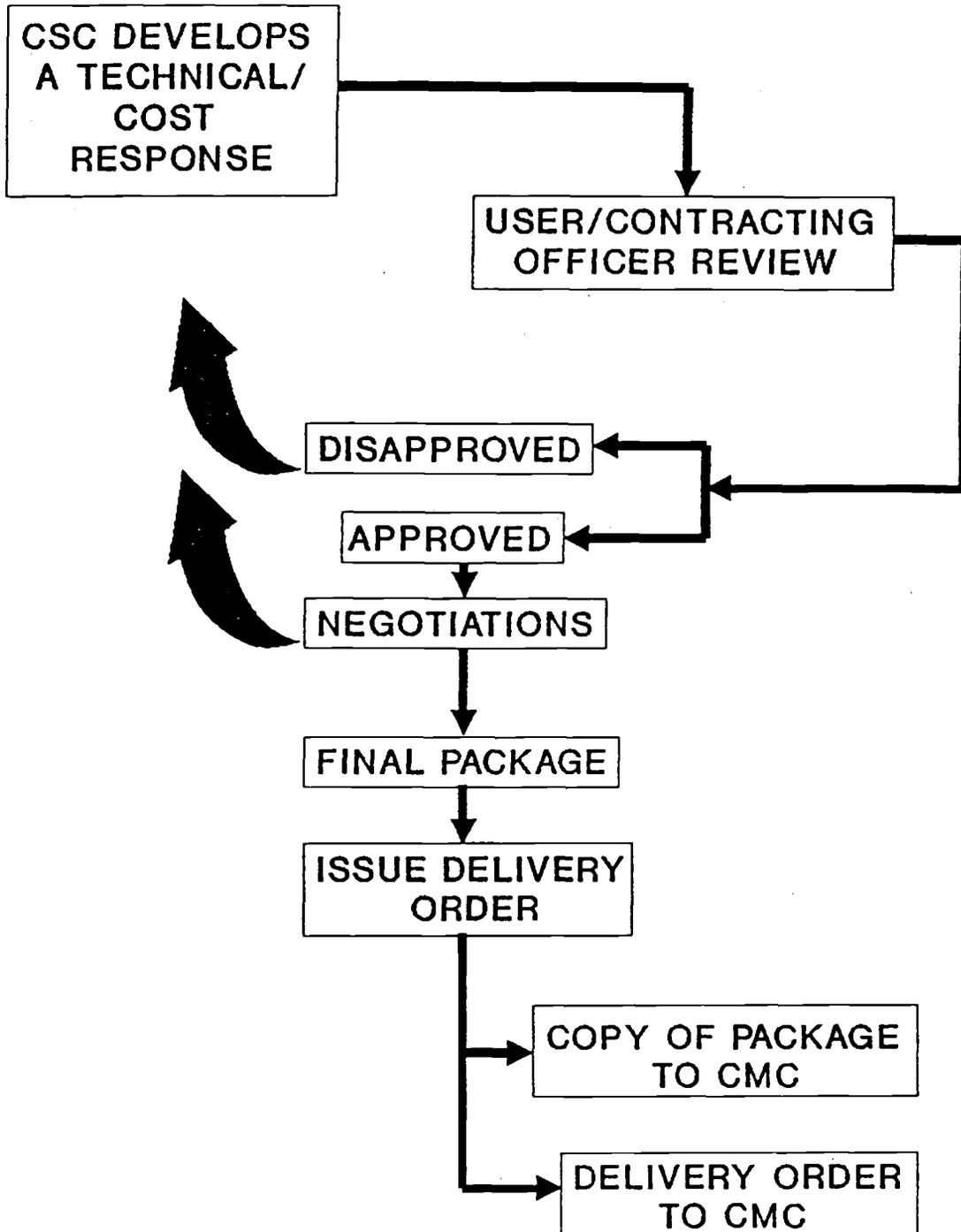
DELIVERY ORDER TO CMC

FIGURE 4-01
Delivery Order Process

Delivery Order, the Contractor will notify the contracting officer immediately, submit a proposal for the work requested in the Delivery Order and not commence performance until a modification terms and conditions and within the estimated cost of the Delivery Order, the Contractor will notify the SKO and the COTR is issued. Each Delivery Order shall include the date of the order, contract task order number, place of performance, scope, the place and manner of inspection and acceptance, Government furnished property, material or facilities to be made available, information deemed necessary to the performance of the Order, a delivery date or period of performance, and accounting and appropriation data.

4.1.2. <u>Limitations of Costs/Limitation of Funds</u>. This clause, which is a part of the contract, shall be applicable to each Delivery Order. If at any time 75% of the estimated cost specified in the Delivery Order is reached, and it appears that additional funds and/or level of effort is required to complete performance of the Delivery Order, the Contractor shall promptly notify the Ordering Officer in writing.

4.1.3. <u>Period of Performance</u>. The period of performance may not exceed the expiration date of the funds used except in those cases when the task is determined to be non-severable. Non-severable tasks are those tasks which cannot be completed within a given fiscal year due to the scope of the task. A start and end date must appear on each Delivery Order. Each task shall contain requested delivery and/or performance schedules.

4.1.4. <u>Phasing of Work</u>. The Delivery Order must include the schedule and manner in which work will be transmitted to the Contractor. The late delivery to the Contractor of contractually required data by the Government may require the Contractor to stop work and make the Government liable for Contractor downtime. Therefore, the Marine Corps must take steps to deliver data on-time. The using organization must request that the Delivery Order be modified if the last reasonable delivery date exceeds the period of performance of the Delivery Order. Contractor performance after the close of the period of performance in the Delivery Order is not authorized. If the Contractor requires more time to complete a task, the Marine Corps Contracting Officer may authorize a continuation of work.

4.1.5. <u>Delivery Date</u>. The delivery date is the date by which the Contractor must deliver the final and complete product specified in the Delivery Order, ready for final inspection and acceptance. If it becomes apparent to the using organization that effort will be required beyond the completion date, a new date must be provided to the Marine Corps Contracting Officer who will initiate action to modify the original date.

4.1.6. <u>Delivery Order Modification</u>. Any change to a Delivery Order must be documented by a Delivery Order Modification and must be processed through the cognizant Marine Corps SKO.

4.1.7. Pre-proposal Review. It may be desirable to request the contracting officer to forward an advance copy of the SOW to the Contractor and schedule a pre-proposal meeting. This can be useful if the SOW is complex or it may appear necessary to explain or clarify issues with the Contractor before the Contractor prepares a technical proposal.

4.1.8. Request For Proposal (RFP). The contracting office will send an RFP to the Contractor. The Site Contracting Officer (SKO) will process the SOW and will need at least two weeks to process the RFP from the Contractor. If the SOW meets the requirements of the contract, the SKO will submit the SOW (minus the Cost Estimate) to the Contractor. The Contractor then has ten working days to review and prepare a technical and cost proposal. An extension can be requested and approved if the circumstances warrant such an extension. Any pre-proposal meetings would take place at this time.

4.1.9. Review of RFP. The Contractor will return the proposal via the contracting office. The functional activity is responsible for reviewing the proposal for technical merit and cost. At this point a determination should be made as to whether the Contractor understands the work that is required and whether the proposed cost is fair and reasonable. The Contractor's cost estimate must include the breakdown by task, labor category, and labor hours.

4.1.10. Letter of Acceptance. If the proposal is acceptable, a NAVCOMPT FORM 2276 and a Letter of Acceptance will be forwarded to the contracting office committing the Government's funds to the project. Figure 4-02 is an example of a completed NAVCOMPT FORM 2276.

4.1.11. Non-Acceptance of RFP. If the proposal is not acceptable, a negotiation session must be set up with the Contractor. The functional representative will be invited as the technical expert in order to advise the contracting officer on technical issues. Prior to the negotiation meeting, a letter of non-acceptance must be prepared, outlining the reasons for not accepting the proposal.

4.1.12. COTR Appointment Letter. Once an agreement has been reached by the Contractor and the Government, a Delivery Order is issued, a number assigned and a COTR Appointment Letter issued. Figure 4-03 is an example of a COTR Appointment Letter. The Contractor can legally begin work.

4.1.13. Maintenance of Records. The Contractor shall maintain the following under this contract as a minimum:

  a. Records for each Delivery Order, indicating the number of hours of direct labor performed by labor category and separated as to contractor or subcontractor.

  b. Records of all direct non-labor costs.

REQUEST FOR CONTRACTUAL PROCUREMENT – NAVCOMPT FORM 2276 (8 PT) (REV. 8-81) S/N 0104 LF-702-2761 Page 1 of 1   Pages

1. THIS REQUEST MUST BE ACCEPTED ON A DIRECT CITATION BASIS ONLY AND IS SUBJECT TO THE CONDITIONS LISTED ON THE REVERSE SIDE.							2. DOCUMENT NUMBER C00001-90-XXX8100

3. REFERENCE NUMBER	4. FUNDS EXPIRE ON 30 Sep 91.	5. OMS RATING	6. PRIORITY	7. DATE REQUIRED 31 Aug 90	8. AMENDMENT NO BASIC

9. FROM	10. FOR DETAILS CONTACT:
Commandant of the Marine Corps Headquarters, U.S. Marine Corps Washington, D.C. 20380-0001	Capt I.M. Responsible Project Officer, CCI AV: 224-0001

11. TO:	12. MAIL INVOICES TO:
UIC Purchasing and Contracting, Marine Corps Combat Development Command (MCCDC) P.O. Box 22134-1305	CMC (CCI) Washington, D.C. 20380-0001 ATTN: Ms. L.E. Phant

13.	ACCOUNTING DATA TO BE CITED ON RESULTING CONTRACTS									
A. ACRN	B. APPROPRIATION	C. SUB HEAD	D. OBJ. CLASS	E. BU. CONTROL	F. SA	G. AAA	H. TT	I. PAA	J. COST CODE	K. AMOUNT
AA	1701106	2790	000	0027	0	000027	2d	000000	CC409EDP8100	$62,591.00

14. AMOUNTS WILL NOT BE EXCEEDED IN THE OBLIGATION DOCUMENT WITHOUT PRIOR WRITTEN APPROVAL FROM THE ISSUER.	L. TOTAL THIS DOCUMENT	$62,591.00
	M. CUMULATIVE TOTAL	$62,591.00

15.
PROCUREMENT BY CONTRACT OF THE FOLLOWING ITEMS IS REQUESTED
THESE ITEMS ☐ ARE ☐ ARE NOT INCLUDED IN THE INTERSERVICE SUPPLY SUPPORT PROGRAM AND
REQUIRED INTERSERVICE SCREENING   ☐ HAS ☐ HAS NOT BEEN ACCOMPLISHED

A. ACRN	B. ITEM NO.	C. FSC	D. DESCRIPTION (MAT. STOCK NO., SPEC. AND/OR DRAWING NO., ETC.)	E. QUANTITY	F. UNIT	G. ESTIMATED UNIT PRICE	H. ESTIMATED AMOUNT
			Ref: (a) Integration Support Contract No. N66032089D-0001 This amendment is issued to provvide additional funds for the reference contract in support of MM Maintnenace. A copy of the obligation document should be provided to CCI and Disbursing (ATTN: Disbursing Clerk) Copy to: CCI				

16. SEE ATTACHED PAGES FOR DELIVERY SCHEDULES, PRESERVATION AND PACKAGING INSTRUCTIONS, SHIPPING INSTRUCTIONS AND INSTRUCTIONS FOR DISTRIBUTION OF CONTRACTS AND RELATED DOCUMENTS.	I. GRAND TOTAL $62,591.00

17. TRANSPORTATION ALLOTMENT (Used if FOB Contractor's plant)

18. I CERTIFY THAT THE FUNDS CITED ARE PROPERLY CHARGEABLE FOR ITEMS REQUESTED.	AUTHORIZING OFFICIAL (NAME, TITLE AND SIGNATURE) Rex M. Carrs, Maj, Head, CCC	DATE

19. THIS REQUEST IS ACCEPTED AND THE ITEMS WILL BE PROVIDED IN ACCORDANCE HEREWITH.	ACCEPTING OFFICIAL (NAME, TITLE AND SIGNATURE)	DATE

FIGURE 4-02
NAVCOMPT FORM 2276

```
                                                  5230
                                                  CCIS-31
                                                  (Date)

From:   Contracting Officer, Purchasing and Contracting
        Division MCCDC, Quantico, Virginia   22134-1395

To:     (Functional Area/User)

Subj:   Appointment as Contracting Officer's Technical
        Representative (COTR)

Ref:    (a)  Delivery Order No. (Number) with Computer Sciences
        Corporation (Name of Delivery Order)

1.  You are hereby appointed to serve as the COTR on the above
referenced order.

2.  Your authority and responsibilities as the COTR are as
    follows:

    (a)  Inspect and accept all deliverables and services
         furnished under the Delivery Order

    (b)  Monitor all performance under the order to include
         the conduct of surveillance and inspections as
         necessary to determine compliance with all
         provisions of the Delivery Order and the basic
         contract.

    (c)  Document all noted discrepancies and insure that the
         Contractor is advised of all discrepancies.  Advise
         Contracting Officer of any issues not immediately
         resolved.

    (d)  Advise the Contracting Officer of any potential
         problems that may impact on Contractor's performance.

    (e)  Assist, as requested by the Contracting Officer, in
         negotiating revisions, additions, or deletions to the
         Delivery Order.

    (f)  Certify invoices in a timely manner.

    (g)  Insure that no deviations from the terms and
         conditions of the contract, including deviations
         from the Statement of Work, are permitted or
         authorized without written approval of the
         Contracting Officer.
```

FIGURE 4-03
COTR Appointment Letter

3. The authority delegated by this letter will remain in effect until expiration of the Delivery Order or until cancelled by separate letter, whichever comes first.

Copy to: (1)   CDPA
            (2)   Computer Sciences Corporation

FIGURE 4-03 (cont.)
COTR Appointment Letter

c. Nothing herein shall be deemed to excuse the Contractor
from maintaining records required by other provisions of this
contract.

The user should also maintain copies of proposals, status
reports, invoices, correspondence and memorandums from meetings.

4.2. FUNDING. All funds are provided by the functional area
requesting the work. All Delivery Orders must cite the quantity
(work to be performed) and specific appropriation data to be used
in support of each task.

4.2.1. Invoices. As invoices are received by the Contracting
Officer, they will be forwarded to the functional manager for
validation. They will then be forwarded to disbursing for
payment. All billings should be processed expeditiously.

4.2.2. Contractor Vouchers. The Contractor will prepare
vouchers on a Standard Form 1034 (in quadruplicate unless
otherwise specified). The vouchers will be submitted with a
Certificate of Performance to the DCAA and the Ordering Officer
for approval before payment. Vouchers will be submitted on not
more than a biweekly basis with no more than sixty days between
performance and submission of voucher. A single voucher for the
contract may be provided for each billing period, provided that
the Contractor submits supporting documentation for each Delivery
Order or vouchers will be segregated by individual Delivery
Orders. The following information will be included on all
vouchers for both billing period and the cumulative to date
amounts:

a.   Delivery Order Number and Contract Number

b.   Labor charges by manhours and cost

c.   Overhead

d.   Premium time and charges

e.   Material, subcontracting cost

f.   Travel cost

g.   G & A cost

h.   Consultant charges

i.   Fee

j.   Other Direct Costs (ODC)

The DCAA will review the voucher and forward it to the Ordering
Officer. The Ordering Officer will assure acceptance of
deliverables by the COTR for Certification of Performance. Final

payment will be predicted upon the execution of a DD Form 250, Material Inspection and Receipt Report.

4.2.3. Payment Address. Payment for performance at all sites under this contract shall be sent to the following address:

    Computer Sciences Corporation
    Applied Technology Division
    P.O. Box 15673
    Baltimore, MD 21253

4.2.4. Invoice Charges. All requirements and information pertaining to the Contractor's invoicing and charges can be found in the contract under Section G-5. The SCO is the only person authorized to approve changes in any of the requirements under this contract. In the event the Contractor effects any change at the direction of any person other then the SCO, the change will be considered to have been made without authority and no adjustment will be made in the contract price to cover any increase in charges incurred as a result thereof.

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Chapter Table of Contents

Chapter 5

PERFORMANCE EVALUATION PROCESS

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Chapter 5

PERFORMANCE EVALUATION PROCESS

5.1. TYPE OF CONTRACT. Since the ISC is an indefinite delivery, indefinite quantity contract with Delivery Orders that are issued on a cost-plus-award-fee basis, the Contractor has a Defense Contract Audit Agency (DCAA) approved accounting system. The contract provides for performance by the Contractor only of efforts formally defined and issued under individual Delivery Orders which fall within the general scope of the contract. The grade awarded for the Contractor's performance determines the amount of award fee that the Contractor receive.

5.2. PERFORMANCE EVALUATION BOARD (PEB). The proper administration of the award fee provisions of the contract is the responsibility of the Marine Corps Contracting Officer. The determination of award fee has been delegated to a PEB whose responsibilities include the recommendation of an award fee to the Fee Determining Official (FDO) based on Contractor performance. The PEB consists of directors of the central design activities and representatives from the HQMC Information Systems Working Group (ISWG). The FDO for this contract is the HQCOR, (CCI). The PEB will convene twice each year, February and August (i.e. 1-91 or 2-91).

5.3. PREPARATION OF SEMIANNUAL PERFORMANCE EVALUATION. The Contractor's performance is evaluated semiannually for work performed during the evaluation period. It is the responsibility of the COTR to provide fair, impartial and timely evaluations to the evaluation board for those Delivery Orders under their cognizance. The HQCOR will send a notification to all SKOs of the evaluation closeout date and instruct them to notify the COTRs that they must complete the Contractor Evaluation Worksheets for each Delivery Order invoiced during that evaluation period. Since all invoices for work performed during the evaluation period do not arrive in time for processing by the closeout date, the work is still evaluated, however, the dollar amount will not be included in the evaluation period totals. These will then be submitted to the next evaluation board after the invoice is processed. This process will ensure that correct totals are reflected and that work already evaluated will not be evaluated again. Appendix I contains the Fee Determination Plan. A copy of the Contractor Evaluation Worksheet is included in the plan as well as a timeline of events of the evaluation process. All of the forms and correspondence used in the evaluation process are considered Sensitive Unclassified information and must be safeguarded appropriately during their use, transmittal and storage.

5.4. CONTRACTOR EVALUATION CRITERIA CATEGORIES. The COTR is required to evaluate the Contractor's performance in three main areas. Technical, Cost, and Management Effectiveness. These

three categories are in accordance with the guidelines set forth
in the Contract, Section H-41. An award fee will be given based
on satisfactory or above performance in all three categories.

5.4.1. Technical Evaluation - Category A. Evaluation in this
category will be based on:

    a. Employment of appropriate procedures.

    b. Work results technically accurate and valid.

    c. The production of error-free software or other products
which conform with the requirement established in the contract or
by individual Delivery Orders.

    d. Conformance to the end product with the goals of the
individual Delivery Order. (i.e., did the product or service not
only meet the minimum stated standards and criteria, but did the
goods or services meet the goals of effectiveness and economy of
design and/or implementation?)

    e. Maintain program schedules and delivery.

    f. Prioritize tasks, maintain schedules, meet milestones and
delivery dates established by work assignments or program plans.

5.4.2. Cost Evaluation - Category B. Evaluation in this
category is based on:

    a. Accurate estimatiion of costs, including category of
labor, man-hours, travel, and other cost elements that are
required to perform tasks and actual compliance with these cost
estimates.

    b. Degree of control over incurred cost as evidenced by
estimated and actual cost.

    c. Establishment of priorities to obtain the most effective
productivity without use of priced overtime.

    d. Exercise of good management principles to minimize idle
time and other nonproductive time.

    e. Effectiveness of management efforts to produce quality
work at a minimum cost to the Government.

    f. Use made of internal administrative reports to achieve
maximum productivity at minimum cost to the Government, e.g.,
cost/schedule management system.

    g. Use of and accurate visibility into cost and the
appropriate justification for use of subcontracts and purchases.

5.4.3. <u>Business Management Evaluation - Category C</u>. Evaluation of this category is based on the following:

    a. Effective and economical organization of all areas of effort, including management and technical teams required to meet work requirements.

    b. Establishment of internal controls, adequate and economical managerial staffing to assure proper supervision of the work force and proper utilization of the assigned skills.

    c. Direction of the work force to accomplish assigned tasks in response to the urgency of need.

    d. Timeliness, accuracy, and comprehensiveness of cost reporting.

    e. Timeliness of response to requests for Delivery Order proposals and modifications thereto.

    f. Coordination with cognizant Marine Corps officials to resolve problems that may arise in communication, workload distribution, planning, scheduling, overtime, idle time or other appropriate areas.

    g. Effectiveness in securing and retaining qualified personnel.

    h. Establishment and maintenance of a personnel mix suitable for accomplishment of the assigned tasks.

    i. Versatility of personnel in performance of interrelated tasks.

    j. Effectiveness of the Contractor's training program.

    k. Success in effectively controlling labor turnover.

5.5 <u>LETTERS OF APPRECIATION</u>. It is the policy of the Marine Corps that all letters of appreciation for contractor personnel be sent to CMC (CC) or CMC (LBC) for official transmittal to the Contractor. The basis for this requirement is to ensure that such letters come to the attention of the PEB and are duly considered as part of the PEB's award fee deliberations. The use of letter of appreciation is a method to provide recognition to contractor personnel (either individuals or groups) who have performed in an exemplary manner. These letters perform a dual function of recognition and reward in that they inform the Marine Corps as well as contractor management of superior individual performance while also becoming a part of the individual's personnel file.

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Appendix A

REFERENCES

1. MCO 5271.1, USMC Information Resources Management Standards
        and Guidelines Program.

2. MCO P5231.1B, Life Cycle Management for Automated
        Information Systems (LCM-AIS) Projects. (22
        Mar 90)

3. Director, C4, LOI of 27 May 1986, USMC System Development
        Methodology (SDM).

4. Mid-Range Information Systems Plan (MRISP).

5. MCO P5510.14, Marine Corps ADP Security Manual.

6. MCO P5230.14, Marine Corps Data Network (MCDN) Management
        Control Manual.

7. MCO 5211.2A, Privacy Act of 1974.

8. MCO 5200.24, Establishment, Maintenance, Review, and
        Improvement of Management Control Systems.

9. CMC ltr of 10 May 1985, Data Access Security Support Plan.

10. MCO 5234.2, Configuration Management of Automated Data
        Processing (ADP) System Software.

11. MCO 5230.15, Data Base Administration.

12. MCO 1510.34, Individual Training Standard (ITS) System.

13. DOD-STD-2167, Defense Systems Software Development, 4 Jun
        85.

14. Applicable FIPS Publications.

15. Mil-Hdbk-245B, Preparation of Statement of Work (SOW).

16. Office of Federal Procurement Policy Act (41 USC 423).

A-1

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Appendix B

TERMS AND ABBREVIATIONS

ADP: Automatic Data Processing

ADPE: Automatic Data Processing Equipment

ADPSO: ADP Selection Office

AIS: Automated Information System

AMSDL: Acquisition Management System Data List

C4:   Command, Control, Communications and Computer (C4) Division,
C4I2 Department, HQMC

CDA: Central Design Activity

CDRLs: Contract Data Requirements List (DD Form 1423).   Lists
specific contract requirements by number and cross references
those numbers to detailed Data Item Descriptions (DIDs).

Class I: An AIS that is sponsored by a Headquarters Marine Corps
(HQMC) functional manager and provides Marine Corps-wide support.
The following subclassifications are provided to define the
processing environment and autonomy of the AIS:

   Class IA - A Class I AIS that supports the data input and
output functions of a parent Class IB system (i.e., a Class IA
acts as a feeder system to a Class IB system), provides Marine
Corps-wide support, and is processed on small workspace computers
organic to the supporting establishment and/or the FMF.

   Class IB - A Class I AIS that operates on a mainframe
computer.

   Class IC - A stand-alone AIS that provides Marine Corps-wide
support and is processed on small workspace computers organic to
the supporting establishment and/or the FMF.   Class IC systems
have no parent Class IB application.

Class II: An AIS that supports the local needs of a HQMC staff
agency, an FMF unit, or a supporting establishment organization.
The following subclassifications are provided to define the
processing environment and autonomy of the AIS:

   Class IIA - A Class II AIS that supports the data input and
output functions of a parent Class IIB system, (i.e., a Class IIA
acts as a feeder system to a Class IIB system) and is processed
on small workspace computers organic to the supporting
establishment and/or the FMF.

Class IIB - A Class II AIS that operates on a mainframe computer.

Class IIC - A stand-alone AIS that supports the local needs of a HQMC staff agency, an FMF command, or a supporting establishment organization and is processed on small workspace computers organic to the supporting establishment and/or FMF. Class IIC systems have no parent Class IIB application.

Class III: An AIS that supports a HQMC staff agency, an FMF unit, or a supporting establishment and is sponsored by the Government agency external to the Marine Corps. The implementation of the AIS is mandated by higher headquarters. The following subclassifications are provided to define the processing environment and autonomy of the AIS:

Class IIIA - A Class III AIS that supports the data input and output functions of a parent Class IIIB system (i.e., a Class IIIA acts as a feeder system to a Class IIIB system) and is processed on small workspace computers organic to the supporting establishment and/or the FMF.

Class IIIB - A Class III AIS that operates on a mainframe computer.

Class IIIC - A stand-alone Class III AIS that supports a HQMC staff agency, an FMF unit, or a supporting establishment organization; that is sponsored by a Government agency external to the Marine Corps; and is processed on small workspace computers organic to the supporting establishment and/or the FMF. Class IIIC systems have no parent Class IIIB application.

CM: Configuration Management is a discipline which applies technical and administrative direction and surveillance to identify and document the functional and physical characteristics of hardware and software items.

COR: The Contracting Officer's Representative represents the Contracting Officer and is responsible for the general administration of the contract.

COTR: Contracting Officer's Technical Representative. The COTR represents the Contracting Officer in technical matters involving deliverables.

CSC: Computer Sciences Corporation

DCAA: Defense Contract Audit Agency

Deliverable Product: An acceptable deliverable product or item is the result of the performance of services in response to a Delivery Order.

Delivery Order (D.O.): The contractual document used to specify and authorize work to be accomplished by a contractor to satisfy a Government requirement.

DIDS: (Data Item Description, DD Form 1664), contractual description for a specific task.

FAR: Federal Acquisition Regulations

FDO: Fee Determining Official. The Marine Corps official who designates technical and administrative personnel to observe, examine, review and report on the performance of the Contractor. The FDO for the ISC is Director, C4 Division.

FIRMR: Federal Information Resources Management Regulation. The primary regulation for use by Federal or executive agencies in their management, acquisition, and use of certain ADP, records, and telecommunications information resources, as applicable.

GPM: Government Program Manager is the individual in the user organization designated by the Marine Corps Contracting Officer to oversee the development of an AIS.

HQCOR: The Marine Corps responsible Contracting Officer's Representative for the ISC.

IRM: Information Resources Management is the planning, budgeting, organizing, directing, and control associated with the creation, collection, processing, transmission, dissemination, use, storage, and disposition of information, both automated and non-automated.

IS-PM: Information Systems-Project Manager. Contractor position responsible for overall performance of contractor provided information resources associated with the AIS under his purview. Primary point of contact for the government COTR.

IS-SM: Information Systems-Site Manager. Contractor position responsible for coordinating and supervising the efforts of several IS-PMs. Separate from and senior to the IS-PM.

IS-PT: Information Systems-Project Team. Staff required by each IS-PM to successfully meet the requirements of those task orders issued by the SKO.

ISC-PM: The Integration Support Contractor-Program Manager (ISC-PM) will be the individual with overall responsibility, on the contractor's side, for the performance of all contractor efforts. This individual will also be the primary point of contact for the PCO, SCO, HQCOR, SKO and SCOR.

ISC-PT: The ISC-Program Team will be comprised of that staff required by the ISC-PM in order to successfully provide guidance and direction to all contractor-provided information resource

personnel working in support of the Marine Corps AIS
requirements.

ISC Program Office: Commandant of the Marine Corps (Code CC)

ISSC: Information Systems Steering Committee. The ISSC makes
recommendations to the ACMC on major decisions in the ADP arena.

ISWG: Information Systems Working Group. The ISWG is made up of
representatives from the major functional areas, FMF, and SE.
The ISWG responds to taskings from the ISSC.

LCM: Life Cycle Management

Non-severable: A task or delivery order which can not be
completed in a given fiscal year due to the scope of the task.

PCO: Procuring Contracting Officer

PEB: Performance Evaluation Board. The responsible contract
administration body that makes the final contractor award fee
recommendation.

Project Manager (PM): Individual responsible for the development
of the system as assigned by the functional manager for the
system.

Project Plans: Include - Project Management Plan, Quality
Assurance Plan, Configuration Management Plan, Data Base Plan,
Data Base Conversion Plan, Telecommunications Support Plan,
Training Support Plan, Test Plan, Implementation Plan, Automatic
Data Processing Equipment Plan

QA: Quality Assurance

RFP: Request for Proposal

SCO: Successor Contracting Officer. Responsible, after award of
contract for resolving legal issues, determining contract scope
matters, interpretation of contract issues, and other contract
problems which cannot be resolved at a lower level.

SCOR: Site Contracting Officer's Representative   There will be
an SCOR at each of the MCCDPAs.

SKO: Site Contracting Officer. Responsible to the SCO for
resolving legal issues and interpreting contract issues at the
MCCDPA level. The SKO is also responsible for negotiation and
issuance of individual Delivery Orders.

SNCR: Statement of Non-availability of Computer Resources;
required when using the ISC.

<u>SOW</u>: Statement of Work. This establishes nonspecification tasks for contractor effort and identifies the work effort to be performed expressed as minimal needs.

<u>Task</u>: A task is a unit of ADP support work in a defined subject or application area, having one or more related deliverable products.

<u>WBS</u>: Work Breakdown Structure. Work Breakdown Structure is the level of detail in the top-down division of work planned to perform the task. It is this breakdown that defines the individual work packages.

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Appendix C

CONTRACT SERVICES

The following is a list of the task descriptions and personnel requirements supported under the ISC. For additional information about a specific task, a paragraph reference number has been provided after each task which coincides with the the ISC.

TASK DESCRIPTIONS

* **NOTE:** Any and all ADPE purchased on behal for the Government,
be it hardware or software, will become the property fo the
Government. In no case will the amount of any ADPE acquisition
exceed $300,000.00 per AIS over the life of the contract.

PERSONNEL REQUIREMENTS

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Appendix D

STATEMENT OF WORK (SOW)

1. <u>General</u>. The SOW explicitly details what the contractor must accomplish. Military Handbook, MIL-HDBK-245 provides the most current available guidance on the preparation of SOWs. This appendix was included in the publication for guidance and assistance to the ISC user. It is essential that the writer of the SOW take the necessary time in identifying the tasks to be completed and their acceptance criteria before writing the SOW. Once the SOW is completed, the Delivery Order is the vehicle that initiates work.

2. <u>Delivery Order Issuance Procedures</u>. Initiating contractor effort under a Delivery Order involves a two-step process.

    a. The SOW must be forwarded to the appropriate organization for review and transmitted to the Contracting Officer. The Contracting Officer, will, in turn, provide the SOW to the ISC Contractor for development of a technical and cost proposal. It is at this point that the scope of the Delivery Order should be clearly established. Any meeting or discussions required between the Marine Corps and the ISC Contractor should take place before the Delivery Order is issued. All disagreements should be resolved at this time. That is why it is essential that requirements, project objectives, assumptions, milestones and constraints, and project deliverables are clearly defined.

    b. The issuance of the Delivery Order occurs after all cost and technical issues have been negotiated. The Delivery Order will incorporate the final, agreed-to SOW by attachment.

3. <u>Sample SOWs</u>. The two sample SOWs contained in Figure D-01 are what the Manpower Management Information Systems Division follows when using the ISC. A typical SOW consists of a Title Page, Table of Contents, Scope, Applicable Documents, Requirements, and Status Reports.

    a. <u>Title Page</u>: A title page is mandatory for each SOW. It must contain an activity name.

        (1). <u>Document Title</u>. The document title should be a descriptive title that identifies both the system and the general nature of the work to be performed, (i.e., Statement of Work for Small Systems Study within Manpower and Reserves Affairs Department, Headquarters, Marine Corps).

        (2). <u>Date</u>. The date of the final SOW.

        (3). <u>Document Number</u>. This is an internal section number used to identify the SOW.

        (4). <u>Version Number</u>. To avoid confusion between SOW's that have been updated, it is wise to identify the SOW

document with the latest version number, (i.e., 1.0, 1.1, 1.2).
Draft SOWs should also have their own version series as well.

       (5). <u>Prepared for</u>: This is the contracting office
which will process the SOW.

       (6). <u>Prepared by</u>: This is the functional activity
writing the SOW.

       (7). <u>Distribution Statement</u>. This is always,
"APPROVED FOR PUBLIC RELEASE, DISTRIBUTION UNLIMITED".

   b. <u>Table of Contents</u>. The Table of Contents is required for
any SOW exceeding five pages in length. However, it is
recommended for all SOWs. It should identify topics down to at
least two levels, but no more than four.

   c. <u>Scope</u>. Provide a brief description of the purpose of the
SOW and what type of work it covers. This is important because
if at some later date you need to modify or add tasks to the
Delivery Order, you can only do so if the work is within the
scope of the original SOW. The appropriate Contract Line Item
Number (CLIN) must be referenced with the associated paragraph
number from the ISC, if possible. There is a different set of
CLINs for each site (HQMC, Quantico, Albany and Kansas City) and
for each year of the contract. Provide sufficient background
information so that the contractor will understand the nature of
the work to be performed. You are free to say as much or as
little as you deem necessary for the particular work effort. As
a guide, the following is suggested: Identify any previous work
in this area. Give the full name and address of the user
activity for whom the work is being performed. Define any terms
or acronyms. Briefly describe the current system (if any) and
the type of hardware or software used. Identify the problems or
deficiencies associated with the current capability. End this
section with a subparagraph defining briefly the objectives of
the SOW. Generally, the subparagraph is a synopsis of the tasks
listed in the requirements paragraph of the SOW.

   d. <u>Applicable Documents</u>. This paragraph is equivalent to
the reference section of a Naval letter. All documents cited in
the requirements section of the SOW must be listed here. The
contractor has copies of the IRM Standards and other frequently
used AIS directives therefore, there is no need to attach them as
part of the SOW. However, any specific system documentation that
is cited should be provided to the contractor.

   e. <u>Requirements</u>. This is the section that tells the
contractor specifically what work they must perform. This
section is one of the most important parts of the SOW. Only
those tasks explicitly defined in the requirements section are
binding on the contractor. The applicable CLIN should be
explicitly identified in this section of the SOW. Refer to
chapter 3 of this document and to Appendix A of Mil-Hdbk 245B for
guidelines on wording your requirements. The requirements

paragraph must include a "Period of Performance." Indicate the total amount of time the project is expected to last. Starting and stopping dates may be included only for planning purposes or if the project is time sensitive. A time period for each task/subtask may also be included. Bear in mind that the contracting process takes time and the contractor has three weeks after the delivery order is issued to assemble a staff. You may state that the contractor can propose alternative schedule times if you want to allow that latitude. You must include a statement that overtime is not anticipated or authorized. If the period of performance crosses into the next fiscal year, the task may be considered severable and should be funded for each fiscal year according to the break point. If the task is nonseverable, a justification statement must be included in the cover letter. A paragraph may be included defining in general terms the technical objectives and goals of the project. This paragraph can be used to describe any special requirements or expertise the contractor must possess to successfully complete the project. The "Detailed Tasks" are the heart and soul of the SOW. They tell the contractor exactly what must be accomplished. Identify the specific tasks to be performed. Be sure to refer to the applicable documents paragraph. The tasks must be within the scope of the work and support the objectives stated in the SOW.

    f.   <u>Status Reports</u>. If the period of performance exceeds two months, it must be stated that the contractor shall provide monthly status reports by the 10th working day of each month. If something is required and is not listed in the ISC paragraph, those requirements must be identified in the status report.

TABLE OF CONTENTS

HEADQUARTERS, U.S. MARINE CORPS
WASHINGTON, D.C. 20380-0001

Statement of Work for
Implementation of the
Table of Manpower Requirements System (TMR)

21 December 1989
MPI Document Number
SOW-TMR-IP
Version 1.0

Prepared for:

Purchasing and Contracting
Marine Corps Combat Development Command
P.O. Box 1395
Quantico, Virginia 22134-1395

Prepared by:

Manpower Management Information Systems Branch
Manpower Department
Headquarters, U.S. Marine Corps
Washington, D.C. 20380-0001

APPROVED FOR PUBLIC RELEASE
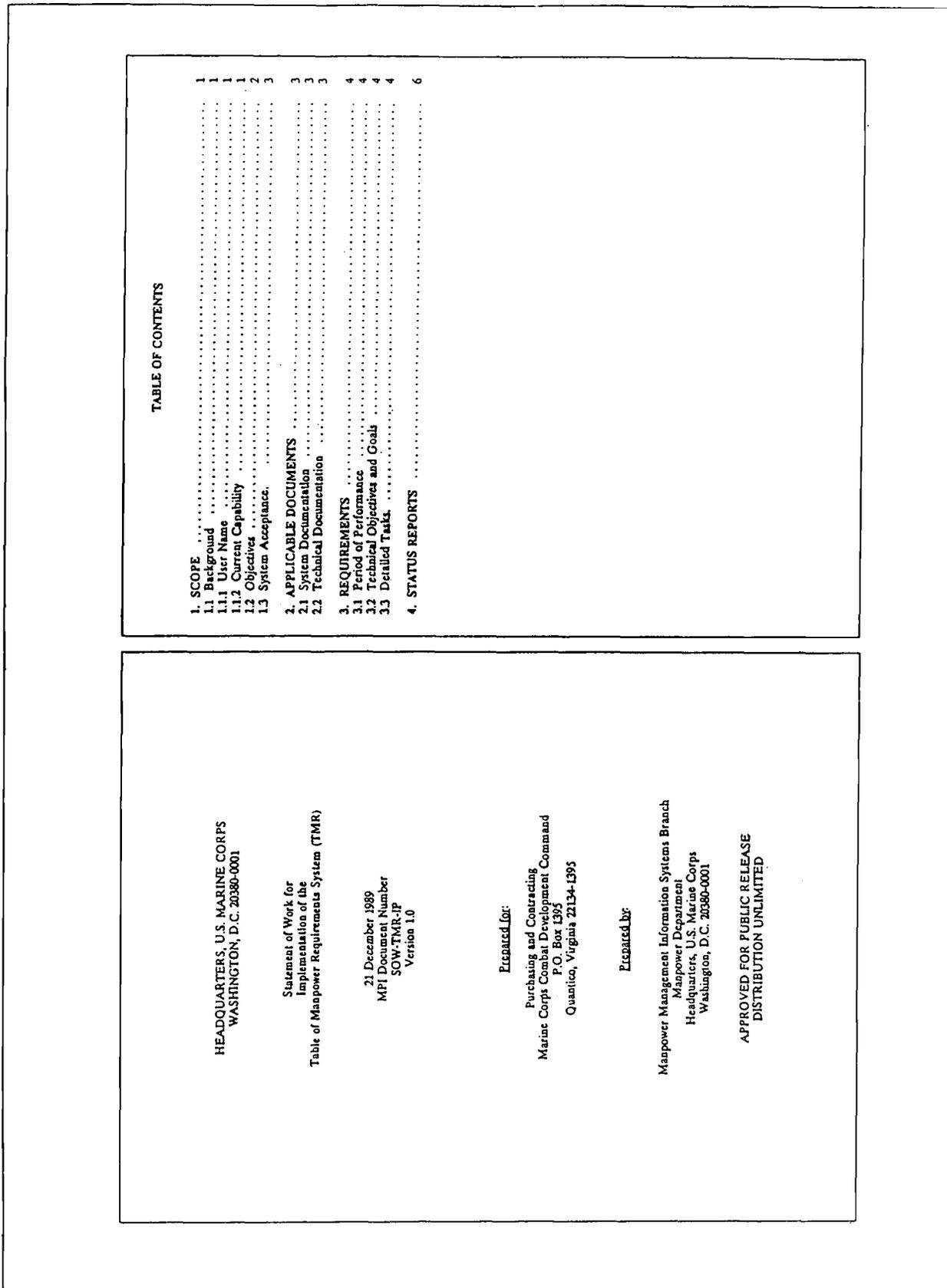DISTRIBUTION UNLIMITED

FIGURE D-01
Sample Statement of Work

1. SCOPE. The purpose of this statement of work (SOW) is to acquire contractor services to continue the development effort for the Table of Manpower Requirements/Troop List System. CLIN 0008 and paragraph C-2.11 of Contract No. N66032-89-D-0001, Integrated Support Contract (ISC), are applicable to this project.

1.1 Background

1.1.1 User Name. Manpower Control Branch (MPC), Manpower Plans and Policy Division, Manpower and Reserve Affairs Department, and Requirements Validation and Analysis Branch (RPR), Requirements and Programs Division, Headquarters, U. S. Marine Corps, Washington, DC 20380-0001.

1.1.2 Current Capability

a. The Table of Manpower Requirements (TMR) System is used by the Marine Corps to manage Tables of Organization (T/O's) which reflect the authorized structure of all Marine Corps units. A variety of T/O's are maintained for different purposes. Operational T/O's specify the wartime billet requirements of the Fleet Marine Force (FMF) and the currently authorized billet requirements of the non-FMF. Separate wartime T/O's are also maintained for non-FMF units. In addition, planning T/O's are maintained to represent the projected structure of the Marine Corps over a seven year planning horizon. The Manpower Control Branch (MPC) is responsible for maintaining the T/O's via the TMR System.

b. The Troop List (TL) System is closely related to the TMR System. The Troop List is developed by the Deputy Chief of Staff for Requirements and Programs (Code RP) and identifies the end strength and composition for each organization in the Marine Corps, generally at the Company Level or above. The Troop List reflects the manpower levels authorized in the Program Objective Memorandum (POM) process. The T/O's maintained in the TMR System must be consistent with the structure information in the Troop List System.

c. Both the TMR and TL Systems support critical functions in Manpower and throughout the Marine Corps. Output from these systems is used as input to several key manpower models. For example, the Manning Level Process (MLP) uses information from these systems to produce the Authorized Strength Report. This report is the basis for all manpower planning and personnel assignment requirements. Data from the TMR and TL Systems is also used by both MPC and RPR as well as the functional T/O sponsors, and other elements of Headquarters Marine Corps and field commands that support short, intermediate, and long range planning relating to the Marine Corps structure and mission. The TMR and TL Systems also support Marine Corps readiness reporting to the Department of the Navy (DON), Department of Defense (DOD), and the Congress.

1.2 Objectives. The TMR/TL System has been designed and the TMR portion of this integrated system has been coded by Decision Systems Associates, Incorporated pursuant to a previous contracting effort. The TMR portion of the system was developed using PC-CICS from Micro Focus incorporated to emulate a mainframe environment. It is the intent of this SOW to continue with the next phase in the development of the TMR/TL System. The specific objectives of this SOW are to:

(1) install and test the new TMR System source code and executable units on the IBM 3090 mainframe located at the Marine Corps Central Design and Programming Activity, Quantico, VA using the Test System (Note: Testing on the Production System is prohibited);

(2) update the Datamanager data dictionary and the ADABASE DBMS to accommodate the new TMR system;

(3) prepare the users manual, computer operations manual, pre-delivery test pland and implementation plan for the TMR portion of the system;

(4) implement and test the TMR portion of the system within Headquarters Marine Corps (Code MPC) while running in parallel with the current system; and

(5) train the users and operators of the system at Headquarters Marine Corps (MPC) and the appropriate/affected ADPE personnel at the Marine Corps Central Design and Programming Activity, Quantico, VA.

Accomplishing these objectives requires a contractor with knowledge of the underlying design of the TMR System and the previous development efforts. Decision Systems Associates, Inc. (DSA) has worked extensively on the old TMR System and, as the developer of the new system, is especially well-suited to complete this project without an extensive learning curve or loss of previously gained expertise.

1.3 System Acceptance. Please note that the installation and testing of the source code and executable unit within the MCCDPA does not constitute the Government's acceptance of the TMR/TL System or any part thereof. It is intended simply to place the system within an environment similar to that in which it will ultimately operate and to allow further development, enhancement and testing within that environment. All further development, enhancement, and testing within the MCCDPA, Quantico environment shall be done on the Test System. Such work is prohibited on the Production System. Prior to cross-over to the Production System, the Government will prepare an Acceptance Test Plan per IRM-5231-14 and will perform acceptance testing on the TMR/TL System.

2. APPLICABLE DOCUMENTS

2.1 System Documentation. A database of the life cycle documentation for the current manpower information systems is maintained by Headquarters, Marine Corps (Code MI-40). A complete listing of all available documentation can be found in "Life Cycle Documentation System Sponsored Automated Information Systems (DOC-MPR-AIS)." This system specific documentation may be seen by contacting the Head, MI-40 at 694-4115. Copies will be provided, if available.

2.2 Technical Documentation

a. MCO P5231.1A, Life Cycle Management for Information Systems Projects," U.S. Marine Corps, 17 Sep 87. This order establishes policies and regulations governing the development, implementation, operation, and management of information systems (IS's) projects.

b. Marine Corps Order 5271.1, "Information Resources Management (IRM) Standards and Guidelines Program," U.S. Marine Corps, 19 Sep 86. This order establishes the IRM standards for the Marine Corps and authorizes the development and distribution of

FIGURE D-01 (cont.)
Sample Statement of Work

publications that provide technical direction for management of IRM activities. The following IRM's are specifically applicable to this SOW:

(1) IRM-5230-02 Project Deliverable Style Manual;
(2) IRM-5231-07 Users Manual;
(3) IRM-5231-08 Computer Operations Manual;
(4) IRM-5231-16 Implementation Plan;
(5) IRM-5231-14 Test Plan;
(6) IRM-5234-01 Programming Standard;
(7) IRM-5234-02 Man-Machine Dialogue;
(8) IRM-5231-11 Data Base Plan;
(9) IRM-5231-13 Data Base Conversion Plan;
(10) IRM-5233-06 Library Management System;
(11) IRM-5235-01 Data Dictionary;
(12) MCCDPA, Quantico, Users Guide (Draft); and
(13) CICS Standards dated December, 1988 by CICS Working Group.

3. REQUIREMENTS

3.1 Period of Performance. The period of performance for this project is seven calendar months from award of the delivery order. All work is to be performed during normal working hours per paragraph H-34.6 of the ISC contract. Overtime is neither anticipated nor authorized. For planning purposes, the SOW assumes a start date of 1 June 1989 and a completion date of 31 December 1989. The contractor shall identify specific start and end dates for each task and due dates for each deliverable as a part of the time-phased start-up plan required under paragraph C-2.4.2.1 of the ISC contract.

3.2 Technical Objectives and Goals. Because of the technical nature of the manpower models and the necessity that current manpower operations not be interrupted, the contractor shall be thoroughly conversant with both the TMR and TL processes and the preceding development efforts on the combined TMR/TL System. Training the contractor in aspects of either process or the preceding development effort is not within the scope of this SOW.

3.3 Detailed Tasks. The Government has identified the following specific tasks within the scope of work to be performed by the contractor per MCO 5231.1A and MCO 5271.1. System documentation is available for the systems covered by this SOW per paragraph 2.1 above.

3.3.1 TASK 1: INSTALL TMR CODE ON CDPA, QUANTICO, MAINFRAME. The contractor shall install the source code and executable unit for the new TMR System on the IBM 3090 mainframe at the Central Design and Processing Activity, Quantico, VA. The contractor shall ensure that the source code and executable unit complies with IRM-5234-01, IRM-5234-02, IRM-5231-11, IRM-5231-13, IRM-5233-06, IRM-5235-01, MCCDPA, Quantico, Users Guide (Draft), and the CICS Standards dated December 1988 developed by the CICS Standards Working Group. The contractor's attention is directed to paragraph C-2.11.9 of the ISC contract regarding ownership of Information System Software. Ownership is not to be confused with government acceptance of the software which will occur only after appropriate acceptance testing by the Government. Paragraph 1.3 above refers.

3.3.2 TASK 2: TMR DOCUMENTATION. The contractor shall produce new documentation for the TMR portion of the system per IRM-5230-02 (Project Deliverable Style Manual) and the following:

3.3.2.1 Subtask 2.1: The contractor shall produce a Users Manual for the TMR System per IRM-5231-07.

3.3.2.2 Subtask 2.2: The contractor shall produce a Computer Operators Manual/Runbook for the TMR System per IRM-5231-08.

3.3.3 TASK 3: IMPLEMENTATION AND TESTING. The contractor shall implement the TMR System within the Manpower Control Branch and shall perform detailed testing to ensure that the output of the new programs is consistent with the output of the old programs. All testing shall be done on the Test System. Testing on the Production System is prohibited.

3.3.3.1 Subtask 3.1: The contractor shall prepare an Implementation Plan per IRM-5231-16 and shall implement the TMR System per the plan as approved by the Government.

3.3.3.2 Subtask 3.2: The contractor shall identify specifically those requirements necessary to allow the old and new systems to run in parallel and, with Government approval, shall implement those requirements. The new TMR system must run on the Test System at the MCCDPA until accepted by the MCCDPA, Quantico as being ready for crossover to the production mode of operation. Running the new TMR system on the Production System is prohibited.

3.3.3.3 Subtask 3.3: The contractor shall prepare a Pre-Delivery Test Plan per IRM-5231-14 and shall test the TMR System per the plan as approved by the Government.

3.3.4 Subtask 3.4: The contractor shall report the results of pre-delivery testing in a Technical Pre-Delivery Test Results Report per IRM-5231-14.

3.3.4 TASK 4: TRAINING. The contractor shall conduct training in the use of the TMR System per paragraph H-29 of the ISC contract. This training shall be provided for members of the user community (users, operators, and managers) prior to testing of the system and shall consist of informal, hands-on instruction in the running and operation of the system, using both the Users Manual and the Computer Operations Manual as appropriate to the audience. This informal training does not necessitate the preparation of course outlines or lesson plans; however, training sessions will comply with paragraph H-29.c. For planning purposes the training will be conducted at Headquarters Marine Corps (HQMC), Washington, D.C. and the Marine Corps Central Design and Programming Activity (MCCDPA), Quantico, VA. Training shall consist of not less than two sessions at HQMC for user personnel and two sessions at the MCCDPA for ADPE personnel. The Marine Corps will provide a list of personnel requiring training not less than three weeks prior to the scheduled session.

4. STATUS REPORTS. The contractor shall provide monthly status reports per paragraph C-2.4.5 of the ISC contract.

FIGURE D-01 (cont.)
Sample of Statement of Work

TABLE OF CONTENTS

HEADQUARTERS, U.S. MARINE CORPS
WASHINGTON, D.C. 20380-0001

Statement of Work for
Small Systems Study within
Manpower and Reserve Affairs Department
Headquarters, Marine Corps

21 December 1989
MPI Document Number
SOW-Small Systems
Version 1.0

Prepared for:

Purchasing and Contracting
Marine Corps Combat Development Command
P.O. Box 1395
Quantico, Virginia 22134-1395

Prepared by:

Manpower Management Information Systems Branch
Manpower Department
Headquarters, U.S. Marine Corps
Washington, D.C. 20380-0001

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FIGURE D-01 (cont.)
Sample Statement Of Work

1. SCOPE. The purpose of this statement of work (SOW) is to acquire contractor services to conduct a survey of various automated computer systems/resources used within the Manpower and Reserve Affairs Department and to recommend the most economical means of maintaining these systems. CLIN 0019 and paragraph C-2.22 of Contract No. N(6)032-89-D-0001, Integrated Support Contract (ISC), are applicable to this project.

1.1 Background

1.1.1 User Name. Manpower Information Systems Division, Manpower and Reserve Affairs Department, Headquarters, U. S. Marine Corps, Washington, DC 20380-0001.

1.1.2 Current Capability. The Manpower and Reserve Affairs Department is supported by a variety of automated systems/models which assist manpower planners, analysts, and assignment officers in the effective and efficient use of manpower assets in peace and war. Many of the systems currently in use are in production at one of the Marine Corps Central Design and Programming Activities (MCCDPA's) and are formally maintained by the cognizant MCCDPA. Others are operated and maintained by commercial contractors. However, over the years, many Class II and III systems (dubbed "small systems" for the purpose of this SOW) have been developed both in-house and by commercial contractors and have not had formal maintenance procedures established. With the advent of the microcomputer, many action officers have developed their own "informal" systems/processes to assist them in their day-to-day duties. Some of these informal systems perform valuable functions and should be formalized as small systems in their own right or should be incorporated into existing systems as formal enhancements/modifications. At present, all system maintenance on these small systems is performed on an ad hoc basis. This makes proper planning and budgeting to support these systems impossible. The end result is less than effective systems and the inefficient use of maintenance resources.

1.1.3 Deficiencies. Many of the small systems addressed above are mission-essential to the Marine Corps. The effective use of these systems significantly adds to the Manpower Department's ability to use available personnel resources wisely, and hence directly bears on the Marine Corps' personnel readiness. If these small systems are to remain viable, they must be incorporated into a formalized maintenance program. Otherwise, they will deteriorate over time to the detriment of the manpower planning and assignment processes. Software maintenance requirements include such things as:

(1) updates or changes to the operating system under which the system runs;

(2) reconfiguration of computer hardware on which the system runs;

(3) maintenance or enhancement of common files or data dictionaries used by the systems;

(4) latent or undiscovered errors in programming or design; and

(5) changes in manpower policies or procedures on which the systems are based.

2.1 Objectives. The objectives of this project are:

(1) to develop a baseline document of all Class II and III systems in use within the Manpower and Reserve Affairs Department;

(2) to specifically identify existing small systems (as defined above) in use to support the manpower process within the Manpower and Reserve Affairs Department for which there is no formalized maintenance program; (2) to identify informal automated processes that should be incorporated into existing systems or are candidates for future development as small systems in their own right;

(3) to develop the most economically feasible alternative for the maintenance of these small systems.

2. APPLICABLE DOCUMENTS

2.1 System Documentation. A database of the life cycle documentation for the current manpower information systems is maintained by Headquarters, Marine Corps (Code MI-40). A complete listing of all available documentation can be found in "Life Cycle Documentation for Manpower Sponsored Automated Information Systems (DOC-MPR-AIS)." This system specific documentation may be seen by contacting the Head, MI-40 at 694-4115. Copies will be provided, if available.

2.2 Technical Documentation

a. MCO P5231.1A, Life Cycle Management for Information Systems Projects," U.S. Marine Corps, 17 Sep 87. This order establishes policies and regulations governing the development, implementation, operation, and management of information systems (IS's) projects.

b. Marine Corps Order 5271.1, "Information Resources Management (IRM) Standards and Guideline Program," U.S. Marine Corps, 19 Sep 86. This order establishes the IRM standards for the Marine Corps and authorizes the development and distribution of publications that provide technical direction for management of IRM activities.

3. REQUIREMENTS

3.1 Period of Performance. The period of performance for this project is three calendar months from award of the delivery order. All work is to be performed during normal working hours per paragraph H-34.6 of the ISC contract. Overtime is neither anticipated nor authorized. For planning purposes, the SOW assumes a start date of 1 July 1989 and a completion date of 30 September 1989. The contractor shall identify specific start and end dates for each task and due dates for each deliverable as a part of the time-phased start-up plan required by paragraph C-2.4.2.1 of the ISC contract.

3.2 Technical Objectives and Goals. Performing the tasks in this SOW requires a contractor with expertise in the overall Marine Corps manpower process and a familiarity with the organization of the Manpower and Reserve Affairs Department. Training the contractor in either of these aspects is not within the scope of this SOW.

3.3 Detailed Tasks. The Government has identified the following specific tasks within the scope of work to be performed by the contractor per MCO 5231.1A and MCO 5271.1. System documentation is available for the formal systems covered by this SOW per paragraph 2.1 above.

3.3.1 TASK I: The contractor shall conduct a detailed survey to identify all Class II and III automated systems and informal processes in use to support the manpower process within the Manpower and Reserve Affairs Department.

FIGURE D-01 (cont.)
Sample Statement Of Work

3.3.1.1 Subtask 11. The contractor shall interview each division head, branch head and section head within the Manpower and Reserve Affairs Department. During the section head interviews, the contractor may identify key section officers who should also be interviewed. The contractor will be required to conduct interviews at both Headquarters, Marine Corps and MCCDPA, Quantico, Virginia. The contractor shall prepare and present a detailed briefing to the Government Project Manager on the proposed plan for fulfilling the requirements of this SOW, to include a tentative interview schedule, prior to beginning the interview process. The contractor shall conduct this briefing per paragraph C.2.4.6 of the basic contract. For planning purposes, we estimate that approximately 100 interviews at an average of two hours each are required. To assist in planning an interview schedule, the organizational structure of the Department is available in HQO P5400.18B (Headquarters Marine Corps Organization Manual) and is outlined to the section level below:

(1) Manpower Analysis Evaluation and Coordination Division (MA)

(2) Special Correspondence Division (MC)

(3) Human Resources Division (MH)
(a) Corrections Branch (MHC)
(b) Educations Programs Branch (MHE)
(c) Family Programs Branch (MHF)
(d) Health Affairs Branch (MHH)
(e) Equal Opportunity Branch (MHE)
(f) Military Awards Branch (MHM)
(g) Personal Affairs Branch (MHP)
  (1) Casualty Section (MHP-10)
  (2) Dependency Determination Section (MHP-20)
  (4) Personal Claim Section (MHP-40)
  (5) Postal Affairs Section (MHP-50)
(h) Safety Branch (MHS)

(4) Personnel Management Division (MM)
(a) Enlisted Assignment B ranch (MMEA)
  (1) Distribution Section (MMEA-1)
  (2) System Support Section (MMEA-5)
  (3) Enlisted Retention Section (MMEA-6)
  (4) Enlisted Monitor Section (MMEA-8)
(b) Officer Assignment Branch (MMOA)
  (1) Ground Officer Assignment Section (MMOA-1)
  (2) Aviation Officer Assignment Section (MMOA-2)
  (3) Plans, Programs and Support Section (MMOA-3)
  (4) Operations Analysis and System Support Section (MMOA-3)
  (5) Counseling and Evaluation Section (MMOA-4)

(c) Operations and Support Branch (MMOS)
  (1) Plans/Analysis Section (MMOS-1)
  (2) System Integration Section (MMOS-3)
  (3) Passport Section (MMOS-5)

(d) Performance Evaluation Branch (MMPE)
  (1) Policy and Research Section (MMPE-1)
  (2) Fitness Report Processing Section (MMPE-2)
  (3) Fitness Report Accountability Section (MMPE-3)
  (4) Systems Support Section (MMPE-4)
  (5) Performance Evaluation Review Section (MMPE-5)

(e) Promotion Branch (MMPR)
  (1) Officer Section (MMPR-1)
  (2) Enlisted Section (MMPR-2)

(f) Records Branch (MMRB)
  (1) Records Services Section (MMRB-10)
  (2) Records Management Section (MMRB-20)

(g) Separations and Retirement Branch (MMSR)
  (1) Retirement Section (MMSR-2)
  (2) Separation Section (MMSR-3)
  (3) Disability Section (MMSR-4)
  (4) Inactive Reserve Section (MMSR-5)
  (5) Retired Affairs Section (MMSR-6)
  (6) Inactive Affairs Section (MMSR-6)

(5) Manpower Plans and Policy Division (MP)

(a) Manpower Productivity Improvement Office (MPRO)

(b) Manpower Control Branch (MPC)
  (1) Allocations Section (MPC-20)
  (2) Civilian Personnel Programs Section (MPC-30)
  (3) Standards and Requirements Section (MPC-40)
  (4) T/O Validation Section (MPC-50)
  (5) Field Music Section (MPC-60)
  (6) Data Services Section (MPC-80)

(c) Labor Relations Branch (MPL)

(d) Manpower Policy, Plans, Programming and Budgeting Branch (MPP)
  (1) Officer Plans Section (MPP-30)
  (2) Policy Section (MPP-36)
  (3) Enlisted Plans Section (MPP-20)
  (4) Plans, Programming and Budgeting Section   (MPP-40)

(6) Personnel Procurement Division (MR)

(a) Marketing Branch (MRM)

(b) Operations Branch (MRR)
  (1) Enlisted Recruitment Operations Section (MRRE)
  (2) Officer Procurement Operations Section (MRRO)
  (3) Plans and Analysis Section (MRRP)
  (4) Training Section (MRRT)

(7) Morale, Welfare and Recreation Support Activity (MW)

    (a) Employee Benefits Branch (MWB)

    (b) Construction Support Branch (MWC)

    (c) Recreation Operations Branch (MWD)

    (d) Financial Management Support Branch (MWF)
        (1) Accounting Section
        (2) Statistics Analysis Section

    (e) Food and Hospitality Operations Branch (MWH)

    (f) Marketing Support Branch (MWM)

    (g) Human Resources Branch (MWP)

    (h) Service Operations Branch (MWS)

    (i) Retail Operations Branch (MWX)

(8) Manpower Management Information Division (MI)
    (1) Systems Development and Integration Branch (MIS)
    (2) MIS Field Support Branch (MIF)

3.3.1.2 Subtask 1.2. The contractor shall prepare a Technical Report to be called a Systems Baseline Document which addresses each system/process identified in subtask 1 above. The baseline document shall address the application software architecture, language, number of lines of code, data base architecture, hardware environment, functions performed, users, interfaces to other systems, and current method of maintenance. For those "informal" processes identified during the survey, the contractor shall provide a recommendation as to whether the process should be included in another system (and which one), should be considered for upgrading to a formally developed system in its own right, or left as is. 3.3.2 TASK 2: The contractor shall identify the feasible alternatives for maintaining small systems and shall conduct an economic analysis per the methodology contained in Chapter 2 of IRM-5236-03 to identify the most economical alternative(s) available to the Marine Corps to provide software maintenance support for the baseline systems not currently under a formalized maintenance program. The contractor shall develop a Technical Report to be called the Small Systems Economic Analysis to document the feasible alternatives considered and the results of the economic analysis.

4. STATUS REPORTS. The contractor shall provide monthly status reports per paragraph C.2.4.5 of the ISC contract.

FIGURE D-01 (cont.)
Sample Statement Of Work

Appendix E

COST ESTIMATE

1. <u>General</u>. In addition to the SOW, the user must calculate and submit an estimate of the labor hours by labor category and other direct costs. Cost estimating is an effort to quantify in dollars the value of the contractor's work effort. This includes materials provided, anticipated costs, unique situations and potential award fee. Cost estimating takes into consideration many factors that include the project size, complexity, personnel skills and experience, knowledge levels, communications, and material requirements. The Cost Estimate is developed by the user to assist the COTR in contract negotiations with the contractor. It should be understood that the labor rates in the contract are estimated rates and do not necessarilly reflect the actual billed rates. The contractor will develop cost estimates for all activities required to complete the tasks addressed in the SOW. The user may request, as a deliverable, a cost/schedule status report to assist in cost tracking through the duration of the project. The contractor is not required to include in his proposal cost estimates for the entire LCM of the AIS, but only for those requirements addressed in the SOW. Additionally, there is no requirement to include in the proposal a spreadsheet tracking costs across a timeline. Under no circumstances should the user request assistance from the contractor or provide cost estimation information to the contractor.

2. <u>Limitations to Cost Estimating</u>. It is impossible to predict exactly how much an effort will cost. Therefore, an estimate should be an informed and rationale best possible calculation, even though it is not 100% accurate. A degree of subjective decision making is required where information is not available or is limited. If the project scope is misunderstood or project requirements are poorly defined, there is a high probability that the cost estimate will be inaccurate. An understanding on the part of the person making the estimate of what is involved with a project and even past projects is essential. Knowledge of what is to be done can be turned into logical steps making it easier to quantify. The complexity and difficulty of each task can be translated into timeframes, again, making it easier to quantify. These efforts will also help identify the labor experience level necessary to accomplish the tasks. Frequently, information simply isn't available, forcing the analyst to settle for an estimate which is less accurate than desired.

3. <u>Expert Judgement Estimating Method</u>. Cost estimates made in this manner are obtained from one or more individuals who have experience and knowledge of the project, the organization, and past projects of a similar nature. The more information made available by the users the more an estimate becomes realistic and accurate. With the basic information available, the individual preparing the cost estimation can create a project structure. The project structure must be planned in detail, identifying the

functions and processes of the project. This structure may parallel the task structure of the SOW but in most cases should be in greater detail. Each task that must be performed will be analyzed as to its time, personnel, and material requirements. Do not try to make a single guess for the entire project as set forth in the SOW. The following types of items provide the preparer with insight and background on the project to be estimated, however, the basis of the expert's judgement may be very subjective, based on intangibles:

a. <u>Personnel</u>. Identify the quantities and types of personnel (i.e. programmer, Senior Analyst, Typist, Technical Writer, etc.,) that are thought to be essential. Determine the skill levels and project knowledge for these individuals. The ISC contains the minimum qualifications for each position.

b. <u>Hardware and Software</u>. Identify any constraints under which the completed project is to operate and the language(s) in which the project programs are to be written.

c. <u>Project Constraints</u>. Identify any constraints placed on the project such as a deadlines, personnel staffing, cost ceilings, contingent project deliverables, unique work environments or test conditions, etc..

d. <u>Documentation</u>. It is essential that the user have as much project documentation as possible. Examples of these include the Functional Description, Requirements Documents, System and Subsystem specifications, etc.

e. <u>Materials</u>. Knowledge of the types of materials the project will use as well as finished materials is critical. This information ensures compatibility and availability of such materials with existing materials.

This method is used when the nature of the project does not allow for a more detailed analysis. The primary advantage to this method is its timeliness and efficiency based upon the user(s) ability to draw on past experience and knowledge. However, this entire method is solely based on the knowledge of the user(s) making the estimate. If the person is not familiar with the project, hardware and software, or personnel requirements, the estimate can be skewed one way or the other. If all estimating is accomplished by using the analogies of completed projects, this can also effect the overall estimate.

4. <u>Analogy Estimating Method</u>. The primary objective of the Analogy Method is to identify similar functions between completed programs and projects and those associated with the project being contemplated, thereby taking advantage of actual cost resource numbers. The analogy method involves a comparative analysis between one or more completed projects. Obviously, the more detailed the analysis, the closer the estimates become. It should be noted that there will never be a one-to-one

correspondence between all processes or functions of a completed program or project and the one being estimated. The following steps examine selected areas that should be considered when using the analogy method:

   a.   Program Selection. Select a program or project to be considered as a candidate for comparison. More than likely this comparison will be done at the program, module, or subtask level.

      (1)   Generalize the functions and processes of the subtask to be estimated. Group like functions and processes in order to compare any similarities.

      (2)   Review the subtask specifications to determine if some of the functions and processes are similar to those of the new project.

      (3)   Select a completed project, for which there is sufficient documentation on expended work days, types and levels of personnel assigned, source coding, etc. The more information that can be derived about the completed project the greater the detail that the comparison can be made. This can also help in selecting a candidate for comparison when one or more programs and projects seem to meet the initial criteria.

   b.   Comparison of Similarities. There are some items which should be considered as baseline elements during the process of comparison.

      (1)   Personnel. The purpose in comparing this area is to determine if the persons who worked on the completed project have similar skill levels, project knowledge, etc. If, for instance, the skill levels were higher on the completed project, and the project knowledge was about the same, it may be necessary to add additional work days to the completed project.

      (2)   Complexity. Although the complexity of a project or program is relative to the experience of the people assigned, it still may be helpful to compare the completed and new project in terms of complexity. One way to quantify the complexity of a project is to break down the functions into specific categories. For each project or function identified in the project, assign a number (i.e., 1 simple, 2 complex, 3 very complex) for the categories that apply. This same process can be applied to the completed project. If there is a difference in the complexity, additional work days may have to be added to the estimate, training can be provided, or changes can be made in personnel assignment.

This method is used when there is a base of data from prior projects from which to draw. This method enables the analyst to estimate based on actual figures. Depending on the level of detail used in the comparison, it can be a very quick and easy method to use. Since a one-to-one relationship between compared projects will never exist, the derived cost estimates will vary

in accuracy depending on how close the similarities are. Even if just the general functions and processes are considered, there are usually areas of the new project where no comparison can be made.

5. Automated Cost Estimating Tools. Automated cost estimating models are available through various sources. These systems will not be discussed in great detail since no one tool is specifically appropriate for the task of creating the cost estimate for the ISC. In most cases, the estimator supplies the model with input parameters concerning the project and its environment. The model then produces cost, level of effort, or schedule estimates which are then used to assist in determining the project costs. Automated tools should be used only if they are understood by the user, if the project is of a type appropriate for the tool being used, and if the tool being used has been "calibrated". The primary advantage of a computer-based cost model is the ability of the estimator to easily vary input parameters as the project changes, new requirements are addressed, or "what if" calculations are desired. Automated systems also promote a certain degree of standardization. In addition to cost estimations, many automated models produce scheduling and planning documents. Automated tools require skill and experience on the part of the user. There is a requirement for the tools to be calibrated based on past experience. The tools selected must be appropriate for the task being estimated. Additionally, they may require alteration and interpretation to the point where the results are subjective at best. The result of using these tools incorrectly is that the estimates may be grossly wrong. If the preparer of the Cost Estimate wants to use an automated tool, approval must be obtained from CMC (Code CCI).

6. Procedures. Regardless of which estimating technique is used, the following procedures will be used:

a. Labor. The contract has a list of the labor rates located in Exhibit N that will be used. Ensure that the current labor rates for the year are used, as well as the labor rates for the site and category selected. In the cost estimate summary or in an appendix to the summary, the labor cost for each task or subtask should be calculated. The number of estimated hours of effort multiplied by the labor rate of a category will equal the cost of that category. The hours should reflect the total effort of all individuals in that labor category (i.e., one entry of 10 hours in a given category, not three entries of the same category totaling 10 hours to represent 3 individuals). Tasks and subtasks crossing calendar boundaries may require two entries for a labor category, as rates generally change from year to year. In these cases the year should be noted as indicated in the sample.

b. Materials. In the cost estimate summary or in an appendix to the summary, the material cost for each task or subtask should be determined. For estimating costs of specific items, use the GSA schedule prices, like or similar item costs or publicly

nature of the project. A project which is material intensive requires greater detail than a project which is merely consuming relatively small amounts of administrative supplies.

c. <u>Travel</u>. In the cost estimate summary or in an appendix to the summary, the travel cost for each subtask or task should be determined. Use the same method of calculating the contractor travel cost as you would to determine government travel costs. Use Joint Travel Regulation (JTR) rates for per diem and expenses.

d. <u>Other Costs</u>. The costs for communications, relocation expenses, computer services, or overtime as allowed in the contract must be estimated and detailed in the cost estimate summary or in an appendix to the summary.

e. <u>Format</u>. This appendix provides two sample cost estimation formats that should be used to summarize the cost and its calculations. Depending on the size of the cost estimating effort, the cost estimate summary should have a greater or lesser degree of detail. For a small, straightforward project all details of the estimate calculations may be in the summary. For a large or complex project the summary should be supported by references or appendixes.

LABOR:	CSC LABOR CATEGORIES	RATE	HOURS	COST
001	Program Manager	37	70	2590
002	Site Manager	30	0	0
003	Project Manager	25	200	5000
004	Senior Computer Systems Analyst	21	704	14784
005	Computer Systems Analyst	18	704	12672
006	Junior Computer Systems Analyst	14	0	0
007	Senior Computer Programmer	15	0	0
008	Computer Programmer	13	0	0
009	Junior Computer Programmer	13	0	0
010	Operations Manager	23	0	0
011	Lead Computer Oper/Shift Sprvr	13	0	0
012	Computer Operator	11	0	0
013	Network Control Specialist	36	0	0
014	Data Control Coordinator	13	0	0
015	Data Entry Clerk	8	0	0
016	Systems Programmer	19	0	0
017	Data Base Management Specialist	16	0	0
018	Operations Research Analyst	38	0	0
019	Teleprocessing Specialist	17	0	0
020	Computer Security Specialist	12	0	0
021	Software Engineer	38	0	0
022	Configuration Mgmt Specialist	14	0	0
023	Procurement Specialist	16	0	0
024	Functional Analyst	22	704	15488
025	Technical Writer	14	175	2450
026	Quality Assurance Specialist	15	0	0
027	Education Specialists	16	0	0
028	Administrative Support Personnel	12	100	1200

	SUB-TOTAL CSC LABOR	>>>>	2657	54184
	TOTAL LABOR HOURS	>>>>	2657	54184

MATERIAL:

Support Tools and Materials		0
General and Administrative		0
General & Administrative (G&A) (1% of tot cost exclusive of fee)		
SUB-TOTAL MATERIALS	>>>>	0

TRAVEL:

Local		0
Other		0
SUB-TOTAL TRAVEL	>>>>	0

OTHER COSTS:

Communications		0
Computer Services		0
Overtime		0
SUB-TOTAL OTHER COSTS	>>>>	0

RECAP:

LABOR SUB-TOTAL:	
MATERIAL SUB-TOTAL:	0
TRAVEL SUB-TOTAL:	0
OTHER COSTS SUB-TOTAL:	0

TOTAL:	
AWD FEE (10%):	
GRAND TOTAL:	

FIGURE E-01
Sample Cost Estimate

LABOR:	CSC LABOR CATEGORIES	RATE	HOURS	COST
001	Program Manager	37	20	740
002	Site Manager	30	0	0
003	Project Manager	25	200	5000
004	Senior Computer Systems Analyst	21	0	0
005	Computer Systems Analyst	18	0	0
006	Junior Computer Systems Analyst	14	0	0
007	Senior Computer Programmer	15	0	0
008	Computer Programmer	13	0	0
009	Junior Computer Programmer	13	0	0
010	Operations Manager	23	0	0
011	Lead Computer Oper/Shift Sprvr	13	0	0
012	Computer Operator	11	0	0
013	Network Control Specialist	36	0	0
014	Data Control Coordinator	13	0	0
015	Data Entry Clerk	8	0	0
016	Systems Programmer	19	0	0
017	Data Base Management Specialist	16	0	0
018	Operations Research Analyst	38	0	0
019	Teleprocessing Specialist	17	0	0
020	Computer Security Specialist	12	0	0
021	Software Engineer	38	0	0
022	Configuration Mgmt Specialist	14	0	0
023	Procurement Specialist	16	0	0
024	Functional Analyst	22	200	4400
025	Technical Writer	14	200	2800
026	Quality Assurance Specialist	15	0	0
027	Education Specialists	16	0	0
028	Administrative Support Personnel	12	100	1200
	SUB-TOTAL CSC LABOR	> > > >	720	14140—

	SUBCONTRACTOR LABOR CATEGORIES	RATE	HOURS	COST
003	Project Manager	12	100	1200
004	Senior Computer Systems Anal	80	640	51200
006	Junior Computer Systems Anal	23	167	3841
008	Computer Programmer	21	167	3507
018	Operations Research Analyst	68	0	0
021	Software Engineer	42	167	7014
024	Functional Analyst	68	0	0
025	Technical Writer	84	500	42000
	SUB-TOTAL SUBCONTRACTOR LABOR	> > > >	1741	102449
	TOTAL LABOR HOURS	> > > >	2461	116589

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FIGURE E-01 (cont.)
Sample Cost Estimate

MATERIAL:

Support Tools and Materials		500
General and Administrative		0
SUB-TOTAL MATERIALS	> > > >	500

TRAVEL:

Local		200
Other		0
SUB-TOTAL TRAVEL	> > > >	200

OTHER COSTS:

Communications		
Computer Services		1000
Overtime		0
FACILITIES		
SUB-TOTAL OTHER COSTS	> > > >	1000

RECAP:

LABOR SUB-TOTAL:	116589
MATERIAL SUB-TOTAL:	500
TRAVEL SUB-TOTAL:	200
OTHER COSTS SUB-TOTAL:	1000
TOTAL:	118289
AWD FEE (10%):	11659
GRAND TOTAL:	129948

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FIGURE E-01 (cont.)
Sample Cost Estimate

Appendix F

WORK WORDS

The following sample list contains words which have the inherent
value of work. In other words, answer the questions, "What are
the work requirements?" This list is offered as a reminder of
the various shades of meaning conveyed by choice or words.

analyze	solve by analysis
annotate	provide with comments
ascertain	find out with certainty
attend	be present at
audit	officially examine
build	make by putting together
calculate	find out by computation
consider	think about, to decide
construct	put together; build
control	direct; regulate
contribute	give along with others
compare	find out likeness or differences
create	cause to be; make
determine	resolve; settle; decide
differentiate	make a distinction between
develop	bring into being or activity
define	make clear; settle the limits
design	perform an original act
evolve	develop gradually, work out
examine	look at closely; test quality of
explore	examine for discovery
extract	take out; deduce; select
erect	put together; set upright
establish	set up; settle; prove beyond dispute
estimate	approximate an opinion of
evaluate	find or fix the value of
fabricate	build; manufacture, invent
form	give shape to; establish
formulate	to put together and express
generate	produce, cause to be
install	place; put into position
inspect	examine carefully or officially
institute	set up; establish, begin
interpret	explain the meaning of
inquire	ask, make a search of
integrate	to add parts to make whole
investigate	search into; examine closely
judge	decide; form an estimate of
make	cause to come into being
manufacture	fabricate from raw materials
notice	comment upon, review
observe	inspect, watch
originate	initiate, to give rise to
organize	integrate, arrange in a coherent unit
perform	do, carry out, accomplish

plan	devise a scheme for doing, making, arranging activities to achieve objectives
probe	investigate thoroughly
produce	give birth or rise to
pursue	seek, obtain or accomplish
reason	think, influence another's actions
resolve	reduce by analysis or clear up
record	set down in writing or act of electronic reproduction of communications
recommend	advise, attract favor of
review	inspection, examination or evaluation
study	careful examination or analysis
seek	try to discover; make an attempt
search	examine to find something
scan	look through hastily, examine intently
solve	find an answer
trace	to copy or find by searching
track	observe or plot the path of

When selecting the key work word that properly expresses the degree of contractor involvement, the SOW writer must define explicitly the total nature of the work requirement as to WHAT is to be done. In some cases, the WHY or the APPLICATION of the results of the requirement may be stated IF it contributes to the clarity of need. Collectively, the requirement for the WHAT with the optional WHY or APPLICATION becomes the OBJECTIVE NEED.

It is not enough to include the needs with merely the work word. The SOW writer must identify the OBJECTIVE NEED together with the work CRITERIA identifying the influencing elements that are to be evaluated that may impact upon the OBJECTIVE NEED. In addition, the CRITERIA for the performance of the analysis, investigation, study or review, must be clearly established and identified in terms of, for example, specific INDICES, Government STANDARDS, special PROVISIONS, promulgated DIRECTIVES (INSTRUCTIONS) or present and future CONDITIONS all of which prevail for consideration by the contractor in accomplishing his work task as designated.

Appendix G

SYSTEM DEVELOPMENT METHODOLOGY (SDM) REQUIREMENTS

1. <u>General</u>. SDM is the formal specification of building a system. The intent of SDM is to provide a methodology based on existing Government publications, but enhanced to accommodate the technologies and constraints specific to the development of new systems. SDM describes the technical processes and product requirements of a project. Refer to MCO P5231.1 and MCO 5271.1 for a detailed discussion of SDM and the Marine Corps IRM Standards and Guidelines Program. A major attribute of the SDM is its modularity. The SDM standards are grouped according to their intended use.

2. <u>Specification Standards</u>. These govern the primary work of any system developer. They define the documentation requirements of specific steps within the SDM phases. The documents produced according to these standards form the core description of the system design. They include:

IRM-5236-03	ECONOMIC ANALYSIS (EA)
IRM-5231-04	FUNCTIONAL REQUIREMENTS DEFINITION (FRD)
IRM-5231-05	GENERAL DESIGN SPECIFICATION (GDS)
IRM-5231-06	DETAILED DESIGN SPECIFICATION (DDS)
IRM-5231-07	USERS MANUAL (UM)
IRM-5231-08	COMPUTER OPERATIONS MANUAL (COM)

FIGURE G-01
Specification Standards

3. <u>Management Plan Standards</u>. These govern the measurement of the impact of each system development in the project as a whole. They define the documentation requirements for reporting these impacts within the SDM phases. The target documents produced according to these standards provide the core information for a project plan. They include:

IRM-5231-09	CONFIGURATION MANAGEMENT PLAN (CMP)
IRM-5231-10	QUALITY ASSURANCE PLAN (QA)
IRM-5231-11	DATA BASE PLAN (DBP)
IRM-5231-12	ADPE SUPPORT PLAN (ADP)
IRM-5239-05	TELECOMMUNICATIONS SUPPORT PLAN (TSP)
IRM-5231-14	TEST PLAN (TP)
IRM-5231-15	TRAINING SUPPORT PLAN (TSP)
IRM-5231-16	IMPLEMENTATION PLAN (IP)

FIGURE G-02
Management Plan Standards

4. <u>Convention Standards</u>. These define a uniform set of rules to be applied to any documentation, (both technical and narrative), produced during the SDM phases. They include:

4. Convention Standards. These define a uniform set of rules to be applied to any documentation, (both technical and narrative), produced during the SDM phases. They include:

IRM-5230-02	STYLE MANUAL STANDARD (SM)
IRM-5231-17	INSPECTION AND ACCEPTANCE STANDARD (IA)
IRM-5233-06	LIBRARY MANAGEMENT SYSTEM STANDARD (LMS)
IRM-5235-01	DATA DICTIONARY STANDARD (DDS)
IRM-5234-01	PROGRAMMING STANDARD (PS)
IRM-5239-01	NETWORK PROCEDURES MANUAL STANDARD (NPM)
IRM-5234-02	MAN-MACHINE DIALOGUE STANDARD (MDS)

FIGURE G-03
Convention Standards

5. Required Documentation. The documentation that is required depends on the size of the system under development. The following dollar thresholds are used to define small, medium, and large systems:

CATEGORY	DEVELOPMENT AND IMPLEMENTATION COSTS
Small	Less than $1 million
Medium	$1 million to $5 million
Large	Over $5 million

FIGURE G-04
Required Documentation

Large Systems: For large systems, all phases of SDM and all the documentation required by the methodology should be developed and tailored to the project.

Medium Systems. Medium systems have the widest variance in requirements for documentation. The following list of items may help in determining the specific document requirements for a Medium System:

- A medium system will normally require only a modest amount of training.

- An ADP support plan if it is either extremely resource intensive or involves the introduction of new hardware.

- A system using existing telecommunications needs no telecommunications support plan, only an identification of the necessary equipment and software.

- The economic analysis for a medium system should be commensurate with the size of the system.

- A separate QA Plan seldom is justified.

- An abbreviated CM Plan will generally suffice as the Overhead for the relatively few configured items and configured program items must be kept to a minimum.

The following chart shows the recommended documentation minimums for a Medium System:

Economic Analysis	Implementation Plan: Configuration MGMT Plan
Functional Requirements Definition	Training Plan
General Requirements Specification: ADPE Support Plan Telecommunications Support Plan Data Base Plan Data Base Conversion Plan	Users Manual Computer Operations Manual
Detailed Design Specification	Test Plan: Quality Assurance Plan

FIGURE G-05
Required Documentation for a Medium System

Small Systems: Small systems require the least documentation of all. The following chart shows the recommended documentation requirements for a Small System:

Functional Requirements Definition: Economic Analysis

Design Specification: General Design Specification, ADPE Support Plan, Telecommunications Support Plan, Data Base Plan, Data Base Conversion Plan Detailed Design Specification

Implementation Plan: Quality Assurance Plan, Test Plan, Configuration Management Plan, Training Plan

Users Manual

Computer Operations Manual

FIGURE G-06
Required Documentation for a Small System

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Appendix H

SOW CHECKLIST

_____ Applicable documents should be referenced in the requirements section of the SOW. Are the documents really pertinent to the task?

_____ Are there any costs (money or labor hours) referred to in the body of the SOW?

_____ Is the Cost Estimate a separate document and addressed as a separate enclosure in the forwarding cover letter?

_____ Are normal work hours addressed in the SOW along with any overtime? (Overtime should always be by the permission of the COTR.)

_____ Is the period of performance a block of time beginning with the date of the Delivery Order? (Keep in mind that the ISC contractor is allowed up to three weeks to staff up following the issuance of the Delivery Order.)

_____ Is Testing and Inspection & Acceptance spelled out? (Whenever possible, the COTR should simply supply a Test Plan with the criterion for inspection and acceptance spelled out.)

_____ Is the funding document (DD FORM 2276) accompanying the proposal acceptance as a separate document and enclosure under the forwarding letter?

_____ Do SOWs with a significant amount of work have a WBS and a schedule/plan for accomplishment of the work by the contractor? This should include milestones and dates.

_____ Does the SOW contain the proper scope and limits of the tasking? (This will be used, along with the schedule to resolve any possible disputes/negotiations and misunderstandings.)

_____ Have you referred to the appropriate Marine Corps IRM Technical Publications in the Requirements and Applicable Documents sections? (IRM-5271-01 indexes all the IRMs and provides an abstract for each one.)

_____ Have you included the correct contract line item number (CLIN) in the SOW? (The CLIN should be chosen in accordance with the type of work being requested. More than one CLIN can be used.

_____ Never refer to the CDRLs or DIDs in the body of the SOW.

_____ Ensure that you have not used words with multiple
meanings when writing the SOW. Always use Work Words,
plain and simple words whenever possible, which cannot be
construed to be taken differently than what you mean.

_____ Have you used words like "guidance" or "judgement"? Have
you used words that left room for interpretation? (Never
use "as required" or "as needed" when writing the SOW.
This can cause decisions to be make by the contractor
which might cost the Government money for unnecessary or
unwanted work.)

_____ Can any of your written taskings cause or lead to
personal services? (i.e., supervision of contractor
personnel by Government personnel.)

_____ Have you used an existing DID whenever possible?

_____ If there were no existing DID available which described
the data being delivered, did you use a DID which was
generic in nature and came closest to describing the
deliverable? (If you did this, did you make a minor
modification to the DID using the remarks section of the
CDRL?)

_____ If you could not find or tailor a DID to meet your needs,
did you refer to the applicable Marine Corps IRM
Technical Publication in the CDRL?

_____ If no CDRL exists which meets the needs of the
deliverable, can one be created?

Appendix I

FEE DETERMINATION PLAN

1. <u>PURPOSE</u>. This plan establishes the procedures and guidelines for the determination of the Contractor's award fee for the USMC Integration Support Contract (ISC).

2. <u>STAFFING</u>.

    a. <u>Headquarters Contracting Officer's Representative (HQCOR)</u>. The Commandant of the Marine Corps (Code CCI) is the HQCOR.

    b. <u>Fee Determining Official (FDO)</u>. The HQCOR acts as the FDO.

    c. <u>Performance Evaluation Board (PEB)</u>. Members of the PEB shall be selected by the FDO.

    d. <u>Advisors to the FDO</u>. The FDO may designate technical and administrative personnel to observe, examine, review and report to the FDO on contractor performance as required.

3. <u>RESPONSIBILITIES OF KEY PERSONNEL</u>.

    a. The HQCOR will:

        (1) Act as the Fee Determining Official (FDO).
        (2) Appoint a Performance Evaluation Board (PEB).
        (3) Coordinate the PEB.
        (4) Obtain technical evaluations.
        (5) Determine the amount of the award fee.
        (6) Announce the evaluation period.

    b. The PEB will:

        (1) Review the evaluation reports and summaries.
        (2) Meet at lease semiannually.
        (3) Conduct investigations when applicable.
        (4) Make final recommendations to the FDO.
        (5) Advise the contractor of evaluation scores.

    c. The Site Contracting Officer (SKO) will:

        (1) Prepare Contractor Performance Evaluation Forms for Delivery Orders with labor dollar amount expended during the rating period.

        (2) Forward completed evaluations and justifications to the HQCOR.

        (3) Forward Delivery Order statistics to the HQCOR.

d.   The Contracting Officer Technical Representatives (COTRs) will:

(1)   Evaluate contractor performance.

(2)   Complete the Contractor Performance Evaluation Worksheet.

(3)   Provide justification summaries when applicable.

(4)   Forward Contractor Performance Evaluation Worksheet with appropriate cover letter to the SKO.

e.   The Site Contracting Officer's Representative (SCOR) will assist the SKO in compiling and summarizing evaluation scores.

4.   PROCEDURES.

a.   General Overview.   The HQCOR is responsible for proper administration of the ISC award fee process.   The performance evaluation process provides the HQCOR and key participants the information needed to assess the critical areas of a contractor's performance and determine the award fee amount for work performed.   The HQCOR sets the closing date for the performance evaluation period.   The closing dates for the semiannual evaluation periods are 30 June and 31 December each year.   A ten week time period is allotted for the preparation of forms and reports, evaluation, data collection, computations, meeting and reviews, as depicted in Figure I-01.   All documents pertaining to the evaluation process will be treated as Sensitive Unclassified documents.

b.   Performance Evaluation Process.   Once the closing date is announced, the SKO will send a memorandum and the Contractor Evaluation Performance Worksheet, (Figure I-02), to the appropriate COTRs.   The COTRs will evaluate the contractor's performance using the guidelines and instructions outlined in Figure I-03.   There must be an Contractor Performance Evaluation Worksheet completed on all Delivery Orders that have labor dollars expended during the evaluation period.   It is the responsibility of the COTRs to ensure that all required data on individual Delivery Orders have been delivered in a timely manner and that performance has been timely, of acceptable quality and within reasonable cost.   For those Delivery Orders that are made up of individual tasks, the COTRs are responsible for evaluating each task.   When the evaluation worksheet is completed, the COTRs will return it to the SKO ensuring that is includes the Delivery Order Number, evaluation period, current date, COTR, dollar amounts and labor hours expended during this period, total evaluation score and recommended award fee.   A statement of justification and/or recommended contractor corrective actions must be provided when the performance evaluation falls below the OUTSTANDING rating.   If the evaluation rating is OUTSTANDING, the full ten percent award fee is recommended.   If the Contractor's rating is between an OUTSTANDING and SATISFACTORY, the rating

percentage score is used to determine the recommended award fee amount. (The appropriate Delivery Order evaluation rating will be used for those invoices that arrived after the closeout date but whose work was completed during that evaluation period. The SKO will forward the invoice amount to the HQCOR so the Delivery Order will reflect current totals and recommended Award Fee amounts.) All evaluations with an UNSATISFACTORY rating are not entitled to any award fee. It is the responsibility of the HQCOR to ensure that all evaluation data is provided to the PEB members one week before the scheduled meeting. The PEB will convene and review the evaluations and take appropriate action by either requesting follow-up responses from the COTRs or determining the award fees with the FDO's signature. The FDO will advise the contractor of all category grades and scores and give the contractor fifteen (15) calendar days in which to submit written comments concerning the findings. At this point Performance Evaluation Report is forwarded to the SKO's who will incorporate the appropriate award fee into the contract Delivery Order by modification. An example of the Performance Evaluation Board Schedule is shown in Figure I-04.
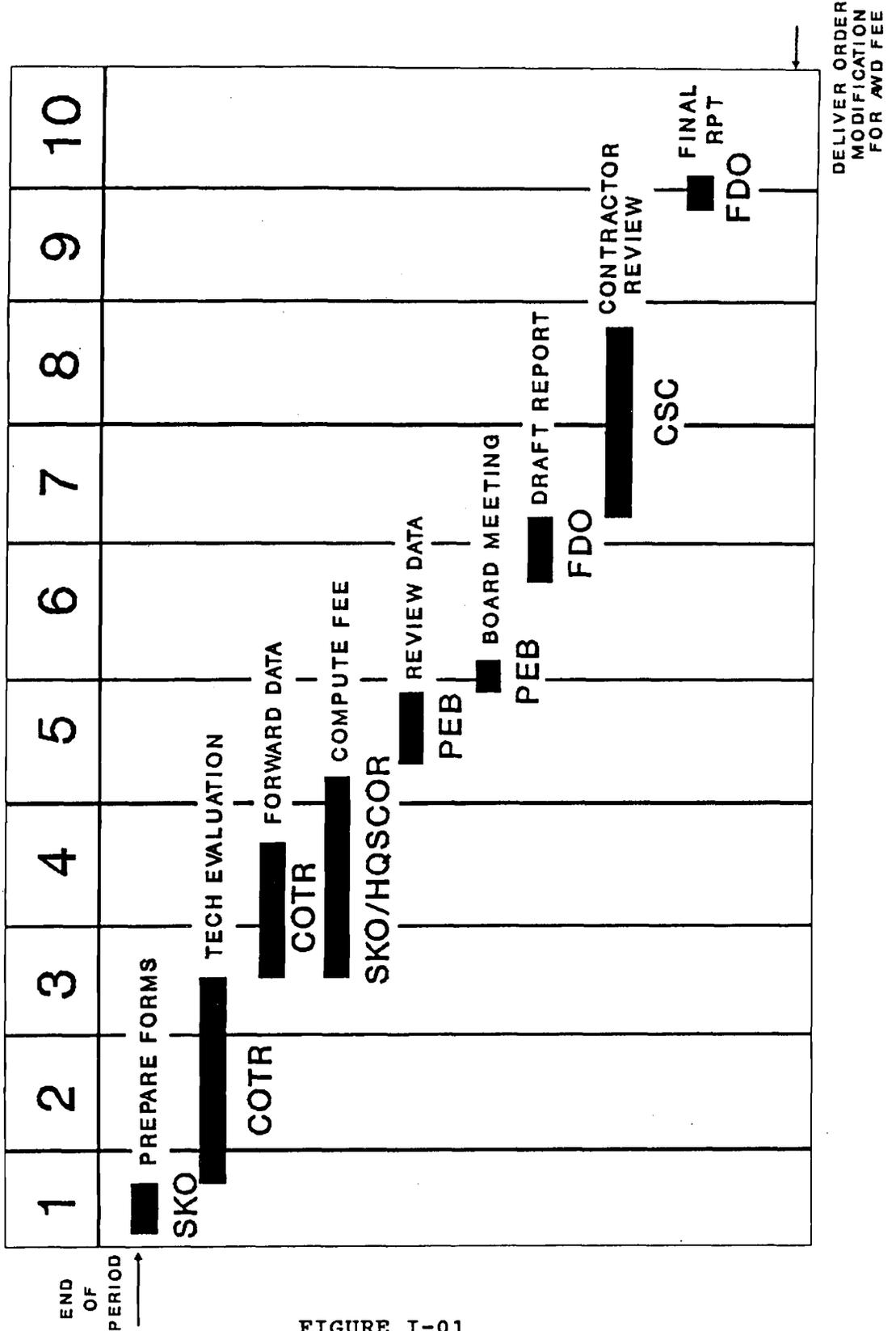
FIGURE I-01
Ten Week Time Period for Performance Evaluation Process

CONTRACTOR PERFORMANCE EVALUATION WORKSHEET

Delivery Order: _____	Evaluation Period: _____
Date of Worksheet: _____	COTR: _____
Dollar Amt Expended: _____	Labor Hrs Expended: _____
TOTAL Eval Score: _____	Recommended Award Fee: _____

CATEGORY A – TECHNICAL EVALUATION (50%)
(H–41.1.3)

Technical Quality of Work (35%) _____

Maintaining Program Schedules (15%) _____

TOTAL TECHNICAL EVALUATION SCORE: [   ]

CATEGORY B – COST MANAGEMENT (30%)
(H–41.1.4)

Cost Estimation (15%) _____

Cost Management/Tracking (15%) _____

TOTAL COST MANAGEMENT SCORE: [   ]

CATEGORY C – BUSINESS MANAGEMENT (30%)
(H–41.1.5)

TOTAL BUSINESS MANAGEMENT SCORE: [   ]

TOTAL SCORE (A + B + C): [   ]

RATINGS:			
OUTSTANDING:	95 – 100%	SATISFACTORY	60 – 79%
GOOD:	80 – 94%	UNSATISFACTORY:	0 – 59%

Any rating less than OUTSTANDING requires justification

FIGURE I-02
Contractor Performance Evaluation Worksheet

CONTRACTOR PERFORMANCE EVALUATION WORKSHEET
GUIDELINES and INSTRUCTIONS

1. **GENERAL.** Upon notification from the HQCOR that the eval-
uation period has been closed out, the Contracting Officer's
Technical Representatives (COTRs) will initiate the evaluation
process for the purpose of recommending an Award Fee based on
the contractor's performance. Every Delivery Order that has
expended hours and labor dollars against it must be evaluated.
The following instructions are provided so that this evaluation
process is not only fair but consistent throughout the Marine
Corps.

2. **INSTRUCTIONS.** The following instructions are listed by
category rating. The instructions provide basic guidelines
and direction in determining percentage ratings.

   a. **CATEGORY A – TECHNICAL EVALUATION (50%)**

      (1) Technical Quality of Work (35%)

        To receive a maximum rating, the work accomplished
during the evaluation period must be technically accurate,
valid and must meet the stated requirements and/or specifica-
tions. The final product from the contractor must be error
free. Points should be deducted based on the number of errors,
the severity of errors and the time taken in correcting the
errors as well as the impact those errors have on other tasks
and the project in terms of additional costs, time expended,
and management constraints.

      (2) Maintaining Program Schedules (15%)

        To receive a maximum rating, the Delivery Order must be
successfully completed without delays for technical or
personnel shortfalls due to faulty prioritizing. The Delivery
Order schedule must be adhered to. In addition, adherence to
agreed upon milestones and Delivery Dates in the Project
Management Plan are required. Consideration must be given to
what impact the government had, if any, in causing the delays.
Deductions should be based on the impact the above criteria
have on other tasks, the overall project and any additional
increase in costs, time and/or management endeavors.

   b. **CATEGORY B – COST MANAGEMENT (30%)**

      (1) Cost Estimation (15%)

To achieve a maximum rating the contractor's goal should be
to provide the most reasonable, accurate estimate of actual

FIGURE I-03
Performance Evaluation Worksheet Guidelines and Instructions

hours to be dedicated to the effort and actual costs to be incurred. It is in the best interest of the Government for the contractor to use the least expensive skill categories capable of accomplishing the task. Deduct points for cost estimates that appear unreasonable and/or unexplainable. Deductions should be made in cases of actual costs exceeding estimated costs. Instances of actual costs totalling less than the estimated amount should be encouraged.

(2) Cost Management/Tracking (15%)

To receive maximum rating, the contractor must use an accurate and effective management system that tracks and schedules cost while achieving maximum productivity at minimum cost to the government. Deduct points for poor management in this area. The COTR must validate the level of effort and cost of each Delivery Order. Therefore, the contractor should provide sufficient and reasonable detail for this validation. Monthly status reports should reflect labor skill categories and hours expended. All monthly statements, to include invoices, must be reviewed by the COTR. Certification includes hours, skill categories, overtime requests and other expenses. Time management must be used to the fullest.

c. CATEGORY C - BUSINESS MANAGEMENT (20%)

To receive a maximum rating the Contractor's work force must be knowledgeable and well informed of the task requirements. Contracting personnel must ensure that they present themselves in a professional manner at all times to the government. The "Chain of Command" must be used for problem resolution. Contracting personnel must show flexibility to Delivery Order modifications in either scope or due dates even though Delivery Orders are specific in stating specifications and due dates. The Contractor must provide management reporting as required by the contract and the reports must consistently show valid data so that the COTR can verify work performed. This includes the number of hours expended per labor category as well as the ability to verify "other direct charges". The contractor must adhere to the allotted 10 days to review a SOW and prepare a Technical and Cost Proposal. The contractor must provide the necessary coordination and cooperation in order to fulfil the requirements of the Delivery Order. The contractor must properly manage the personnel working on each Delivery Order. The contractor is not required to have a training program for each Delivery Order.

FIGURE I-03 (cont)
Performance Evaluation Worksheet Guidelines and Instructions

ACTION	DATE
1. Performance Evaluation Period closeout date	31 Dec/Jun
2. SKOs send Evaluation forms to COTRs	7 Jan/Jul
3. COTRs complete evaluation forms and forward to SKOs	17 Jan/Jul
4. SKOs consolidate evaluation forms by Delivery Orders and forward to HQCOR	22 Jan/Jul
5. HQCOR sends compiled evaluations to field for review	31 Jan/Jul
6. Preliminary review by field complete	19 Feb/Aug
7. Performance Evaluation Board convenes	20 Feb/Aug
8. HQCOR completes draft report of PEB results	27 Feb/Aug
9. Contractor completes review	6 Mar/Sep
10. HQCOR sends final report to field	13 Mar/Sep
11. SKOs complete Delivery Order modification for Award Fee	20 Mar/Sep

FIGURE I-04
Example of the ISC Performance Evaluation Board Schedule