

ORDER FOR SUPPLIES OR SERVICES

PAGE OF PAGES

1 15

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

BPA NO.

1. DATE OF ORDER JUL 13 2006		2. CONTRACT NO. (if any) GS35F4507G		6. SHIP TO:	
3. ORDER NO. DR-21-06-234		MODIFICATION NO.		a. NAME OF CONSIGNEE U.S. Nuclear Regulatory Commission Attn: Matthew Schmit. (301) 415-7469	
4. REQUISITION/REFERENCE NO. dtd 2/23/06 ASB-06-234/ASL-06-307		b. STREET ADDRESS Mail Stop: T3-F23		c. CITY Washington	
5. ISSUING OFFICE (Address correspondence to) U.S. Nuclear Regulatory Commission Div. of Contracts Attn: H. (Eddie) Colón, Jr. Mail Stop T-7-I-2 Washington, DC 20555		d. STATE DC		e. ZIP CODE 20555	
7. TO:		f. SHIP VIA		8. TYPE OF ORDER	
a. NAME OF CONTRACTOR AT&T GOVERNMENT SOLUTIONS, INC.		<input type="checkbox"/> a. PURCHASE		<input checked="" type="checkbox"/> b. DELIVERY	
b. COMPANY NAME ATTN: JOLIE LAGRANGE-JOHNSON CONTRACTS ADMINISTRATOR		Reference your Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated.		Except for billing instructions on the reverse, this delivery task order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.	
c. STREET ADDRESS 1900 GALLOWES RD STE 105		d. CITY VIENNA		e. STATE VA	
f. ZIP CODE 221823865		10. REQUISITIONING OFFICE ASB ASLBP		9. ACCOUNTING AND APPROPRIATION DATA 67D-15-300-189 M7027 252A 31X0200 OBLIGATE: \$300,000.00	
DUNS #: 009683442		11. BUSINESS CLASSIFICATION (Check appropriate box(es)) <input type="checkbox"/> a. SMALL <input checked="" type="checkbox"/> b. OTHER THAN SMALL <input type="checkbox"/> c. DISADVANTAGED <input type="checkbox"/> d. WOMEN-OWNED <input type="checkbox"/> e. HUBZone <input type="checkbox"/> f. EMERGING SMALL BUSINESS <input type="checkbox"/> g. SERVICE-DISABLED VETERAN-OWNED		12. F.O.B. POINT Destination	
13. PLACE OF a. INSPECTION b. ACCEPTANCE		14. GOVERNMENT B/L NO.		15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date) As stated	
16. DISCOUNT TERMS NET 30		17. SCHEDULE (See reverse for Rejections) See CONTINUATION Page			

ITEM NO. (A)	SUPPLIES OR SERVICES (B)	QUANTITY ORDERED (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)	QUANTITY ACCEPTED (G)
	The Contractor shall provide "LICENSING SUPPORT NETWORK (LSN) MAINTENANCE AND OPERATIONS" in accordance with the enclosed SOW, the terms and conditions of GSA Federal Supply Schedule Contract No. GS-35F-4507G and this task order, at prices stated in the SCHEDULE below. BASE YEAR (JULY 14, 2006 - JULY 13, 2007)					
0001	Senior Systems Analyst/Programmer (LABOR HOUR)				\$11,828.40	
0002	Systems Analyst/Programmer (LABOR HOUR)				\$106,315.20	
0003	Senior Engineer/Scientist/Analyst (LABOR HOUR)				\$5,797.08	
0004	Principle SW Design Engineer (LABOR HOUR)				\$443,078.40	
0005	Hosting (FIRM FIXED PRICE)				\$148,986.00	
0006	Est. Travel Amount (NOT-TO-EXCEED)				\$3,136.00	NTE
	TOTAL EST. AMOUNT (Celling) - BASE YEAR.....\$719,141.08					

SEE BILLING INSTRUCTIONS	18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.		\$719,141.08	17(h) TOTAL (Cont. pages)
	21. MAIL INVOICE TO:							
	a. NAME U.S. Nuclear Regulatory Commission Division of Contracts, Mail Stop T-7-I-2						\$1,499,159.88	17(i) GRAND TOTAL
	b. STREET ADDRESS (or P.O. Box) Attn: (DR-21-06-234)							
c. CITY Washington		d. STATE DC	e. ZIP CODE 20555		Total Est. Value, Including Options: \$2,218,300.96			

22. UNITED STATES OF AMERICA
BY (Signature)

23. NAME (Typed)
Valerie M. Whipple
Contracting Officer
TITLE: CONTRACTING/ORDERING OFFICER

AUTHORIZED FOR LOCAL REPRODUCTION
PREVIOUS EDITION NOT USABLE

SUNSI REVIEW COMPLETE

OPTIONAL FORM 347 (REV. 3/2005)
PRESCRIBED BY GSA FPMR 48 CFR 101-11.6

TEMPLATE - ADM001


ADM001

ORDER FOR SUPPLIES OR SERVICES SCHEDULE - CONTINUATION

PAGE NO.
2

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER JUL 13 2006	CONTRACT NO. GS35F4507G	ORDER NO. DR-21-06-234
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ITEM NO. (A)	SUPPLIES OR SERVICES (B)	QUANTITY ORDERED (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)	QUANTITY ACCEPTED (G)
	OPTION YEAR ONE (JULY 14, 2007 - JULY 13, 2008)					
0007	Senior Systems Analyst/Programmer (LABOR HOUR)				\$12,289.20	
0008	Systems Analyst/Programmer (LABOR HOUR)				\$110,462.52	
0009	Senior Engineer/Scientist/Analyst (LABOR HOUR)				\$6,023.16	
0010	Principle SW Design Engineer (LABOR HOUR)				\$460,336.80	
0011	Hosting (FIRM FIXED PRICE)				\$148,986.00	
0012	Est. Travel Amount (NOT-TO-EXCEED)				\$0.00	
	TOTAL EST. AMOUNT (Ceiling) - OPTION YEAR ONE				\$738,097.68	
	OPTION YEAR TWO (JULY 14, 2008 - JULY 13, 2009)					
0013	Senior Systems Analyst/Programmer (LABOR HOUR)				\$12,769.20	
0014	Systems Analyst/Programmer (LABOR HOUR)				\$114,776.76	
0015	Senior Engineer/Scientist/Analyst (LABOR HOUR)				\$6,258.24	
0016	Principle SW Design Engineer (LABOR HOUR)				\$478,272.00	
0017	Hosting (FIRM FIXED PRICE)				\$148,986.00	
0018	Est. Travel Amount (NOT-TO-EXCEED)				\$0.00	
	TOTAL EST. AMOUNT (Ceiling) - OPTION YEAR TWO				\$761,062.20	
	TOTAL EST. VALUE, IF ALL OPTIONS ARE EXERCISED				\$2,218,300.96	
	ENCLOSURES:					
	1. Statement of Work (SOW) w/ Attachments A - G 2. NRC Form 187 - "Contract Security and/or Class. Req." 3. Billing Instructions					
	Reference is made to your proposal dated 4/17/06, as revised on 5/24/06 and 7/12/06, in response to this effort.					
	ACCEPTED:					
	<i>Jolie LaGrange-Johnson, Contracts Manager</i> NAME AND TITLE					
	 7/13/06 SIGNATURE DATE					
TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))					\$1,499,159.88	

ADDITIONAL TASK ORDER TERMS AND CONDITIONS

A.1 CONSIDERATION AND OBLIGATION

(a) The total estimated amount of this contract (ceiling) for the products/services ordered, delivered, and accepted under this contract is **\$719,141.08**.

(b) The amount presently obligated with respect to this contract is **\$300,000.00**. This obligated amount may be unilaterally increased from time to time by the Contracting Officer by written modification to this contract. The obligated amount shall, at no time, exceed the contract ceiling as specified in paragraph (a) above. When and if the amount(s) paid and payable to the Contractor hereunder shall equal the obligated amount, the Contractor shall not be obligated to continue performance of the work unless and until the Contracting Officer shall increase the amount obligated with respect to this contract. Any work undertaken by the Contractor in excess of the obligated amount specified above is done so at the Contractor's sole risk.

A.2 2052.215-70 KEY PERSONNEL (JAN 1993)

(a) The following individuals are considered to be essential to the successful performance of the work hereunder:

[REDACTED]

LSN Technical Lead/Project Manager
(Principal SW Design Engineer)

[REDACTED]

Senior SW Engineer
(Principal SW Design Engineer)

[REDACTED]

LSN Analyst III/System Administrator
(System Analyst/Programmer)

The contractor agrees that personnel may not be removed from the contract work or replaced without compliance with paragraphs (b) and (c) of this section.

(b) If one or more of the key personnel, for whatever reason, becomes, or is expected to become, unavailable for work under this contract for a continuous period exceeding **30** work days, or is expected to devote substantially less effort to the work than indicated in the proposal or initially anticipated, the contractor shall immediately notify the contracting officer and shall, subject to the concurrence of the contracting officer, promptly replace the personnel with personnel of at least substantially equal ability and qualifications.

(c) Each request for approval of substitutions must be in writing and contain a detailed explanation of the circumstances necessitating the proposed substitutions. The request must also contain a complete resume for the proposed substitute and other information requested or needed by the contracting officer to evaluate the proposed substitution. The contracting officer and the project officer shall evaluate the contractor's request and the contracting officer shall promptly notify the contractor of his or her decision in writing.

(d) If the contracting officer determines that suitable and timely replacement of key personnel who have been reassigned, terminated, or have otherwise become unavailable for the contract work is not reasonably forthcoming, or that the resultant reduction of productive effort would be so substantial as to impair the successful completion of the contract or the service order, the contract may be terminated by the contracting officer for default or for the convenience of the Government, as appropriate. If the contracting officer finds the contractor at fault for the condition, the contract price or fixed fee may be equitably adjusted downward to compensate the Government for any resultant delay, loss, or damage.

A.3 PROJECT OFFICER AUTHORITY (FEB 2004)

(a) The contracting officer's authorized representative hereinafter referred to as the project officer for this contract is:

Name: **Matthew Schmitt**

Address: U.S. Nuclear Regulatory Commission
ASLBP
Mail Stop T3-F23
Washington, DC 20555

Telephone Number: (301) 415-7469

(b) Performance of the work under this contract is subject to the technical direction of the NRC project officer. The term technical direction is defined to include the following:

(1) Technical direction to the contractor which shifts work emphasis between areas of work or tasks, authorizes travel which was unanticipated in the Schedule (i.e., travel not contemplated in the Statement of Work (SOW) or changes to specific travel identified in the SOW), fills in details, or otherwise serves to accomplish the contractual SOW.

(2) Provide advice and guidance to the contractor in the preparation of drawings, specifications, or technical portions of the work description.

(3) Review and, where required by the contract, approval of technical reports, drawings, specifications, and technical information to be delivered by the contractor to the Government under the contract.

(c) Technical direction must be within the general statement of work stated in the contract. The project officer does not have the authority to and may not issue any technical direction which:

(1) Constitutes an assignment of work outside the general scope of the contract.

(2) Constitutes a change as defined in the "Changes" clause of this contract.

(3) In any way causes an increase or decrease in the total estimated contract cost, the fixed fee, if any, or the time required for contract performance.

(4) Changes any of the expressed terms, conditions, or specifications of the contract.

(5) Terminates the contract, settles any claim or dispute arising under the contract, or issues any unilateral directive whatever.

(d) All technical directions must be issued in writing by the project officer or must be confirmed by the project officer in writing within ten (10) working days after verbal issuance. A copy of the written direction must be furnished to the contracting officer. A copy of NRC Form 445, Request for Approval of Official Foreign Travel, which has received final approval from the NRC must be furnished to the contracting officer.

(e) The contractor shall proceed promptly with the performance of technical directions duly issued by the project officer in the manner prescribed by this clause and within the project officer's authority under the provisions of this clause.

(f) If, in the opinion of the contractor, any instruction or direction issued by the project officer is within one of the categories as defined in paragraph (c) of this section, the contractor may not proceed but shall notify the contracting officer in writing within five (5) working days after the receipt of any instruction or direction and shall request the contracting officer to modify the contract accordingly. Upon receiving the notification from the contractor, the contracting officer shall issue an appropriate contract modification or advise the contractor in writing that, in the contracting officer's opinion, the technical direction is within the scope of this article and does not constitute a change under the "Changes" clause.

(g) Any unauthorized commitment or direction issued by the project officer may result in an unnecessary delay in the contractor's performance and may even result in the contractor expending funds for unallowable costs under the contract.

(h) A failure of the parties to agree upon the nature of the instruction or direction or upon the contract action to be taken with respect thereto is subject to 52.233.1. Disputes.

(i) In addition to providing technical direction as defined in paragraph (b) of the section, the project officer shall:

(1) Monitor the contractor's technical progress, including surveillance and assessment of performance, and recommend to the contracting officer changes in requirements.

(2) Assist the contractor in the resolution of technical problems encountered during performance.

(3) Review all costs requested for reimbursement by the contractor and submit to the contracting officer recommendations for approval, disapproval, or suspension of payment for supplies and services required under this contract.

(4) Assist the contractor in obtaining the badges for the contractor personnel.

(5) Immediately notify the Security Branch, Division of Facilities and Security (SB/DFS) (via e-mail) when a contractor employee no longer requires access authorization and return of any NRC issued badge to SB/DFS within three days after their termination.

(6) Ensure that all contractor employees that require access to classified Restricted Data or National Security Information or matter, access to sensitive unclassified information (Safeguards, Official Use Only, and Proprietary information) access to sensitive IT systems or data, unescorted access to NRC controlled buildings/space, or unescorted access to protected and vital areas of nuclear power plants receive approval of SB/DFS prior to access in accordance with Management Directive and Handbook 12.3.

A.4 2052.204.70 SECURITY (MAR 2004)

(a) Contract Security and/or Classification Requirements (NRC Form 187). The policies, procedures, and criteria of the NRC Security Program, NRC Management Directive (MD) 12 (including MD 12.1, "NRC Facility Security Program;" MD 12.2, "NRC Classified Information Security Program;" MD 12.3, "NRC Personnel Security Program;" MD 12.4, "NRC Telecommunications Systems Security Program;" MD 12.5, "NRC Automated Information Systems Security Program;" and MD 12.6, "NRC Sensitive Unclassified Information Security Program"), apply to performance of this contract, subcontract or other activity. This MD is incorporated into this contract by reference as though fully set forth herein. The attached NRC Form 187 (See List of Attachments) furnishes the basis for providing security and classification requirements to prime contractors, subcontractors, or others (e.g., bidders) who have or may have an NRC contractual relationship that requires access to classified Restricted Data or National Security Information or matter, access to sensitive unclassified information (e.g., Safeguards), access to sensitive Information Technology (IT) systems or data, unescorted access to NRC controlled buildings/space, or unescorted access to protected and vital areas of nuclear power plants.

(b) It is the contractor's duty to protect National Security Information, Restricted Data, and Formerly Restricted Data. The contractor shall, in accordance with the Commission's security regulations and requirements, be responsible for protecting National Security Information, Restricted Data, and Formerly Restricted Data, and for protecting against sabotage, espionage, loss, and theft, the classified documents and material in the contractor's possession in connection with the performance of work under this contract. Except as otherwise expressly provided in this contract, the contractor shall, upon completion or termination of this contract, transmit to the Commission any classified matter in the possession of the contractor or any person under the contractor's control in connection with performance of this contract. If retention by the contractor of any classified matter is required after the completion or termination of the contract and the retention is approved by the contracting officer, the contractor shall complete a certificate of possession to be furnished to the Commission specifying the classified matter to be retained. The certification must identify the items and types or categories of matter retained, the conditions governing the retention of the matter and their period of retention, if known. If the retention is approved by the contracting officer, the security provisions of the contract continue to be applicable to the matter retained.

(c) In connection with the performance of the work under this contract, the contractor may be furnished, or may develop or acquire, safeguards information, or confidential or privileged technical, business, or financial information, including Commission plans, policies, reports, financial plans, internal data protected by the Privacy Act of 1974 (Pub. L. 93.579), or other information which has not been released to the public or has been determined by the Commission to be otherwise exempt from disclosure to the public. The contractor shall ensure that information protected from public disclosure is maintained as required by NRC regulations and policies, as cited in this contract or as otherwise provided by the NRC. The contractor will not directly or indirectly duplicate, disseminate, or disclose the information in whole or in part to any other person or organization except as may be necessary to perform the work under this contract. The contractor agrees to return the information to the Commission or otherwise dispose of it at the direction of the contracting officer. Failure to comply with this clause is grounds for termination of this contract.

(d) Regulations. The contractor agrees to conform to all security regulations and requirements of the Commission which are subject to change as directed by the NRC Division of Facilities and Security (DFS) and the Contracting Officer. These changes will be under the authority of the FAR Changes clause referenced in this document.

The contractor agrees to comply with the security requirements set forth in NRC Management Directive 12.1, NRC Facility Security Program which is incorporated into this contract by reference as though fully set forth herein. Attention is directed specifically to the section titled "Infractions and Violations," including "Administrative Actions" and "Reporting Infractions."

(e) Definition of National Security Information. The term National Security Information, as used in this clause, means information that has been determined pursuant to Executive Order 12958 or any predecessor order to require protection against unauthorized disclosure and that is so designated.

(f) Definition of Restricted Data. The term Restricted Data, as used in this clause, means all data concerning design, manufacture, or utilization of atomic weapons; the production of special nuclear material; or the use of special nuclear material in the production of energy, but does not include data declassified or removed from the Restricted Data category pursuant to Section 142 of the Atomic Energy Act of 1954, as amended.

(g) Definition of Formerly Restricted Data. The term Formerly Restricted Data, as used in this clause, means all data removed from the Restricted Data category under Section 142-d of the Atomic Energy Act of 1954, as amended.

(h) Definition of Safeguards Information. Sensitive unclassified information that specifically identifies the detailed security measures of a licensee or an applicant for the physical protection of special nuclear material; or security measures for the physical protection and location of certain plant equipment vital to the safety of production or utilization facilities. Protection of this information is required pursuant to Section 147 of the Atomic Energy Act of 1954, as amended.

(i) Security Clearance. The contractor may not permit any individual to have access to Restricted Data, Formerly Restricted Data, or other classified information, except in accordance with the Atomic Energy Act of 1954, as amended, and the Commission's regulations or requirements applicable to the particular type or category of classified information to which access is required. The contractor shall also execute a Standard Form 312, Classified Information Nondisclosure Agreement, when access to classified information is required.

(j) Criminal Liabilities. It is understood that disclosure of National Security Information, Restricted Data, and Formerly Restricted Data relating to the work or services ordered hereunder to any person not entitled to receive it, or failure to safeguard any Restricted Data, Formerly Restricted Data, or any other classified matter that may come to the contractor or any person under the contractor's control in connection with work under this contract, may subject the contractor, its agents, employees, or subcontractors to criminal liability under the laws of the United States. (See the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2011 et seq.; 18 U.S.C. 793 and 794; and Executive Order 12958.)

(k) Subcontracts and Purchase Orders. Except as otherwise authorized in writing by the contracting officer, the contractor shall insert provisions similar to the foregoing in all subcontracts and purchase orders under this contract.

(l) In performing the contract work, the contractor shall classify all documents, material, and equipment originated or generated by the contractor in accordance with guidance issued by the Commission. Every subcontract and purchase order issued hereunder involving the origination or generation of classified documents, material, and equipment must provide that the subcontractor or supplier assign classification to all documents, material, and equipment in accordance with guidance furnished by the contractor.

A.5 Badge Requirements for Unescorted Building Access to NRC Facilities

During the life of this contract, the rights of ingress and egress for contractor personnel must be made available, as required, provided that the individual has been approved for unescorted access after a favorable adjudication from the Security Branch, Division of Facilities and Security (SB/DFS). In this regard, all contractor personnel whose duties under this contract require their presence on-site shall be clearly identifiable by a distinctive badge furnished by the NRC. The Project Officer shall assist the contractor in obtaining badges for the contractor personnel. All contractor personnel must present two forms of Identity Source Documents (I-9). One of the documents must be presented in person for certification. A list of acceptable documents is available at http://www.usdoj.gov/crt/recruit_employ/i9form.pdf. It is the sole responsibility of the contractor to ensure that each employee has a proper NRC-issued identification/badge at all times. All photo-identification badges must be immediately (no later than three days) delivered to SB/DFS for cancellation or disposition upon the termination of employment of any contractor personnel. Contractor personnel must display any NRC issued badge in clear view at all times during on-site performance under this contract. It is the contractor's duty to assure that contractor personnel enter only those work areas necessary for performance of contract work, and to assure the protection of any Government records or data that contractor personnel may come into contact with.

A.6 SECURITY REQUIREMENTS FOR INFORMATION TECHNOLOGY ACCESS APPROVAL (FEB 2004)

The proposer/contractor must identify all individuals and propose the level of Information Technology (IT) approval for each, using the following guidance. The NRC sponsoring office shall make the final determination of the level, if any, of IT approval required for all individuals working under this contract.

The Government shall have and exercise full and complete control over granting, denying, withholding, or terminating building access approvals for individuals performing work under this contract.

SECURITY REQUIREMENTS FOR LEVEL I

Performance under this contract will involve prime contractor personnel, subcontractors or others who perform services requiring direct access to or operate agency sensitive information technology systems or data (IT Level I).

The IT Level I involves responsibility for the planning, direction, and implementation of a computer security program; major responsibility for the direction, planning, and design of a computer system, including hardware and software; or the capability to access a computer system during its operation or maintenance in such a way that could cause or that has a relatively high risk of causing grave damage; or the capability to realize a significant personal gain from computer access. Such contractor personnel shall be subject to the NRC contractor personnel security requirements of NRC Management Directive (MD) 12.3, Part I and will require a favorably adjudicated Limited Background Investigation (LBI).

A contractor employee shall not have access to sensitive information technology systems or data until he/she is approved by Security Branch, Division of Facilities and Security (SB/DFS). Temporary access may be approved based on a favorable adjudication of their security forms and checks. Final access will be approved based on a favorably adjudicated LBI in accordance with the procedures found in NRC MD 12.3, Part I. However, temporary access authorization approval will be revoked and the employee may subsequently be removed from the contract in the event the employee's investigation cannot be favorably adjudicated. Such employee will not be authorized to work under any NRC contract without the approval of SB/DFS. Timely receipt of properly completed security applications is a contract requirement. Failure of the contractor to comply with this condition within the ten workday period may be a basis to void the notice of selection. In that

event, the Government may select another firm for award. When an individual receives final access, the individual will be subject to a reinvestigation every 10 years.

The contractor shall submit a completed security forms packet, including the SF-86, "Questionnaire for National Security Positions," and fingerprint charts, through the Project Officer to SB/ DFS for review and favorable adjudication, prior to the individual performing work under this contract. The contractor shall assure that all forms are accurate, complete, and legible (except for Part 2 of the questionnaire, which is required to be completed in private and submitted by the individual to the contractor in a sealed envelope), as set forth in MD 12.3 which is incorporated into this contract by reference as though fully set forth herein. Based on SB review of the applicant's security forms and/or the receipt of adverse information by NRC, the individual may be denied access to NRC facilities, sensitive information technology systems or data until a final determination is made of his/her eligibility under the provisions of MD 12.3. Any questions regarding the individual's eligibility for IT Level I approval will be resolved in accordance with the due process procedures set forth in MD 12.3 and E. O. 12968.

In accordance with NRCAR 2052.204.70 "Security," IT Level I contractors shall be subject to the attached NRC Form 187 (See List of Enclosures) which furnishes the basis for providing security requirements to prime contractors, subcontractors or others (e.g., bidders) who have or may have an NRC contractual relationship which requires access to or operation of agency sensitive information technology systems or remote development and/or analysis of sensitive information technology systems or data or other access to such systems and data; access on a continuing basis (in excess of 30 days) to NRC Headquarters controlled buildings; or otherwise requires issuance of an NRC badge.

SECURITY REQUIREMENTS FOR LEVEL II

Performance under this contract will involve contractor personnel that develop and/or analyze sensitive information technology systems or data or otherwise have access to such systems or data (IT Level II).

The IT Level II involves responsibility for the planning, design, operation, or maintenance of a computer system and all other computer or IT positions. Such contractor personnel shall be subject to the NRC contractor personnel requirements of MD 12.3, Part I, which is hereby incorporated by reference and made a part of this contract as though fully set forth herein, and will require a favorably adjudicated Access National Agency Check with Inquiries (ANACI).

A contractor employee shall not have access to sensitive information technology systems or data until he/she is approved by SB/DFS. Temporary access may be approved based on a favorable review of their security forms and checks. Final access will be approved based on a favorably adjudicated ANACI in accordance with the procedures found in MD 12.3, Part I. However, temporary access authorization approval will be revoked and the employee may subsequently be removed from the contract in the event the employee's investigation cannot be favorably adjudicated. Such employee will not be authorized to work under any NRC contract without the approval of SB/DFS. Timely receipt of properly completed security applications is a contract requirement. Failure of the contractor to comply with this condition within the ten workday period may be a basis to void the notice of selection. In that event, the Government may select another firm for award. When an individual receives final access, the individual will be subject to a reinvestigation every 10 years.

The contractor shall submit a completed security forms packet, including the SF-86, "Questionnaire for National Security Positions," and fingerprint charts, through the Project Officer to the NRC SB/DFS for review and favorable adjudication, prior to the individual performing work under this contract. The contractor shall assure that all forms are accurate, complete, and legible (except for Part 2 of the questionnaire, which is required to be completed in private and submitted by the individual to the contractor in a sealed envelope), as set forth in MD 12.3. Based on SB review of the applicant's security forms and/or the receipt of adverse information by NRC, the individual may be denied access to NRC facilities, sensitive information technology systems or data until a final determination is made of his/her eligibility under the provisions of MD 12.3. Any

questions regarding the individual's eligibility for IT Level II approval will be resolved in accordance with the due process procedures set forth in MD 12.3 and E.O. 12968.

In accordance with NRCAR 2052.204.70 "Security," IT Level II contractors shall be subject to the attached NRC Form 187 (See Section J for List of Attachments) which furnishes the basis for providing security requirements to prime contractors, subcontractors or others (e.g. bidders) who have or may have an NRC contractual relationship which requires access to or operation of agency sensitive information technology systems or remote development and/or analysis of sensitive information technology systems or data or other access to such systems or data; access on a continuing basis (in excess of 30 days) to NRC Headquarters controlled buildings; or otherwise requires issuance of an NRC badge.

CANCELLATION OR TERMINATION OF IT ACCESS/REQUEST

When a request for investigation is to be withdrawn or canceled, the contractor shall immediately notify the Project Officer by telephone in order that he/she will immediately contact the SB/DFS so that the investigation may be promptly discontinued. The notification shall contain the full name of the individual, and the date of the request. Telephone notifications must be promptly confirmed in writing to the Project Officer who will forward the confirmation via email to the SB/DFS. Additionally, SB/DFS must be immediately notified when an individual no longer requires access to NRC sensitive automated information technology systems or data, including the voluntary or involuntary separation of employment of an individual who has been approved for or is being processed for access under the NRC "Personnel Security Program."

A.7 2052.209-73 CONTRACTOR ORGANIZATIONAL CONFLICTS OF INTEREST

(a) Purpose. The primary purpose of this clause is to aid in ensuring that the contractor:

(1) Is not placed in a conflicting role because of current or planned interests (financial, contractual, organizational, or otherwise) which relate to the work under this contract; and

(2) Does not obtain an unfair competitive advantage over other parties by virtue of its performance of this contract.

(b) Scope. The restrictions described apply to performance or participation by the contractor, as defined in 48 CFR 2009.570- 2 in the activities covered by this clause.

(c) Work for others.

(1) Notwithstanding any other provision of this contract, during the term of this contract the contractor agrees to forgo entering into consulting or other contractual arrangements with any firm or organization, the result of which may give rise to a conflict of interest with respect to the work being performed under this contract. The contractor shall ensure that all employees under this contract abide by the provision of this clause. If the contractor has reason to believe with respect to itself or any employee that any proposed consultant or other contractual arrangement with any firm or organization may involve a potential conflict of interest, the contractor shall obtain the written approval of the contracting officer before the execution of such contractual arrangement.

(2) The contractor may not represent, assist, or otherwise support an NRC licensee or applicant undergoing an NRC audit, inspection, or review where the activities that are the subject of the audit, inspection or review are the same as or substantially similar to the services within the scope of this contract (or task order as appropriate), except where the NRC licensee or applicant requires the contractor's support to explain or defend the contractor's prior work for the utility or other entity which NRC questions.

(3) When the contractor performs work for the NRC under this contract at any NRC licensee or applicant site, the contractor shall neither solicit nor perform work in the same or similar technical area for that licensee or applicant organization for a period commencing with the award of the task order or beginning of work on the site (if not a task order contract) and ending one year after completion of all work under the associated task order, or last time at the site (if not a task order contract).

(4) When the contractor performs work for the NRC under this contract at any NRC licensee or applicant site,

(i) The contractor may not solicit work at that site for that licensee or applicant during the period of performance of the task order or the contract, as appropriate.

(ii) The contractor may not perform work at that site for that licensee or applicant during the period of performance of the task order or the contract, as appropriate, and for one year thereafter.

(iii) Notwithstanding the foregoing, the contracting officer may authorize the contractor to solicit or perform this type of work (except work in the same or similar technical area) if the contracting officer determines that the situation will not pose a potential for technical bias or unfair competitive advantage.

(d) Disclosure after award.

(1) The contractor warrants that to the best of its knowledge and belief, and except as otherwise set forth in this contract, it does not have any organizational conflicts of interest as defined in 48 CFR 2009.570-2.

(2) The contractor agrees that, if after award, it discovers organizational conflicts of interest with respect to this contract, it shall make an immediate and full disclosure in writing to the contracting officer. This statement must include a description of the action which the contractor has taken or proposes to take to avoid or mitigate such conflicts. The NRC may, however, terminate the contract if termination is in the best interest of the government.

(3) It is recognized that the scope of work of a task-order-type contract necessarily encompasses a broad spectrum of activities. Consequently, if this is a task-order-type contract, the contractor agrees that it will disclose all proposed new work involving NRC licensees or applicants which comes within the scope of work of the underlying contract. Further, if this contract involves work at a licensee or applicant site, the contractor agrees to exercise diligence to discover and disclose any new work at that licensee or applicant site. This disclosure must be made before the submission of a bid or proposal to the utility or other regulated entity and must be received by the NRC at least 15 days before the proposed award date in any event, unless a written justification demonstrating urgency and due diligence to discover and disclose is provided by the contractor and approved by the contracting officer. The disclosure must include the statement of work, the dollar value of the proposed contract, and any other documents that are needed to fully describe the proposed work for the regulated utility or other regulated entity. NRC may deny approval of the disclosed work only when the NRC has issued a task order which includes the technical area and, if site-specific, the site, or has plans to issue a task order which includes the technical area and, if site-specific, the site, or when the work violates paragraphs (c)(2), (c)(3) or (c)(4) of this section.

(e) Access to and use of information.

(1) If in the performance of this contract, the contractor obtains access to information, such as NRC plans, policies, reports, studies, financial plans, internal data protected by the Privacy Act of 1974 (5 U.S.C. Section 552a (1988)), or the Freedom of Information Act (5 U.S.C. Section 552 (1986)), the contractor agrees not to:

(i) Use this information for any private purpose until the information has been released to the public;

(ii) Compete for work for the Commission based on the information for a period of six months after either the completion of this contract or the release of the information to the public, whichever is first;

(iii) Submit an unsolicited proposal to the Government based on the information until one year after the release of the information to the public; or

(iv) Release the information without prior written approval by the contracting officer unless the information has previously been released to the public by the NRC.

(2) In addition, the contractor agrees that, to the extent it receives or is given access to proprietary data, data protected by the Privacy Act of 1974 (5 U.S.C. section 552a (1988)), or the Freedom of Information Act (5 U.S.C. section 552 (1986)), or other confidential or privileged technical, business, or financial information under this contract, the contractor shall treat the information in accordance with restrictions placed on use of the information.

(3) Subject to patent and security provisions of this contract, the contractor shall have the right to use technical data it produces under this contract for private purposes provided that all requirements of this contract have been met.

(f) Subcontracts. Except as provided in 48 CFR 2009.570-2, the contractor shall include this clause, including this paragraph, in subcontracts of any tier. The terms contract, contractor, and contracting officer, must be appropriately modified to preserve the Government's rights.

(g) Remedies. For breach of any of the above restrictions, or for intentional nondisclosure or misrepresentation of any relevant interest required to be disclosed concerning this contract or for such erroneous representations that necessarily imply bad faith, the Government may terminate the contract for default, disqualify the contractor from subsequent contractual efforts, and pursue other remedies permitted by law or this contract.

(h) Waiver. A request for waiver under this clause must be directed in writing to the contracting officer in accordance with the procedures outlined in 48 CFR 2009.570-9.

(i) Follow-on effort. The contractor shall be ineligible to participate in NRC contracts, subcontracts, or proposals therefor (solicited or unsolicited), which stem directly from the contractor's performance of work under this contract. Furthermore, unless so directed in writing by the contracting officer, the contractor may not perform any technical consulting or management support services work or evaluation activities under this contract on any of its products or services or the products or services of another firm if the contractor has been substantially involved in the development or marketing of the products or services.

(1) If the contractor, under this contract, prepares a complete or essentially complete statement of work or specifications, the contractor is not eligible to perform or participate in the initial contractual effort which is based on the statement of work or specifications. The contractor may not incorporate its products or services in the statement of work or specifications unless so directed in writing by the contracting officer, in which case the restrictions in this paragraph do not apply.

(2) Nothing in this paragraph precludes the contractor from offering or selling its standard commercial items to the Government.

A.8 52.217-9 OPTION TO EXTEND THE TERM OF THE CONTRACT (MAR 2000)

(a) The Government may extend the term of this contract by written notice to the Contractor within 10 days; provided that the Government gives the Contractor a preliminary written notice of its intent to extend at least 30 days before the contract expires. The preliminary notice does not commit the Government to an extension.

(b) If the Government exercises this option, the extended contract shall be considered to include this option clause.

(c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed 3 years.

A.9 52.232-22 LIMITATION OF FUNDS (APR 1984)

(a) The parties estimate that performance of this contract will not cost the Government more than (1) the estimated cost specified in the Schedule or, (2) if this is a cost-sharing contract, the Government's share of the estimated cost specified in the Schedule. The Contractor agrees to use its best efforts to perform the work specified in the Schedule and all obligations under this contract within the estimated cost, which, if this is a cost-sharing contract, includes both the Government's and the Contractor's share of the cost.

(b) The Schedule specifies the amount presently available for payment by the Government and allotted to this contract, the items covered, the Government's share of the cost if this is a cost-sharing contract, and the period of performance it is estimated the allotted amount will cover. The parties contemplate that the Government will allot additional funds incrementally to the contract up to the full estimated cost to the Government specified in the Schedule, exclusive of any fee. The Contractor agrees to perform, or have performed, work on the contract up to the point at which the total amount paid and payable by the Government under the contract approximates but does not exceed the total amount actually allotted by the Government to the contract.

(c) The Contractor shall notify the Contracting Officer in writing whenever it has reason to believe that the costs it expects to incur under this contract in the next 60 days, when added to all costs previously incurred, will exceed 75 percent of (1) the total amount so far allotted to the contract by the Government or, (2) if this is a cost-sharing contract, the amount then allotted to the contract by the Government plus the Contractor's corresponding share. The notice shall state the estimated amount of additional funds required to continue performance for the period specified in the Schedule.

(d) Sixty days before the end of the period specified in the Schedule, the Contractor shall notify the Contracting Officer in writing of the estimated amount of additional funds, if any, required to continue timely performance under the contract or for any further period specified in the Schedule or otherwise agreed upon, and when the funds will be required.

(e) If, after notification, additional funds are not allotted by the end of the period specified in the Schedule or another agreed-upon date, upon the Contractor's written request the Contracting Officer will terminate this contract on that date in accordance with the provisions of the Termination clause of this contract. If the Contractor estimates that the funds available will allow it to continue to discharge its obligations beyond that date, it may specify a later date in its request, and the Contracting Officer may terminate this contract on that later date.

(f) Except as required by other provisions of this contract, specifically citing and stated to be an exception to this clause--

(1) The Government is not obligated to reimburse the Contractor for costs incurred in excess of the total amount allotted by the Government to this contract; and

(2) The Contractor is not obligated to continue performance under this contract (including actions under the Termination clause of this contract) or otherwise incur costs in excess of (i) the amount then allotted to the contract by the Government or, (ii) if this is a cost-sharing contract, the amount then allotted by the Government to the contract plus the Contractor's corresponding share, until the Contracting Officer notifies the Contractor in writing that the amount allotted by the Government has been increased and specifies an increased amount, which shall then constitute the total amount allotted by the Government to this contract.

(g) The estimated cost shall be increased to the extent that (1) the amount allotted by the Government or, (2) if this is a cost-sharing contract, the amount then allotted by the Government to the contract plus the Contractor's corresponding share, exceeds the estimated cost specified in the Schedule. If this is a cost-sharing contract, the increase shall be allocated in accordance with the formula specified in the Schedule.

(h) No notice, communication, or representation in any form other than that specified in subparagraph (f)(2) above, or from any person other than the Contracting Officer, shall affect the amount allotted by the Government to this contract. In the absence of the specified notice, the Government is not obligated to reimburse the Contractor for any costs in excess of the total amount allotted by the Government to this contract, whether incurred during the course of the contract or as a result of termination.

(i) When and to the extent that the amount allotted by the Government to the contract is increased, any costs the Contractor incurs before the increase that are in excess of (1) the amount previously allotted by the Government or, (2) if this is a cost-sharing contract, the amount previously allotted by the Government to the contract plus the Contractor's corresponding share, shall be allowable to the same extent as if incurred afterward, unless the Contracting Officer issues a termination or other notice and directs that the increase is solely to cover termination or other specified expenses.

(j) Change orders shall not be considered an authorization to exceed the amount allotted by the Government specified in the Schedule, unless they contain a statement increasing the amount allotted.

(k) Nothing in this clause shall affect the right of the Government to terminate this contract. If this contract is terminated, the Government and the Contractor shall negotiate an equitable distribution of all property produced or purchased under the contract, based upon the share of costs incurred by each.

(l) If the Government does not allot sufficient funds to allow completion of the work, the Contractor is entitled to a percentage of the fee specified in the Schedule equaling the percentage of completion of the work contemplated by this contract.

A.10 2052.215-81 TRAVEL REIMBURSEMENT

(a) Total expenditure for domestic travel may not exceed **\$3,136** without the prior approval of the contracting officer.

(b) The contractor is encouraged to use Government contract airlines, AMTRAK rail services, and discount hotel/motel properties in order to reduce the cost of travel under this contract. The contracting officer shall, upon request, provide each traveler with a letter of identification which is required in order to participate in this program. The Federal Travel Directory (FTD) identifies carriers, contract fares, schedules, payment conditions,

and hotel/motel properties which offer their services and rates to Government contractor personnel traveling on official business under this contract. The FTD, which is issued monthly, may be purchased from the U.S. Government Printing Office, Washington, DC 20402.

(c) The contractor will be reimbursed for reasonable travel costs incurred directly and specifically in the performance of this contract. The cost limitations for travel costs are determined in accordance with the specific travel regulations cited in FAR 31.205-46, as are in effect on the date of the trip. Travel costs for research and related activities performed at State and nonprofit institutions, in accordance with section 12 of Public Law 100-679, shall be charged in accordance with the contractor's institutional policy to the degree that the limitations of Office of Management and Budget (OMB) guidance are not exceeded. Applicable guidance documents include OMB Circular A-87, Cost Principles for State and Local Governments; OMB Circular A-122, Cost principles for Nonprofit Organizations; and OMB Circular A-21, Cost Principles for Educational Institutions.

(d) When the Government changes the Federal Travel Regulations, or other applicable regulations, it is the responsibility of the contractor to notify the contracting officer in accordance with the Limitations of Cost clause of this contract if the contractor will be unable to make all of the approved trips and remain within the cost and fee limitations of this contract due to the changes. Contractors, subcontractors, and grantees, are encouraged to adopt and enforce on-the-job seat belt policies and programs for their employees when operating company-owned, rented, or personally owned vehicles.

A.11 SEAT BELTS

Contractors, subcontractors, and grantees, are encouraged to adopt and enforce on-the-job seat belt policies and programs for their employees when operating company-owned, rented, or personally owned vehicles.

DR-21-06-234

ENCLOSURE 1

STATEMENT OF WORK

LICENSING SUPPORT NETWORK (LSN) OPERATIONS AND MAINTENANCE (O&M)
STATEMENT OF WORK
DR-21-06-234

1.0 Background

Section 114 (d) of the Nuclear Waste Policy Act of 1982 (NWPAA) requires the Nuclear Regulatory Commission (NRC) to issue a final decision approving or disapproving issuance of the construction authorization for a mined geologic repository to store high-level radioactive waste (HLW) at Yucca Mountain, NV, within three years of the Department of Energy's (DOE) license application. The NRC expects to accomplish this by replacing the classic "discovery" exchanges among parties with electronic access to discovery materials, via the Licensing Support Network (LSN, www.lsnnet.gov), prior to the docketing of the license application. The LSN is a critical tool for the HLW proceeding to ensure that document access, and the associated hearing agenda, can all be handled in an expeditious manner.

The LSN is codified in 10 CFR Part 2, Subpart J. Since the original rule - establishing a centralized dial-up Licensing Support System (LSS) - was promulgated in 1989, there has been extensive interaction with the parties and potential parties to the proceeding under the auspices of the LSS; and later the LSN Advisory Review Panel (LSNARP), a federal advisory committee chartered to provide advice and guidance on the design and operation of the system.

The LSN fosters the NRC's ability to protect public health and safety with respect to a license decision on the HLW repository by:

- Facilitating the NRC's compliance with the mandated three-year schedule for a decision on the repository construction authorization,
- Providing an electronic environment that facilitates a thorough technical review of relevant HLW proceeding documentary material, and
- Ensuring equitable access to the information for the parties to the hearing.

The LSN provides a web-based portal (www.lsnnet.gov), or central index, to the HLW proceeding participants' documents. As such, users will follow links to relevant materials from the LSN site or issue searches using fielded or text queries. However, when a user selects a document for retrieval from the search results list, the request is delivered by the LSN (through a HTTP link) to the participant's machine where the participant documents are located. The current LSN participants are DOE, NRC, State of Nevada, Nye County, White Pine County, Mineral County, Churchill County, Nuclear Energy Institute (NEI), City of Las Vegas, Clark County, Eureka County, and Lander County. In the future, Inyo County, Esmeralda County and possibly some public coalitions (e.g., Greenpeace) are expected to become LSN participants.

Per 10 CFR Part 2, Subpart J, DOE documents must be available via the LSN six months before the license application for the repository is submitted to the NRC. Subsequent to the DOE documents being available, the NRC and other potential parties (State of Nevada, local counties, NEI, etc.) are expected to make their documents available.

The LSN indexing subsystem is a set of software routines that provides the ability to process (e.g., index) 30,000 documents per day for loading into the search subsystem. Currently the LSN search subsystem contains approximately 3 million documents (30 million pages). It is undergoing expansion to a maximum system capacity of 5 million documents (50 million pages).

**LICENSING SUPPORT NETWORK (LSN) OPERATIONS AND MAINTENANCE (O&M)
STATEMENT OF WORK
DR-21-06-234**

Currently, 13 participant web sites are integrated and regularly spidered by the LSN. In addition, the LSN administration subsystem allows the Government to monitor the LSN (e.g., new or changed documents) and update web site information (e.g., post announcements and add priority users).

The overall operating environment includes but is not limited to:

- Microsoft (MS) SQL Server 2003
- Windows server leveraging load balancing and clustering
- Overland storage tape subsystem
- Autonomy IDOL (Intelligent Data Operating Layer) Server (12 DREs (Dynamic Reasoning Engines)), DIH (Distributed Index Handler), and DAH (Distributed Action Handler).
- Secure FTP (File Transfer Protocol)
- Web Server (IIS (Internet Information Server) 6)
- XML (Extensible Markup Language)
- Storage Area Network (SAN)
- MS Visual Studio (.Net and Visual Basic)

The goal of the LSN is to reduce the time needed for the HLW repository licensing proceeding, thus providing the Commission the necessary tools to meet the congressionally-mandated three-year decision time frame.

2.0 Objectives

The Contractor shall provide all labor, supervision, tools, materials, parts, and equipment necessary to provide the hardware and software maintenance, labor, web application hosting, and other resources needed to ensure uninterrupted operation of the LSN throughout the anticipated Yucca Mountain HLW repository licensing proceeding.

3.0 Description of the Scope of Work

3.1 The Contractor shall maintain and operate the LSN search subsystem, indexing subsystem, and administration subsystem. The scope of this project encompasses the following activities.

1. Making documents submitted by participants available for search and retrieval via the LSN System.
2. Processing new, deleted, and changed documents.
3. Maintaining the 13 currently integrated participants and integrate new participants (estimated at 2) for a total of approximately 15.
4. Providing a secure co-hosting facility with a minimum 3Mbps (megabits per second) bandwidth, firewall, and Intrusion Detection System (IDS).
5. Assisting the Government in meeting security requirements responsive to requirements of the Federal Information Security Management Act (FISMA).
6. Maintaining a test environment at the Contractor's facility.

LICENSING SUPPORT NETWORK (LSN) OPERATIONS AND MAINTENANCE (O&M)
STATEMENT OF WORK
DR-21-06-234

7. Providing status reporting.
8. Updating the operations guide.
9. Maintaining and updating Web pages.
10. Maintaining the LSN administration subsystem.

- 3.2** The LSN is currently operational and cannot experience any extended downtime (e.g., greater than four hours). As such, if the contractor proposes to move the system from the current hosting facility they should include a plan in their proposal of how they will accomplish the move without extended LSN downtime. The Government estimates a move of the LSN to another hosting facility would result in at least 30 days of downtime before the LSN is operational again.

4.0 Specific Tasks

- 4.1** **Task 1** - Make documents submitted by participants available for search and retrieval via the LSN System. Process new, deleted, and changed documents.

- 4.1.1 Requirement:** The Contractor shall make current documents submitted by participants available for search and retrieval via the LSN. Currently the LSN search subsystem contains approximately 3 million documents (30 million pages) that have been uploaded to the LSN search subsystem and are available to the public for search and retrieval. The current system capacity is 5 million documents (50 million pages). The Contractor shall upload the documents and make them available for search and retrieval 24 hours a day, 7 days a week, 365 days a year. The LSN spider (document upload process) is a set of software routines that provides the ability to process (e.g., index) documents for loading into the search subsystem. The Contractor shall process/upload (via spider process) new, deleted, and changed documents made available by participants within 24 hours of receipt (or as directed by the Government). The Contractor shall process daily, when made available by a participant, a maximum document load of 30,000 documents (approximately 360,000 pages) per night, 5 nights per week, for a total of 150,000 documents (approximately 1.8 million pages) per week. Maximum downtime, (e.g., cannot search and retrieve documents due to a system error) shall be less than four (4) hours Monday-Friday (excluding holidays) during working hours (6:00 a.m. Eastern Standard Time (EST) - 9:00 p.m. EST) per day. After working hours, on weekends, and on holidays, the maximum downtime shall be eight (8) hours per day. The Government shall be given a minimum of 24 hours notice of planned maintenance that may affect the LSN operations.

The LSN shall accept documents made available in standard text formats including, but not limited to, Word, Wordperfect, Portable Document Format (PDF), Hypertext Markup Language (HTML), text file (TXT), and Powerpoint. Additionally, documents with no text (e.g., image-only documents or header only documents with no image) must also be made available for bibliographic header field-only search and retrieval. Image formats include but are not limited to single page Tag Image File Format (TIFF), multi page TIFF, Graphics Interchange Format (GIF), and Joint Photographic Experts Group (JPEG). Bibliographic header field information will be posted in XML format by LSN participants.

LICENSING SUPPORT NETWORK (LSN) OPERATIONS AND MAINTENANCE (O&M)
STATEMENT OF WORK
DR-21-06-234

- 4.1.2 Performance Standards:** The Contractor shall ensure that 100% of documents posted by participants are uploaded (successfully spidered) within 24 hours or as directed by the Government. If a participant's document(s) cannot be successfully spidered (e.g., corrupt document file, invalid XML header file, etc.), this shall be reported in the LSN administration subsystem. Documents successfully spidered shall be available for search and retrieval by users 24 hours a day, 7 days a week, 365 days a year. The maximum unavailability of the LSN search system shall be less than 4 hours during the hours of 6:00 a.m. EST and 9:00 p.m. EST and less than 8 hours at any other time.
- 4.1.3 Deliverables:** The data from the spider shall be immediately uploaded to the LSN administration system within one hour of each spider run.
- 4.1.4 Method of Surveillance:** The LSN has an administration subsystem that identifies the number of documents successfully spidered. If a document is not successfully spidered, it shall be reported in the LSN administration subsystem. The Government project officer will use this administrative module on a daily basis to verify successful and/or unsuccessful document uploads. If a document is not successfully uploaded, the contractor shall work with the Government to identify what caused the error in an effort to allow the participant to remedy document upload anomalies (e.g., corrupt document file, invalid header XML file, etc.). Additionally, the Government will independently verify the search system is available by issuing queries and/or monitoring the LSNWebmaster E-mail account where users identify system problems.
- 4.1.5 Guidance:** Attachment A, Table A: Recommended Participant Bibliographic Header Field Structure provides a description of the fields that shall be available for searching in the LSN.
- 4.1.6 Acceptable Level of Performance:**
1. One event per month causing either:
 - 1.1 Downtime of less than four hours Monday-Friday (excluding holidays) during working hours (6:00 a.m. EST - 9:00 p.m. EST) per day, or
 - 1.2 Downtime of less than eight hours after working hours, on weekends, or on holidays.
 2. Complete participant spidering at a maximum of 30,000 documents within 36 hours.
- 4.2 Task 2 - Maintain the 13 currently integrated participants and integrate new participants.**
- 4.2.1 Requirement:** The Contractor shall maintain the 13 currently integrated participants and integrate new participants (estimated at 2) for a total of approximately 15. Integration is completed when the LSN is able to successfully spider a participant document repository (see Task 1).

LICENSING SUPPORT NETWORK (LSN) OPERATIONS AND MAINTENANCE (O&M)
STATEMENT OF WORK
DR-21-06-234

- 4.2.2 Performance Standard:** New participants shall be integrated into the LSN System within two weeks of receiving the appropriate application/paperwork. Problems with previously integrated participants shall be diagnosed by the Contractor within 24 hours. LSN problems identified by the contractor preventing participant integration shall be resolved by the contractor within 48 hours. The contractor shall work as expeditiously as possible to resolve integration problems caused by the participant (e.g., participant machine unavailability).
- 4.2.3 Deliverables:** The new participant is posted on the LSN advanced search page when integration is completed.
- 4.2.4 Method of Surveillance:** The LSN has an administration subsystem that identifies the number of current participants. The Government project officer will use this administrative module to determine if new participants have been added within two weeks of receiving an application. The administrative subsystem will also be used to identify if previously integrated participants are still active by reviewing the spider reports (e.g., successful document uploads, changes, and/or deletes).
- 4.2.5 Guidance:** Attachment B, Setting Up an LSN Repository, provides guidance for participants on how to make their site available for integration into the LSN. The contractor can use this guidance document to understand how participant sites will be configured for integration with the LSN.
- 4.2.6 Acceptable Level of Performance:**
1. One of the two new participants is integrated within three weeks of receiving request versus the performance standard of two weeks.
 2. One participant integration problem caused by the LSN in every five is solved by the contractor in 48-72 hours.
- 4.3 Task 3 - Provide a secure co-hosting facility.**
- 4.3.1 Requirement:** The Contractor shall install and maintain the LSN hardware and software in a secure co-hosting facility with a minimum 3Mbps (Megabits per second) bandwidth Internet connection, firewall, and Intrusion Detection System (IDS). Attachment C, LSN Network Diagram, provides the current configuration of the system. Any changes to the configuration must be approved by the Government. Breach of the LSN by a hacker shall be prevented. The LSN shall be protected against viruses. Other malicious activity such as denial of service attacks shall be minimized to the maximum extent possible. To the extent required to carry out a program of inspection to safeguard against threats and hazards to the security, integrity, and confidentiality of Government data, the contractor shall afford the Government access to the contractor's facilities, installation, technical capabilities, operations, documentation, records, and databases.

LICENSING SUPPORT NETWORK (LSN) OPERATIONS AND MAINTENANCE (O&M)
STATEMENT OF WORK

DR-21-06-234

- 4.3.2 Performance Standard:** No breach to the LSN by unauthorized users (e.g. hackers). Minimum 3Mbps bandwidth. Denial of service attack (or other malicious activity) response by the contractor shall ensure that LSN search and retrieval is not unavailable for 4 hours or more in any one day Monday-Friday (excluding holidays) during working hours (6:00 a.m. EST- 9:00 p.m. EST). After working hours, on weekends, and on holidays, the maximum LSN search and retrieval downtime shall be eight hours per day.
- 4.3.3 Deliverables:** With the monthly report (see Task 7) a report of firewall and IDS activity including any recommended adjustments to bolster LSN security (e.g., changes in firewall or IDS rule sets to prevent potential hacker attacks).
- 4.3.4 Method of Surveillance:** The Government shall be placed on the IDS alert E-mail list.
- 4.3.5 Guidance:** See Attachment C, LSN Network Diagram, for the current configuration of the system.
- 4.3.6 Acceptable Level of Performance:** Firewall and IDS activity report delivered no later than two days after the monthly report in one instance per year.
- 4.4 Task 4 -** Assisting the Government in meeting security requirements responsive to requirements of the Federal Information Security Management Act (FISMA).

1. Person(s) responsible for information security of the Licensing Support Network (LSN) shall be noted in the System Security Plan (SSP). The contractor shall inform the NRC Project Manager if there is a change in responsibility.
2. The contractor shall comply with the all applicable laws, regulations, and policies governing a data system determined to have a sensitivity level of "moderate," as defined by FIPS Pub 199, Standards for Security Information of Federal Information and Information Systems.
3. All information systems which process Government information must comply with FISMA requirements for initial certification and periodic re-certification. The LSN certification package has been completed and is being evaluated by the NRC Office of Information Services. Approval to Operate is anticipated in April 2006. Therefore, re-certification is currently scheduled for April 2009.
4. Only licensed software and in-house developed authorized code (including Government and contractor developed, shall be used on the LSN. Public domain, shareware, or freeware shall only be installed after prior written approval is obtained from the contracting officer or COTR. The contractor shall provide proof of licensing upon request of the contracting officer or COTR.
5. The contractor shall not publish or disclose in any manner, without the contracting officer's written consent, the details of any safeguards either designed or developed by the contractor under this contract or otherwise

LICENSING SUPPORT NETWORK (LSN) OPERATIONS AND MAINTENANCE (O&M)
STATEMENT OF WORK

DR-21-06-234

provided by the Government. The SSP and other information system security documentation for the LSN are considered Sensitive Unclassified Information. The contractor agrees to abide by NRC regulations for handling sensitive unclassified information governed by the NRC's Sensitive Unclassified Non-Safeguards Information program (SUNSI).

6. If new or unanticipated threats or hazards are discovered by either the Government or the contractor, or if existing safeguards have ceased to function, the discoverer shall immediately bring the situation to the attention of the other party.
7. Under no circumstances is the contractor permitted to make use of LSN equipment or supplies for purposes other than support of this contract.
8. The contractor shall provide annual updates to the LSN contingency plan and report of testing of the contingency plan as part of the certification and accreditation process. When the LSN is granted an authority to operate (ATO), the contractor assumes responsibility for implementing the plan as necessary. The plan submitted shall include the requirements of NIST SP 800-64, Section B.2.
9. Any sensitive unclassified information made available in any format shall be used only for carrying out the provisions of this contract. Information contained in such material shall not be divulged or made known in any manner to any person except as may be necessary in the performance of this contract. Disclosure to anyone other than an authorized officer or employee of the contractor shall require written approval of the contracting officer or COTR.
10. The contractor, upon request, shall provide objective evidence of its compliance with the Security Assurance requirements as specified in NIST SP 800-53 for a system of "moderate" sensitivity and Security Functional Requirements as documented in the Licensing Support Network Baseline Design Requirements.
11. The contractor shall respond to IT security incidents as directed by Management Directive 12.5, NRC Automated Information Security Program.

4.4.1 Requirement: The Contractor shall conduct annual contingency plan testing. Annual contingency plan testing is required as part of the Government's information security requirements.

4.4.2 Performance Standard: Complete the annual contingency plan test by the dates specified below in Section 4.4.3, Deliverables.

4.4.3 Deliverables:

Base Year: Not Applicable

LICENSING SUPPORT NETWORK (LSN) OPERATIONS AND MAINTENANCE (O&M)
STATEMENT OF WORK
DR-21-06-234

Option Year 1: 6/30/07 - Contingency plan test plan
 7/31/07 - Contingency plan test results

Option Year 2: 6/30/08 - Contingency plan test plan
 7/31/08 - Contingency plan test results

4.4.4 Method of Surveillance: The Government Project Officer shall evaluate the timeliness and completeness of the annual contingency plan test and results.

4.4.5 Guidance: Attachment D, LSN Contingency Plan, provides the information needed to conduct the test.

4.4.6 Acceptable Level of Performance: Each deliverable may be delivered up to one month later than scheduled with prior approval from the Government. However, the request for the change in the delivery date by the contractor must be made no later than one month before the scheduled due date.

4.5 Task 5 - Maintain a test environment.

4.5.1 Requirement: The Contractor shall maintain a test environment at the Contractor's facility. The LSN test environment shall facilitate efficient development of LSN fixes and enhancements and shall be synchronized with the versions and releases utilized in the production system.

4.5.2 Performance Standard: Within one week of contract award the test environment shall be fully operational.

4.5.3 Deliverables: Contract award plus one week - demonstration to the Government of a fully operational test environment.

4.5.4 Method of Surveillance: Site visit.

4.5.5 Guidance: See Attachment E, LSN Test Network Diagram.

4.5.6 Acceptable Level of Performance: Test environment operational in two weeks of contract award.

4.6 Task 6 - Provide general maintenance and operational support.

4.6.1 Requirement: The Contractor shall provide general (release-based and emergency) maintenance support of the LSN application software, files and databases, and all associated backup and recovery subsystems.

The Contractor shall provide operational support for the LSN search & retrieval and administrative components, and for all associated backup and recovery subsystems,

LICENSING SUPPORT NETWORK (LSN) OPERATIONS AND MAINTENANCE (O&M)
STATEMENT OF WORK
DR-21-06-234

including scheduled reviews, subsequent to participant sites being "spidered" and the LSN indexes being updated. The Contractor shall monitor the LSN every business day, to ensure correct, stable and efficient operation of the system, including, but not limited to: (1) verifying system operation; (2) checking the status of transaction and index updates resulting from scheduled "spider" of participant sites; and (3) reviewing, on a daily basis, the operational reports and logs. On a scheduled basis (at least monthly), the Contractor shall check the size, growth, space utilization, and integrity of the underlying RDBMS tables, control-point directories, and database structures, and perform other diagnostic routines to ensure successful LSN operation. The Contractor shall administer user IDs and user access levels per requirements engendered in the overall design concept. The Contractor shall respond to questions from database administrators of the participants' collections regarding LSN computer systems, database, directories, problem reports, problem notifications, and status reporting, as directed by the NRC task manager.

When LSN maintenance and operational support responsibilities result in the discovery of an actual or potential LSN problem that needs to be diagnosed and/or corrected, or when database monitoring identifies a database change that is needed, the Contractor shall promptly notify the NRC task manager via phone and/or e-mail. The Contractor shall provide resources to perform an ad hoc analysis of the LSN application code, scripts, agents, and database tables in response to technical questions from the NRC task manager.

The Contractor shall make routine and ad hoc preventive and corrective changes to the LSN databases as requested or approved by the NRC task manager. In general, the changes shall either be to crawlers, scripts, agents, the database structures and/or data definitions, or shall be for the purpose of correcting data in the databases. Additionally, the Contractor should anticipate routine and corrective maintenance activities such as resizing the database, performing diagnostics on data in the database, running maintenance and backup jobs, etc.

Based on the general maintenance and operational support performed, the contractor will annually update the LSN Operation Guide with relevant information.

4.6.2 Performance Standard: Maximum downtime (e.g., cannot search and retrieve documents due to maintenance issue) shall be less than four (4) hours Monday-Friday (excluding holidays) during working hours (6:00 a.m. EST - 9:00 p.m. EST) per day. After working hours, on weekends, and on holidays, the maximum downtime shall be eight (8) hours per day.

4.6.3 Deliverables:

1. Submit a daily e-mail message to project officer confirming the LSN is operational.
2. Any work performed to remedy or mitigate issues during general maintenance and operational support shall be reported in the weekly or monthly report.

LICENSING SUPPORT NETWORK (LSN) OPERATIONS AND MAINTENANCE (O&M)
STATEMENT OF WORK
DR-21-06-234

3. Submit an annual update to the LSN Operation Guide as show below:

Base Year:	TBD (Coordinate with the NRC Project Officer)
Option Year 1:	5/31/07
Option Year 2:	5/31/08

4.6.4 Method of Surveillance: The LSN administration subsystem will be used to review server performance, disk space utilization, and spider performance (e.g., documents successfully added). Additionally, the Government will independently verify the search system is available by issuing queries and/or monitoring the LSNWebmaster E-mail account where users identify system problems.

4.6.5 Guidance: Attachment F, LSN Operations Guide (Draft).

4.6.6 Acceptable Level of Performance: One event per month causing either:

1. Downtime of less then four hours Monday-Friday (excluding holidays) during working hours (6:00 a.m. EST - 9:00 p.m. EST) per day or
2. Downtime of less then eight hours after working hours, on weekends, or on holidays.

4.7 Task 7 - Provide status reporting.

4.7.1 Requirement: The Contractor shall provide weekly Activity Reports to include any exceptions or changes from the existing plans. The weekly report will be delivered by Tuesday Close of Business (COB) for review prior to a regular Wednesday Project Meeting. The weekly will include a proposed agenda for the meeting to cover management issues and any technical issues that would impact schedule, cost, or technical risk. At a minimum, the weekly report should cover the accomplished items, planned items, issues (technical, management, and financial), and proposed resolutions during the reporting period. The monthly reports shall be expanded to include financial data (planned and actual) and an update to the project plan (in MS Project). The Contractor must be prepared to interface with NRC's IBM Rational Software Suite for integrated defect tracking, functional testing, and quality monitoring as needed.

4.7.2 Performance Standard: Weekly/monthly reports are received by Wednesday COB.

4.7.3 Deliverables:

1. Weekly reports each Wednesday (except when monthly reports are due)
2. Monthly report the first Wednesday on or after the tenth of the month.

**LICENSING SUPPORT NETWORK (LSN) OPERATIONS AND MAINTENANCE (O&M)
STATEMENT OF WORK
DR-21-06-234**

- Audit status provides random auditing of participant documents for changes. The changes are determined by document file time, date, and/or MD5 changes. The Government also has the ability to submit documents for auditing.
- Participant sever polling that allows the Government to determine if a participant's site (web or fetch server) is or has been down for a period of time (e.g., greater then five minutes).
- View who is on the web site by IP or login name.
- LSN server status for each machine including CPU and memory utilization.
- Generate date-based reports for each participant reporting processing errors (e.g., fetch errors, parse errors), new documents, modified headers, modified documents, and/or deleted documents.
- Add a new participant and set their site to active, visible but not searchable, or not visible.
- Add priority users.
- Manage data such as adding announcements, guidance, help pages, events, hyperlinks, FAQs, tutorials, downloads, and home page notices.
- Ability to set the query mode to all queries, no public queries, and priority queries to those logged in based on query server CPU utilization thresholds.

The Contractor is required to keep an updated defects log. The existing defect log, maintained in MS Excel, shall be provided to the Contractor within one week of contract award.

4.9.2 Performance Standard: Any defect identified by the Government shall be fixed in one week.

4.9.3 Deliverable: Updated defects log with the monthly report or within 24 hours when new items are added.

4.9.4 Method of Surveillance: The Government will review the defect log for accuracy, completeness, and timeliness.

4.9.5 Guidance: None.

4.9.6 Acceptable Level of Performance: One defect per month fixed by the contractor within two weeks.

5.0 Period of Performance

The period of performance will be July 14, 2006 - July 13, 2007 with two additional 1-year option periods.

LICENSING SUPPORT NETWORK (LSN) OPERATIONS AND MAINTENANCE (O&M)
STATEMENT OF WORK
DR-21-06-234

6.0 Meetings and Travel

The Contractor will be required to participate in weekly and monthly meetings to discuss the status reports. Meetings will be held at 10:00 a.m. on Wednesdays, and may be held by teleconference.

Minimal local travel will be required. One trip to Las Vegas for two Contractor personnel may be required and for planning purposes, any such trip will be one work week (five working days) in length.

7.0 NRC-Furnished Material and Equipment

All production and test system hardware and software will be provided by the Government. The Contractor shall provide the hardware and software necessary to connect to the Internet (e.g., hub, switch, router, etc.). See Attachment G, Government Property Inventory Count Sheet.

LICENSING SUPPORT NETWORK (LSN) OPERATIONS AND MAINTENANCE (O&M)
STATEMENT OF WORK
DR-21-06-234

4.7.4 Method of Surveillance: The Project Officer shall review weekly/monthly reports for accuracy, completeness, and timeliness.

4.7.5 Acceptable Level of Performance: One status report per month delivered late with prior Government approval. Approval must be requested by the contractor at least 24 hours before the scheduled due date.

4.8 Task 8 - Maintain and update Web pages.

4.8.1 Requirement: The Contractor shall maintain and update Web pages. Any web page updates or corrections shall be made by the Contractor within 24 hours of notification from the Government. If the changes require greater than 24 hours, the Contractor shall deliver a web page update plan to the Government within 24 hours. The web page update plan shall identify the activities to be performed with associated completion dates. Any information or additional resources (e.g., Government-Furnished Information (GFI) or Government-Furnished Equipment (GFE)) required by the Contractor to complete the web page update shall be included in the plan. A maximum of two web page updates per month are estimated.

4.8.2 Performance Standard: Any web page updates or corrections shall be made by the Contractor within 24 hours of notification from the Government. If the changes require greater than 24 hours, the Contractor shall deliver a web page update plan to the Government within 24 hours.

4.8.3 Deliverables: Web page update plan (if necessary).

4.8.4 Method of Surveillance: The Government will review the web site for correction or the web page update plan for accuracy, completeness, and timeliness.

4.8.5 Guidance: None.

4.8.6 Acceptable Level of Performance: One web page update per month takes up to 72 hours and is not included in the web page update plan.

4.9 Task 9 - Maintain the LSN administration subsystem.

4.9.1 Requirement: The Contractor shall maintain the LSN administration subsystem. The administration subsystem is used by the Government to maintain the LSN as well as "audit" activity on the site. The functionality includes:

- Monitor spider status including progress with each stage including initialization, header fetch, header parse, document fetch, document index, document import, and successful transfer. Errors in any of these stages are captured.
- View repository status for each participant's document collection including number of headers, documents, and document sections indexed.

DR-21-06-234

ATTACHMENT A -

TABLE A: RECOMMENDED PARTICIPANT HEADER FIELD STRUCTURE

TABLE A: RECOMMENDED PARTICIPANT BIBLIOGRAPHIC HEADER FIELD STRUCTURE

- The following table contains a model bibliographic data field set as would be implemented in a classic Relational Database Management (RDBMS) system implementation. This is a shortened version of the original LSS bibliographic header structure as recommended in 1994.
- Participants who have unusual ways of treating data (such as putting multiple document or publication identification numbers into a single text field) should coordinate those approaches with the LSN Administrator.
- Some fields, such as "QA Record" and "Traceability Code and Number" are unique to DOE.

	Field Name	M = Mandatory R = Req'd if Avail. O = Optional	S = Single Value M = Multi-Valued	Field Length (Characters)	Comments
1	Access Control Information	R	M	65	<ul style="list-style-type: none">• Alphabetic• Max.# of entries is 10• Examples of access control: Attorney Work Product, Attorney/Client, Business Proprietary, Copyright, Public• Because a document can be both Attorney Work Product and Attorney/Client, cannot restrict to single-value.
2	Addressee Name	R	M	56	<ul style="list-style-type: none">• Alphanumeric• Max. # of entries is 500• Standard format is: LAST NAME [space] FIRST INITIAL MIDDLE INITIAL (ex: GRASER DJ)

	Field Name	M = Mandatory R = Reqd if Avail. O = Optional	S = Single Value M = Multi-Valued	Field Length (Characters)	Comments
11	Image URL	R	M	255	<ul style="list-style-type: none"> • Alphanumeric • May be blank (no image is available) • No max. # of entries
12	LSN Accession Number	M	S	12	<ul style="list-style-type: none"> • Generated by the LSN
13	Non-Digital Media	R	M	40	<ul style="list-style-type: none"> • Alphabetic • Examples: Microfilm, Photograph, Radiograph, Videotape
14	Number of Images	O	S	11	<ul style="list-style-type: none"> • Numeric
15	Package Identifier	R	M	50	<ul style="list-style-type: none"> • Alphanumeric • Max. # of entries is 500
16	Participant Accession Number	M	S	25	<ul style="list-style-type: none"> • Alphanumeric • No required format
17	QA Record Indicator	R **	S	1	<ul style="list-style-type: none"> • Default value is the DOE-assigned code value
18	Related Record Code	R	M	7	<ul style="list-style-type: none"> • Alphanumeric • Max. # of entries is 500
19	Related Record Number	R	M	25	<ul style="list-style-type: none"> • Alphanumeric • Max. # of entries is 500
20	Text URL	R	S	255	<ul style="list-style-type: none"> • Alphanumeric • May be blank (non-textual material)

HEADER FIELD DESCRIPTIONS

Access Control Information

A code indicating that access to a document is restricted. Access is restricted if the document is privileged, proprietary, or copyrighted.

Addressee Name

The names of all the persons to whom a document is addressed. Each entry in this field is linked to a corresponding entry in the Addressee Organization field.

Addressee Organization

The affiliation of each receiver or the organization to whom the correspondence is addressed if there is no personal receiver. Each entry in this field is linked to a corresponding entry in the Addressee Name field.

Author Name

The name of each person listed on the document as responsible for all or part of its creation. Only personal authors are entered in this field. Corporations as authors are captured in the Author Organization field. Each entry in this field is linked to a corresponding entry in the Author Organization field.

Author Organization

The name of the organization (i.e., company, corporation or group) with which the author is affiliated at the time the document was created, or the name of the organization responsible for creating or originating the document when there is no personal author. If an author works for one organization and is representing another, both affiliations should be captured. Each entry in this field is linked to a corresponding entry in the Author Name field.

Comments

Any information not covered in other fields which the submitter or indexer believes would be of help to identify or retrieve the document, or to further explain any field entry for the document. This field can be used for entries such as the language of the document (if it is not English) or the page numbers that are missing in an incomplete document. This field may contain information on where an image version of a document may be acquired. This field may contain a description of the contents of a document that cannot be imaged and converted to searchable text. This field may include summaries of documents that are privileged or physical "things" if that data is not elsewhere explicitly detailed in the textual document. Participants utilizing a special instruction sheet must make all these types of information accessible in a text version of the special instruction sheet, otherwise, such data is to be included in the Comments field, Physical Location Reference Information field, or comparable fielded data location.

Descriptors

Words or phrases (identifiers, keywords) that the submitter provides with the document to represent the subject content of the document and to assist the user in retrieval. Keywords may be, but are not necessarily, contained in a controlled vocabulary.

Related Record Code

The code that represents the type of relationship between the document being entered and a document to which it is related. Each code in the authority list will have a reciprocal code; for example, the reciprocal of a document (A) that is attached to another document (B) is document (B) has attachments (A). Examples of Related Record Codes include: REV (revises or is a later version of), COR (corrects) or SUPR (supersedes). Each entry in this field is linked to a corresponding entry in the Related Record Number field.

Related Record Number

This field contains the LSN Participant Accession Number(s) of a document that has a particular relationship to the document being entered. There are several types of relationships, such as: parent/child (a document and its attachments); original/subsequent (a document and a later version, comments, corrections, or errata); and whole/part (a book and its chapters, a journal and its articles); and an information package and the cataloging units it contains. The type of relationship is captured in the Related Record Code field. Each entry in this field will be linked to a corresponding entry in the Related Record Code field.

Text URL

The Uniform Resource Locator reference to the text associated with the header.

Title

An identifying sentence or phrase given to the document that appears on the document, i.e., the actual title. If the actual title is not present for a document, a title must be created.

Traceability Code and Number

An identifier that has been assigned to a document in order to link it to a specific activity. These identifiers will enable searchers to easily retrieve all documents associated with any given activity by providing a special linkage not available through other fields. Examples of traceability numbers include WBS numbers, Data Tracking Number, and configuration item identifiers. This number may include a code that indicates the type of traceability number. Examples of this code include: DTN (technical data link), DI (Document Identifier), and WBS (Work Breakdown Structure).

Version

The version, revision number, or status of a document that has or will have multiple iterations. It will correspond to information contained on the document (e.g., Revision 2, Version 1, Final, or Draft).

DR-21-06-234

ATTACHMENT B -
SETTING UP AN LSN REPOSITORY

22 SETTING UP AN LSN PARTICIPANT REPOSITORY

22.1 Purpose

The purpose of this document is to assist potential parties to the high-level waste proceeding in developing a web site to participate in the Licensing Support Network (LSN) as required by 10 C.F.R. 2, Subpart J. This document should be used by cognizant web site and/or computer professionals.

22.2 Background

22.2.1 What Is the Licensing Support Network?

The LSN responds to a congressional mandate that the Nuclear Regulatory Commission (NRC) reach a determination on the Department of Energy's (DOE's) application for construction authorization for a high-level radioactive waste repository at Yucca Mountain, Nevada, in a three-year time frame. To shorten the time spent on the exchange of documents that may be used as evidence in the NRC licensing proceeding, the parties and potential parties to the proceeding on the DOE license application will make their documents available via the LSN before the DOE application is submitted to the NRC. The LSN provides a single place where the parties and potential parties to the licensing proceeding can search for documents from any/all of those collections in a uniform way.

22.2.2 Components of the Licensing Support Network

The LSN was designed using three major components:

- The LSN Spider System: The spider operates using the baseline concepts of a web crawler. Specifically, it looks for files stored on a registered participant web site, collects the bibliographic header information about each document, and gleans the content of each related document, and creates a searchable index.
- The LSN Auditing System: Once a document is placed on the participant web site, it may not be modified or removed without notifying the LSN Administrator (LSNA). The LSN Auditing System validates the header and document file information accumulated through the spidering process with the current files stored on the participant web site. Each document in the searchable index is audited on an equal basis with no preference given to the owner.
- The LSN Site Polling System: The site poller checks the status of each participant's web site on a regular basis to ensure the LSNA is notified of outages and other problems.

22.2.3 Repositories

22.2.3.1 Participant Repositories

Participant repositories, or web sites with their respective document collections, are created, populated, and maintained by each party, potential party, or interested governmental participant

involved with the licensing proceeding. Each participant, according to 10 C.F.R. 2, Subpart J, is required to provide documentary material that may be used in the licensing proceeding.

Although a participant only needs one physical server, it must support a pair of logical servers in order to accomplish the required tasks.

- The fetch server is utilized by the LSN system components to gain access to the complete repository structure.
- The web server is a public interface by which everyone can view the documents.

22.2.3.2 The LSN Repository

The LSN Repository, via the LSN spider, collects the bibliographic headers and document text from each participant's web site and creates the searchable index. The LSN web site, <http://www.lsnnet.gov>, provides the search interface for the repository. The LSN Repository does not contain physical copies of the documents. It merely stores the search terms and bibliographic header information required to support the search mechanisms. Once a search has been executed, the web site user is redirected to the document located on the associated Participant Repository's web server.

22.2.4 How Does the LSN Work?

22.2.4.1 The LSN Spider System

The LSN Spider conducts the following steps in order to synchronize the searchable index with the contents of a participant fetch repository:

- The spider conducts a scan of the directory structure of the Participant Repository using the header and document root directories. All directories and files entries are stored in the LSN database.
- Any header that has been flagged as added or modified is downloaded and parsed to update the bibliographic header information in the LSN database.
- Any document that has been flagged as added or modified is downloaded and sent through a content extraction process.
- Any added or modified header or document combination is updated in the searchable index.
- Any added or modified header or document combination is then updated in the public viewing area.
- Any headers and/or documents that have been marked as changed or removed are tracked and reported to the LSNA.

The LSN spider will run Monday through Saturday mornings, commencing between 00:00 and 01:00 Eastern Time (ET). The spider will not run between 12:00 ET (noon) on Saturday and 00:00 ET on Monday (midnight Sunday), to allow the LSN to conduct complete backups and maintenance.

The spidering process actually consists of multiple spiders (one or more for each participant) and can take up to eight hours to fully execute. During initial loading of large participant repositories (e.g., DOE) the spider may run up to 16 hours.

22.2.4.2 The LSN Auditing System

The LSN Auditing System is a multi-channelled process that compares the directory and file information stored in the LSN database with the actual files located on the repository server. This process is used to ensure submitted documents have not been changed or removed without prior notification to the LSNA.

During the spidering process, the system retrieves the combined header/document file information from the LSN database, checks the date-time stamp and file sizes, and then downloads copies of each of those files from the repository fetch server. Hash values are calculated for each of the downloaded files. The system validates all three items (date-time stamp, file size, and hash) against previous values.

The hash value comparison is capable of detecting a one (1)-bit change within the files.

The LSN Auditor runs whenever the spidering process is dormant, which is usually Monday through Saturday 08:00 ET through 23:30 ET.

22.2.4.3 The LSN Site Polling System

The LSN site poller runs continually, 24 hours a day, seven days a week. At intervals specified by the LSNA, the site poller will connect and disconnect from the participant fetch and web servers to ascertain the availability of each server. The information is stored in the LSN database for reporting purposes for the LSNA.

22.3 Setting up a Participant Repository

The following sections provide the basic information for setting up a Participant Repository server. This information is based on the LSN system requirements for interfacing the LSN Repository with the participant repositories.

Having both a fetch and a web server allows the LSN to spider through the fetch server then provide hyperlinks to the documents via the web server. The web server will provide higher throughput while serving the documents, plus accommodates a wider range of client environments.

22.3.1 File System

Although the LSNA cannot mandate how files are stored on a participant's server, the following directory structure has been found to provide the most flexibility for the LSN and Participant Repository administrators:

- Create an LSN root directory on the server (i.e., D:\LSNRoot)
- Create two (2) directories under the LSN root directory:
 - headers (i.e., D:\LSNRoot\headers)

This directory will contain the bibliographic header files (see Section 22.4.1). Only those headers which have been released for public use should reside in this directory. Do not place any other files in this directory, as they will generate error conditions in the LSN Spider, which will be reported to the LSNA.

Multi-level directories (i.e., subdirectories) are permitted if it is desired to organize the documents by date-range, topic, or other categorization. The LSN Spider will traverse the directory structure.

- documents (i.e., D:\LSNRoot\documents)

This directory will contain the actual documents (i.e., PDF, HTML, etc.) and any supporting image files (i.e., TIF, JPG, etc.). Do not place any other files in this directory, as they will generate error conditions in the LSN Spider, which will be reported to the LSNA.

The documents stored here must match the textual or image Uniform Resource Locator (URL) entries in the header files (see Section 22.4.1.3 for more information on the header files and the URL entries within the header file).

Multi-level directories (i.e., subdirectories) are permitted if it is desired to organize the documents by date-range, topic, or other categorization. The LSN Spider will traverse the directory structure.

- If the participant organization desires to have its own web or search pages, place them in the LSN root directory, or any subfolder not previously specified. The LSN processes do not look for or access any directories other than those three listed above.
- It is highly recommended that a default web page be placed in the LSN root directory to assist the LSN Site Polling process. This helps the site poller to connect to the web server using the `http://www.participant.org` format.

22.3.2 Participant Fetch Server

The participant fetch server provides the interface by which the LSN Spider and LSN Auditor access the Participant Repository.

The supported protocols for the participant fetch server include:

- File Transfer Protocol (FTP)
- File Transfer Protocol Secure (FTPS) (FTP rolled into Secure Sockets Layer (SSL))
- Secure FTP (SFTP) under Unix-based Secure Shell

These protocols are used because they have the capability of scanning the directory structure using recursive directory listings.

Configure the fetch server's root directory to point to the LSN root directory created in accord with Section 22.3.1.

The following list provides the recommendations for configuring the web server:

- Ensure that external access to the fetch server, including that of the LSN processes, is read-only.
- Use user IDs and passwords for access to this server.
- If possible, use a secure protocol (FTPS or SFTP).

22.3.3 Participant Web Server

The participant web server provides the interface by which the users of the LSN access the Participant Repository.

The supported protocol for the web server is HTTP.

Configure the web server's root directory to point to the LSN root directory created in accord with Section 22.3.1.

The following list provides the recommendations for configuring the web server:

- Header directory: No access
- Documents directory: Read-only permission
- Do not allow directory browsing
- Place a default web page in the root directory.
- Ensure that a process of patching the web server is in place to prevent denial of service, worm, and virus attacks.

22.3.4 Security and Firewalls

To provide security for the Participant Repository servers, each participant is urged to implement and maintain an information technology security program to assure that adequate security is provided for all LSN information collected, processed, transmitted, stored, or disseminated in its computer systems. This would include the development and implementation of policies, standards, and procedures to assure that systems processing LSN data provide appropriate confidentiality, integrity, and availability, through the use of cost-effective management, personnel, operational, and technical controls. As part of a participant security program, it is recommended that firewall rules be set up.

Access to the fetch server should be limited to the LSN production and test facilities. These facilities have fixed Internet Protocol (IP) addresses and include the following ranges:

Description	IP Range and Mask	Starting Address	Ending Address
LSN (Ashburn) Production Site	63.240.196.96/27	63.240.196.103	63.240.196.109
AT&T Test Facility	199.89.158.128/29	199.89.158.128	199.89.158.135

Only open those ports that are required for the selected protocol.

Access to the web server must be from all addresses on the public Internet.

22.4 Populating the Participant Repository

22.4.1 Headers

Bibliographic headers are one mechanism by which search information is provided for the documents (the text within a document can also be searched). The headers are formatted using standard Extensible Markup Language (XML). Use of a common format will facilitate the exchange of data between the central LSN Repository and LSN participants.

All generated headers should be placed in the headers directory created in accord with Section 22.3.1 of this Guideline.

All of the associated documents should be placed in the documents directory at the same time.

22.4.1.1 Using the LSN Header Management System

Upon request, each participant will be provided a copy of the LSN Header Management System by the LSN staff. This Windows application was designed to assist participants in creating and managing their headers. The application will automatically generate properly validated and formatted XML files, which can be used to promote headers to the Participant Repository.

22.4.1.2 Generating XML Files Through Another Process

If the participant organization maintains a large collection of documents, or currently maintains their documents in a document management system, they may utilize an automated process for generating the headers. The resulting headers must follow the format prescribed in the next section.

22.4.1.3 XML Bibliographic Header Description

This section describes the XML format that will be used to structure the LSN document bibliographic header data in a canonical form. It also provides guidance on how the data is stored in a file. The LSN Baselined Design Requirements describe the use and values of the fields.

This information is being presented in a way that can be understood by those not familiar with XML. For an additional overview and introduction to XML, please follow the link below:

http://www.ed.gov/databases/ERIC_Digests/ed437941.html

22.4.1.3.1 XML Structure Overview

The basic structure of XML is as follows:

```
<?xml version="1.0" ?>
  <Headers>
    <Header>
      .....
    </Header>
  </Headers>
```

The LSN format uses mixed case tags, e.g., <DocumentNum>. Furthermore, the XML tags are case-sensitive. Therefore, <DOCUMENTNUM> and <documentnum> are not the same as <DocumentNum>.

Some of the fields in the bibliographic header can contain multiple values. Tags that could contain multiple entries are plural (except for the structure listed above for "headers"). For example, "Authors" indicates that any given document has the potential for more than one author. When a document has more than one author, the tagging scheme remains the same. For example, if a document has two authors it is tagged as follows:

```
<Authors>
  <Author Org="SNL">Smith JR</Author>
  <Author Org="SNL">George JT</Author>
</Authors>
```

The "Authors" and "/Authors" tags are not required, but they help segment the XML data for better readability.

Refer to the LSN Baselined Design Requirements (in NRC's Agencywide Documents Access and Management System (ADAMS), accession number ML011590614) for a listing of which attributes are multi-valued.

22.4.1.3.2 Special Characters

Five characters cannot be present in XML data without special handling. They are: & < > ' ". There are two ways to handle data containing any of these special characters. The first method is to "escape" the character. The second method is to mark up sections with Character Data (CDATA).

For example, assume the title of the document is "Jack & Jill." If the ampersand in the title is left as is, XML will generate an error:

```
<Title>Jack & Jill</Title>
```

As noted above, one method to easily correct this is to "escape" the character. Using escape to correctly handle the ampersand, the correct title is:

```
<Title>Jack &amp; Jill</Title>
```

When the results of a search in the LSN are displayed, the title will appear correctly as "Jack & Jill."

The escape codes for the five characters are provided in the following table:

Character	Escape Code
&	&
<	<
>	>
'	'
"	"

An example of an escape code being applied to the Author Organization "AT&T" (and the Author is J Doe) is:

```
<Author Org="AT&amp;T">Doe J</Author>
```

The second method of handling data containing the five special characters is to use the CDATA sections. The term CDATA is inherited from SGML (Standard Generalized Markup Language). CDATA encapsulates all characters in a value and tells the XML parser to accept them as is, with no special character processing. When the CDATA section is used, the five special characters do not need to be escaped. An example using CDATA is:

```
<Title><![CDATA[Jack & Jill]]></Title>
```

The CDATA section can only be used for XML elements. An XML element is text between a starting tag (e.g., <TITLE>) and an ending tag (e.g., </TITLE>). The CDATA section cannot be used to encode special characters in element attributes (the text within an attribute). For format purposes, an element attribute is an assignment statement within the starting tag of an element.

The discussion above detailed how the special character ampersand is handled. The same methodology is followed for the remaining special characters < > ' ". When a special character occurs in the text between the starting and ending tags, it must be escaped with an escape sequence or with a CDATA section. When these characters occur in an attribute value, they must be handled with an escape sequence.

22.4.1.3.3 Sample XML Bibliographic Header Layout

The following is a sample XML bibliographic header layout for LSN participants. The data is provided as a technical example and does not represent an actual document. The data represented in the XML bibliographic headers is analogous to the following catalog format example:

Access Control Information:
Addressee Name:
Addressee Organization:
Author Name:
Author Organization:
Comments:
Descriptors:
Document Date:
Document Number(s):
Document Type:
Image URL:
Non-Digital Media Indicator:
Number of Images:
Package Identifier:
Participant Accession Number:
QA Record Indicator:
Related Record Code:
Related Record Number:
Text URL:
Title [Created Title]:
Traceability Code and Number:
Version:

The example below is the format for an LSN XML encoded bibliographic header. All of the bibliographic header fields defined in the LSN Baselined Design Requirements are presented. However, not all attributes are required; some are optional. Please refer to the LSN Baselined Design Requirements for a listing of which attributes are optional. If a tag is optional, omitting it will make the bibliographic header file smaller. Note also that some elements contain multiple values (i.e., Authors). The indentations convey structure and some lines wrap due to their length. When a line appears to be improperly indented, it is because of wrapping from the line above it.

URL paths do not need to be fully qualified; they can be relative. The application will navigate relative paths to generate the final URL.

```
<?xml version="1.0" ?>
<Headers>
  <Header>
    <ParticipantAccNum>MOL.19961111.0013</ParticipantAccNum>
    <DocDate>19960603</DocDate>
    <NonDigitalMedia> </NonDigitalMedia>
    <NumOfImages>1</NumOfImages>
    <QARecInd>Y</QARecInd>
    <Title>Change FINAL PUBLISHED DOCUMENT FOR SAND94 2322, BENCH SCALE
    EXPERIMENTAL DETERMINATION OF THE THERMAL DIFFUSIVITY OF CRUSHED TUFF,
    JUNE 1, 1996 (C)</Title>
    <Descriptors>EXPERIMENTAL TURF</Descriptors>
```

<Comment>This document is a sample of the DOE1.XML file to be used only for LSN testing/development. The DOE does not certify the content, adequacy or technical accuracy of the material.</Comment>

<URLs>

<URL Type="T" Page="0">http://nrc/MOL199611110011EX1.HTM</URL>

<URL Type="I" Page="1">/images/MOL199611110011P00001.TIF</URL>

</URLs>

<Authors>

<Author Org="SNL"><![CDATA[O'Reilly RE]]></Author>

<Author Org="SNL">George JT</Author>

</Authors>

<Addressees>

<Addressee Org="NRC">Turner JX</Addressee>

</Addressees>

<Traceabilities>

<Traceability>1.2.1.5</Traceability>

</Traceabilities>

<AccCtrls>

<AccCtrl>PRV</AccCtrl>

</AccCtrls>

<DocumentNums>

<DocumentNum>SAND94 2322</DocumentNum>

</DocumentNums>

<DocumentTypes>

<DocumentType>Publication</DocumentType>

</DocumentTypes>

<RelatedRecs>

<RelatedRec Code="AMR">MOL.20000113.0488</RelatedRec>

</RelatedRecs>

<Versions>

<Version>1</Version>

</Versions>

<Packagelds>

<Packageld>MOY 961126 34 02</Packageld>

</Packagelds>

</Header>

</Headers>

22.4.1.3.4 LSN Accession Number Assignment

Participants do not assign the master accession number that will be used by the LSN software. The first time a Participant Accession Number is encountered by the LSN Spider and the document is successfully indexed by the LSN software, an LSN Accession Number is assigned. The LSN Accession Number is retained only on the LSN Repository and it does not have to be stored locally, appended to, or otherwise linked to by the participants on their servers. The LSN Repository will maintain the originally assigned LSN Accession Number. Even if an item is subsequently removed from a participant LSN site, the LSNA will maintain a "transactions" log

on the LSN Repository so that participants can review and account for all used LSN Accession Numbers.

22.4.1.3.5 Additional Guidance

The URLs in the headers are case insensitive but all filename and paths must be unique regardless of case. For example, .../documents/doc1.pdf and .../documents/DOC1.pdf would NOT be unique.

The URL field in the headers may be entered in two manners:

1. Absolute Path: http://server/documents/filename.ext
2. Relative Path: /documents/filename.ext

22.4.2 Documents

The purpose of the LSN Repository is to provide a searchable index for any document that may be used in the licensing proceeding. Any document that a participant feels necessary to support their argument or contention must be available within the LSN Repository during the discovery phase.

The daily indexing capacity is 30,000 documents per day.¹ Documents thus should be placed on a participant server in accord with Section 22.3 of this guideline in groups no larger than 30,000 per day if a participant wishes to load daily. A participant may also load documents on a less frequent basis, as long as the LSN spider is not exposed to crawling more than its daily or weekly capacity (30,000 or 150,000 documents, respectively). For example, a participant could stage documents on hidden directories. After the spider has completed crawling the first "exposed" directory, and is ready to crawl another, the participant would "unhide" the next directory. Technical alternatives developed by a participant must be proposed in advance to the LSNA and validated in testing.

Bulk loading, i.e., loading more documents into a single directory or subdirectory area than can be handled by the spider prior to the scheduled backup, is not a viable option.²

¹The September 13, 2003, letter to LSNARP members from the LSNA stated the threshold was 20,000 documents per day, but the speed of the spidering process subsequently has been increased.

²Nor is it acceptable to provide a document index in lieu of having the LSN spider a participant's documents. The LSN spidering software establishes a baseline snapshot of each document. That baseline is not established until such time as the software that is under LSN operational control has parsed the document collection to provide an independent audit/quality control capability, which is necessary for the LSNA to fulfill his responsibilities regarding documentary material integrity pursuant to 10 C.F.R. § 2.1001(c)(4). See June 27, 2003 Letter to J.D. Ziegler from D.J. Graser.

All associated headers should be placed in the headers directory at the same time that the documents are loaded.

For header only documents (e.g., proprietary documents, non-document-based material), the participant must place only the header on their server, with no associated document. Information should be placed into the comments field as appropriate to discuss why this is a header only document.

Documents types should be widely known. This means that users who need to view the documents should not need to purchase proprietary formatted document software to view the documents in the LSN Repository. Adobe Portable Document Format (PDF) is probably the most widely accepted format available. The reader can be downloaded for free.

If desired, a hierarchical structure may be used to simplify the storage of the documents on the fetch server. The LSN Spider will traverse the directory structure. You must ensure that the path to the documents matches the URL specified in the header.

APPENDIX 22.A - PARTICIPANT REPOSITORY REGISTRATION FORM

LSN Participant	
-----------------	--

FETCH (SPIDER) SERVER INFORMATION		
Fetch Address		### or www.xyz.gov
Fetch Port		
Fetch Protocol	<input type="checkbox"/> FTP <input type="checkbox"/> FTPS, or <input type="checkbox"/> SFTP	Please select one
Fetch User ID		
Fetch Password		
Fetch Path (Headers)		i.e., /headers/
Fetch Path (Docs / Images)		i.e., /documents/

WEB SERVER INFORMATION		
Web Authority		i.e., www.xyz.gov
Web Server Type		i.e., Apache, IIS, etc.
Web Server Port		Should be 80

DOCUMENT INFORMATION		
Est. # of Documents		
Text Document Types		i.e., PDF, HTML, Word, WordPerfect, etc. List all applicable
Image Types		i.e., TIF, GIF, JPG, etc.

POINTS OF CONTACT		
Administrative / User Registration	Name	
	Telephone	
	Fax	
	Email Address	
Technical	Name	
	Telephone	
	Fax	
	Email Address	
To obtain image versions of documents	Name	
	Telephone	
	Fax	
	Email Address	
If users have problems using documents found on-line	Name	
	Telephone	
	Fax	
	Email Address	

Please return to Matt Schmit at MRS3@NRC.GOV

APPENDIX 22.B - USING THE LSN HEADER MANAGEMENT SYSTEM

The LSN Header Management System is a Windows-based tool designed to assist LSN participant organizations in managing and generating the bibliographic headers required to satisfy the generation of a Participant Repository in accordance with 10 C.F.R. 2, Subpart J.

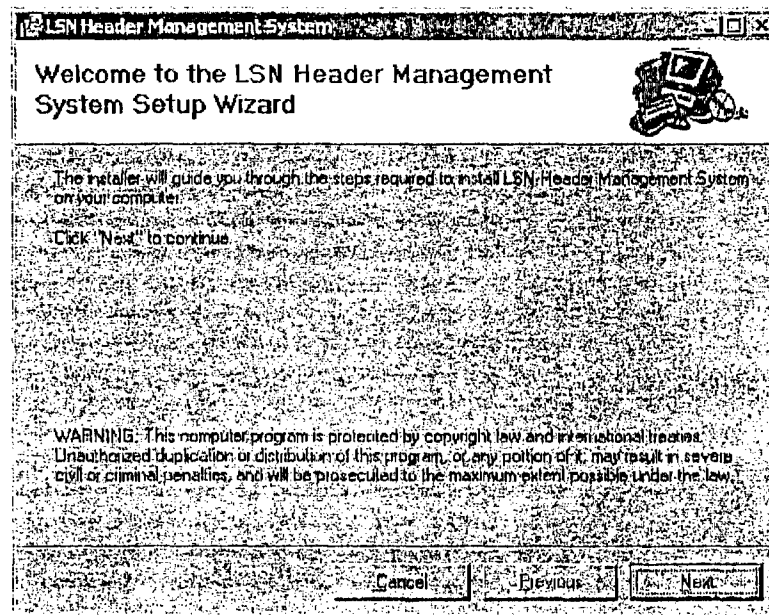
22.B.1 Installing the LSN Header Management System

Note: For the purposes of this documentation, it is assumed that the Compact Disc (CD) drive is assigned drive D:

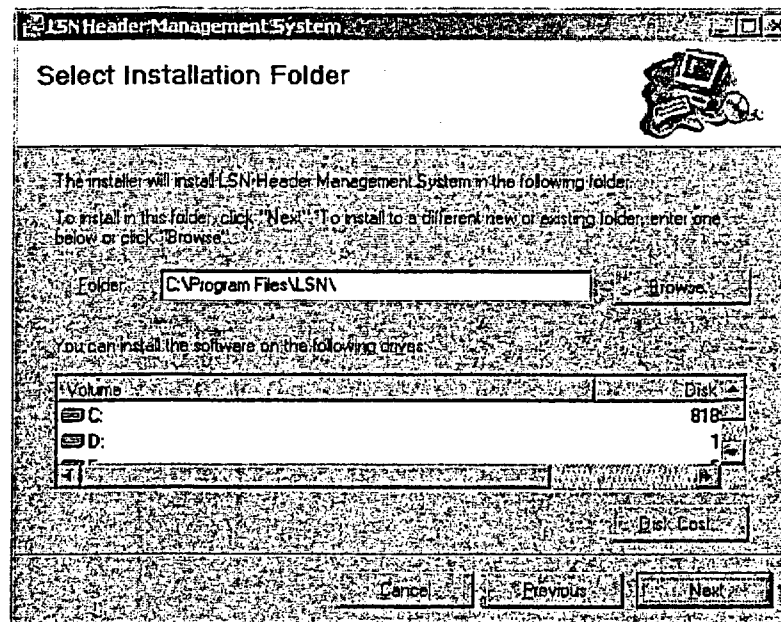
If you are running a previous version of the Header Management System, you need to uninstall it first via the Add/Remove Programs located in your Microsoft Windows Control Panel. If you want to retain the headers you have already entered, copy the LSNHeaders.MDB file located in the previous installation directory to another location before uninstalling.

Insert the supplied Compact Disc (CD) in your CD drive (D:). If the setup program does not run automatically, open the D: drive through Microsoft Explorer, and double click the Setup.Exe file.

Once the setup system initializes, you will see:

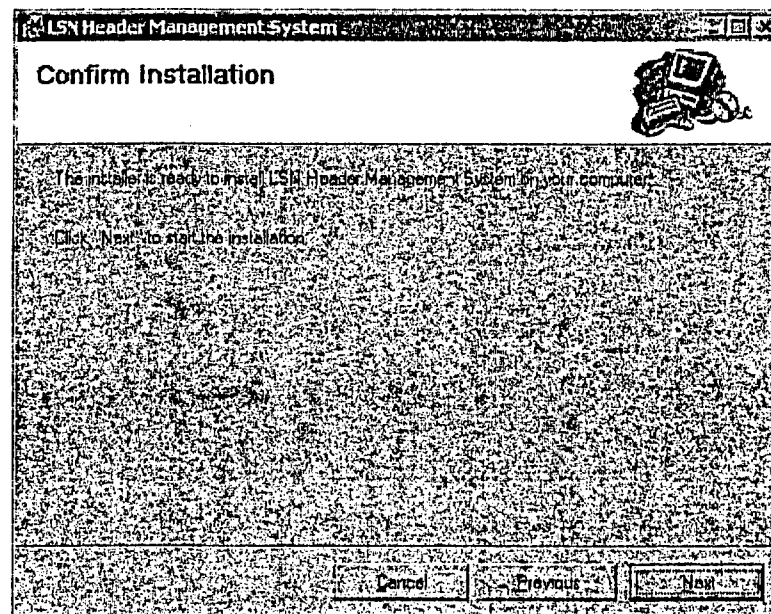


Click the next button. You will then be prompted with the following screen to determine the installation location:

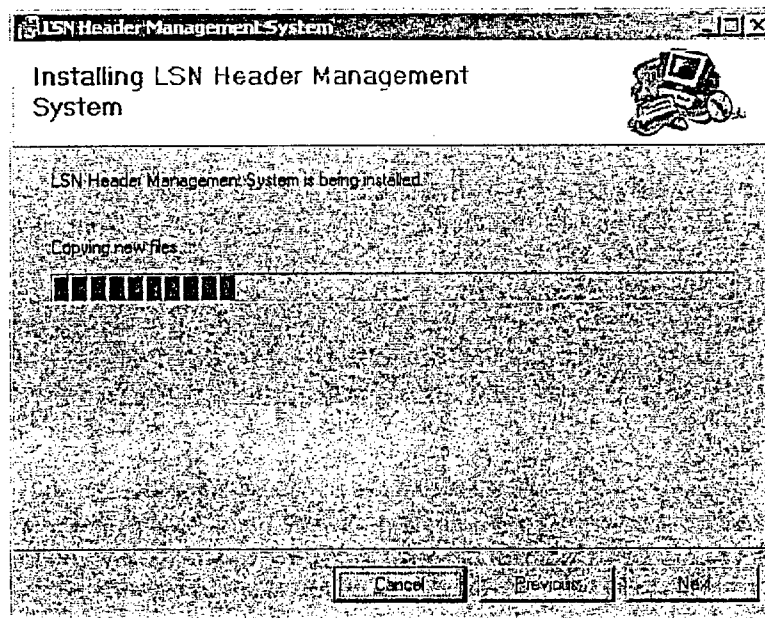


Most users should accept the default. If a different location is desired or required, enter the path in the Folder text box, or select the location via the Browse button. When satisfied with the installation location, click the Next button.

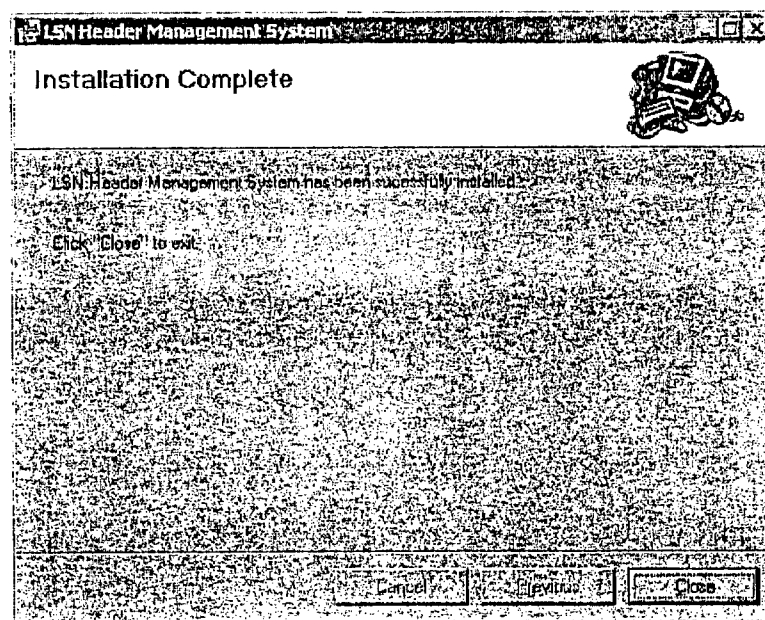
The next screen confirms that you really want to complete the installation process:



During the installation process, you will see the following progress screen:



Once the installation process has completed, the final screen will appear:



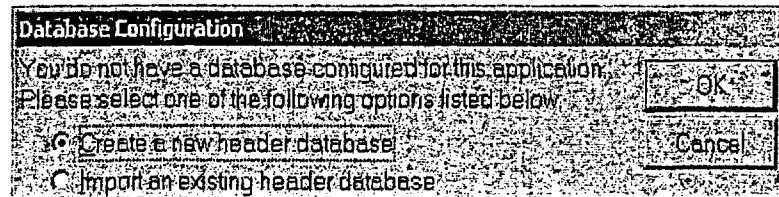
Click the Close button to exit the installation process.

22.B.2 Running the LSN Header Management System

There are two methods of starting the LSN Header Management System:

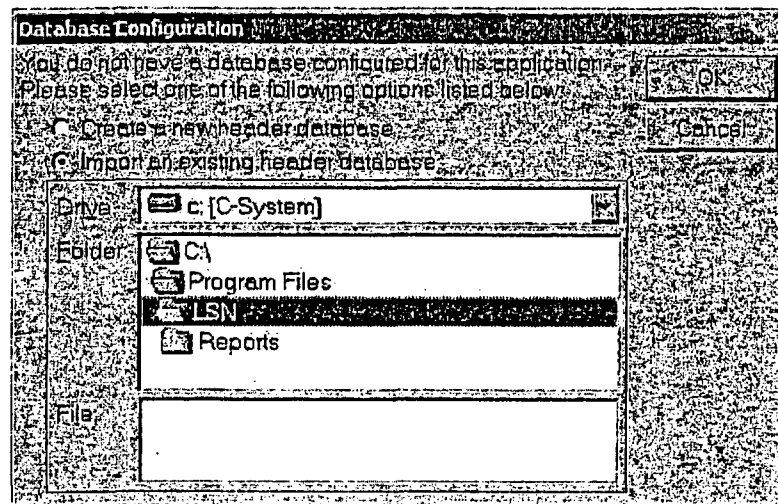
1. Double click the LSN Header Management System shortcut (📎) located on your Windows desktop.
2. Open your Start menu and left-click the LSN Header Management System menu item.

Whenever the Header Management System starts, it checks for the existence of its supporting database. If a database does not exist, you will be prompted with the following dialog:



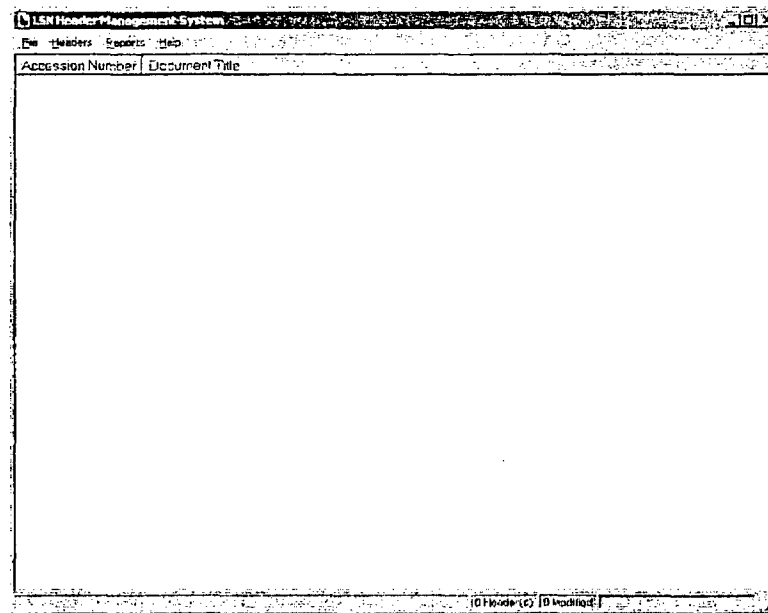
If this is the first time you've run the system, select **Create a new header database** option (the default selection), and click the OK button. The database will be automatically generated.

If you have used a previous version of the Header Management System, you may import the database from that version. Select **Import an existing header database**:



Select the location of the header database file. Once you have selected the database to import, click the OK button.

The LSN Header Management System's main screen will then appear. The main window uses a standard windows interface, presenting commands via the four menus located near the top of the window, along with a list of the current headers stored in the database.



The status bar at the bottom of the window displays four sections (as applicable):

1. Current status messages
2. Total number of headers in the database
3. Number of currently modified headers
4. A progress indicator

22.B.3 Creating a New Header








To create a new header, select Headers, New Document Header. The Header Editor window will appear:

The upper portion of the Header Editor allows you to enter the following single value header fields:

Field Name	Required	Description
Participant Access Number	Yes	The unique identification for this document
Document Title	Yes	The title assigned to this document
Document Date	Yes	The date the document was last modified
Comments	No	Any general comments
Non-Digital Media	No	Any information concerning non-electronic formatted documents, such as rocks, photographs, exhibits, etc.
QA Record Indicator	No	Whether this record is recorded in a QA Record System.
Descriptors	No	Words or phrases that represent the subject content of the document that can be used to assist the search engine users.

The lower portion of the Header Editor has a toolbar with a multi-tabbed display for multi-valued fields. These multi-valued fields include:

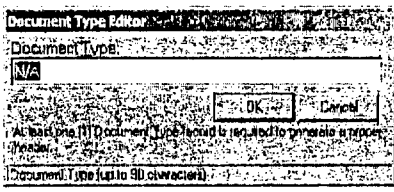
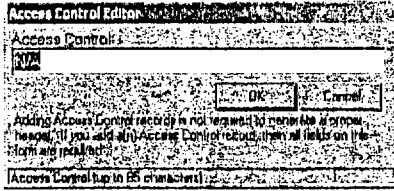
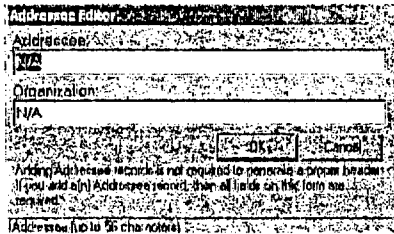
Image	Multi-Valued Field	Image	Multi-Valued Field
	Document Types		Access Controls

Image	Multi-Valued Field	Image	
	Addressees		Authors
	Document Numbers		Package IDs
	Related Records		Traceabilities
	Versions		

To switch between the multi-valued field modes, click on one of the images in the toolbar. Selecting one of these multi-valued field modes causes the entries of the specified type to be displayed in the multi-column list.

To add, edit, or remove an item from the multi-valued fields list, right click in the display list and select a command from the popup menu. To issue the edit or remove commands, you must right click on an existing entry.

When adding or editing a multi-valued field, one of the following editor windows will be displayed. One or more data entry fields may be required to complete the multi-valued field entry. The dialog appropriate to the multi-valued field will display information about the multi-valued field below the OK and Cancel buttons. The status bar displays information concerning the current data field on the dialog.

Multi-Valued Field	Editor Dialog
Document Types	 <p>Document Type Editor Dialog</p> <p>Document Type: [N/A]</p> <p>OK Cancel</p> <p>At least one (1) Document Type record is required to generate a proper header.</p> <p>Document Type (up to 80 characters)</p>
Access Controls	 <p>Access Control Editor Dialog</p> <p>Access Control: [N/A]</p> <p>OK Cancel</p> <p>Adding Access Control records is not required to generate a proper header. If you add any Access Control records, then all fields on the form are required.</p> <p>Access Control (up to 65 characters)</p>
Addressees	 <p>Addressee Editor Dialog</p> <p>Addressee: [N/A]</p> <p>Organization: [N/A]</p> <p>OK Cancel</p> <p>Adding Addressee records is not required to generate a proper header. If you add any Addressee records, then all fields on the form are required.</p> <p>Addressee (up to 25 characters)</p>

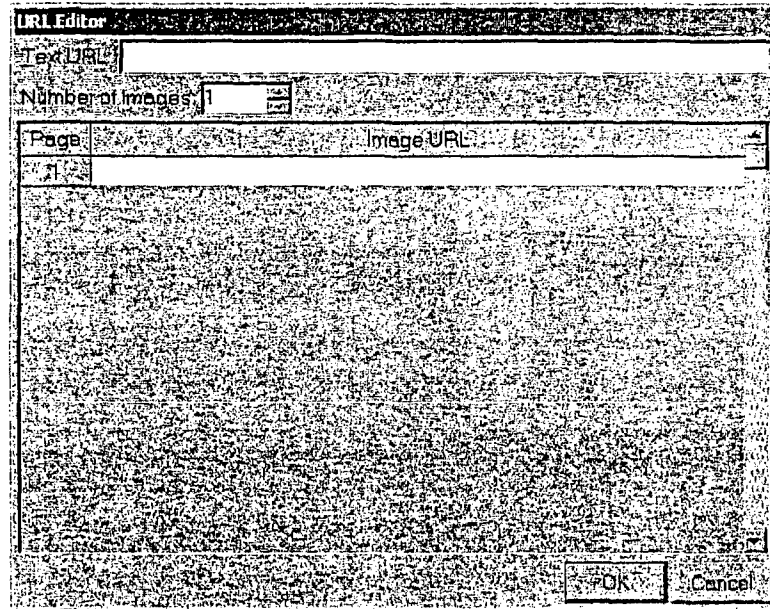
Multi-Valued Fields	Editor Dialog
Authors	
Document Numbers	
Packages	
Related Records	
Traceabilities	
Versions	

Enter the required information in the data fields and then press the OK button to apply the changes and return to the Header Editor. To close the editor without applying the changes, click the Cancel button.

Pressing the OK or Cancel buttons does not cause the system to save the information to the database. It only updates the header information contained within the current Header Editor.

The last image on the toolbar (🖱️) opens the URL editor.

The URL Editor handles the management of the web-based pointers to the textual document and any associated images.



In the Text URL field, enter the full URL (e.g., <http://www.yourserver.org/documents/documentname.pdf>).

If the document does not have any associated images, enter 0 in the number of images field.

If the document has associated images, enter the number of images and then add the full URL for each image (e.g., <http://www.yourserver.org/documents/documentname.tif>). For a multi-page image file, there will be only one URL.

When you have completed the entries for this dialog, click the OK button to apply the changes and close the dialog. To close the dialog without saving your changes, click the Cancel button.

To apply all of the additions, modifications, or deletions to the current Header Editor in to the Header Management System's database select the Save command from the Header Editor's Header menu. This option will only be available if modifications have been made.

22.B.4 Editing an Existing Header

In the list of existing headers provided on the Header Management System's main screen, select the header requiring editing. You may select either the Open Selected Document Header menu item from the Headers menu, or right click and select it from the popup menu.

The Header Editor behaves identically in the Edit mode as it does in the New Header mode, except that all existing data is pre-populated when the window opens. No changes are saved to the database until the Save command is given.

If you close the Header Editor while unsaved changes exist, you will be prompted as to whether the changes should be applied.

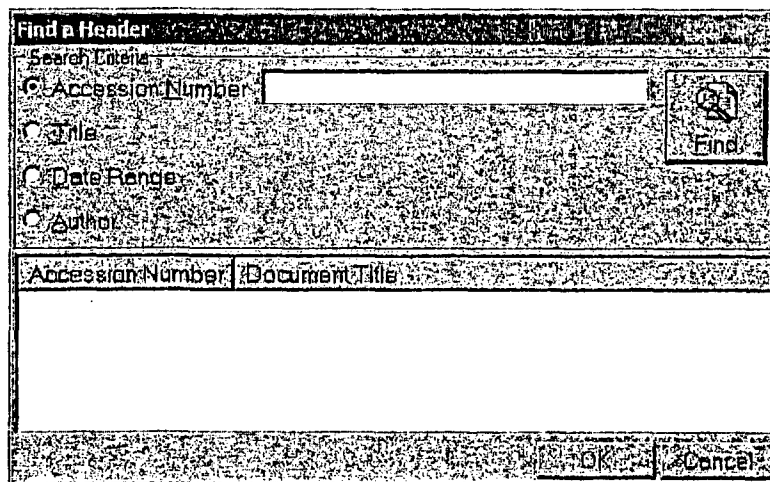
22.B.5 Finding an Existing Header

Once a substantial number of headers have been entered, it may become more difficult to remember on which header you are working. Because screen size is limited, all fields cannot be displayed in the main screen's header list.

To facilitate finding a header, a limited field search is provided. Select Headers, Find Document Header on the main screen and the Find a Header dialog will appear.

Select which field (Accession Number, Title, Date Range, or Author) on which to conduct the search using the radio buttons provided. Entry fields will appear based on the field selected.

For accession number searches, enter the desired accession number:

The image shows a 'Find a Header' dialog box. It has a title bar with the text 'Find a Header'. Below the title bar, there is a section labeled 'Search Criteria'. Inside this section, there are four radio buttons: 'Accession Number', 'Title', 'Date Range', and 'Author'. The 'Accession Number' radio button is selected. To the right of these radio buttons is a 'Find' button with a magnifying glass icon. Below the 'Search Criteria' section, there is a large text input field. At the bottom of the dialog box, there are 'OK' and 'Cancel' buttons.

Similarly, for title searches, enter the desired title; for date range searches, enter the starting and ending dates of the range; and for author searches, enter the desired author.

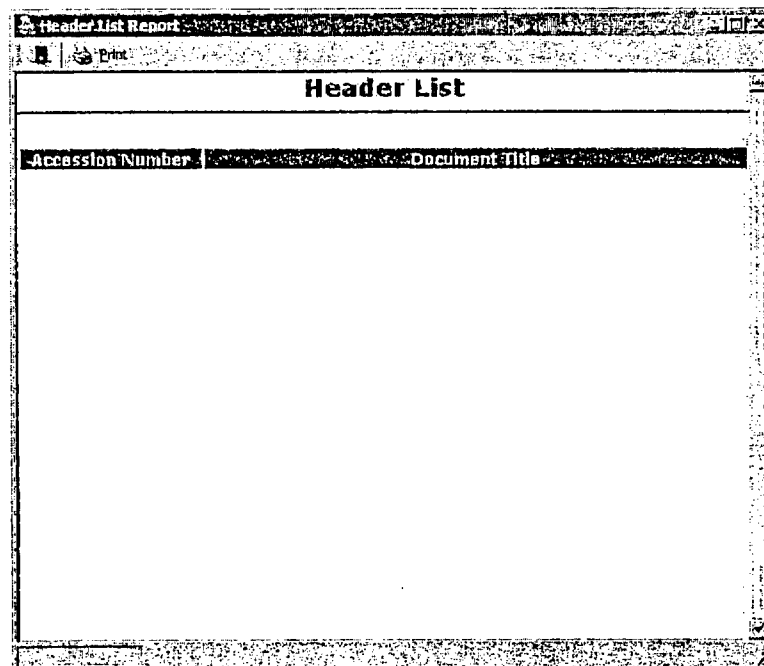
Once the search criterion has been entered, click the Find button. The search engine will display any resulting matches in the list provided. By selecting one of the resulting matches and

pressing the OK button, the header will be opened in the Header Editor. Clicking the Cancel button will return you to the main screen.

22.B.6 Generating Reports

The Header Management System provides several simple reports to help manage your headers. Selecting the report name from the Reports menu on the main screen activates an individual report.

All of the reports are displayed using the Report Viewing Window. The only differences are the headings and the columns appropriate to the report.



To exit from the report viewer, click the exit button (the door). To print the report, click the Print button.

The available reports include:

Report Name	Description
Header List	Displays a quick list of all headers currently managed by the system. Only the Accession Number and the Title of the document are displayed.
Detailed Header List Document Title	Displays a list of all headers currently managed by the system. All fields that contain information are displayed on the report.
Modified Headers List	Displays a list of those headers which have been modified but have not had new or updated Xml generated.
Header History	Displays the chronological history for each header.

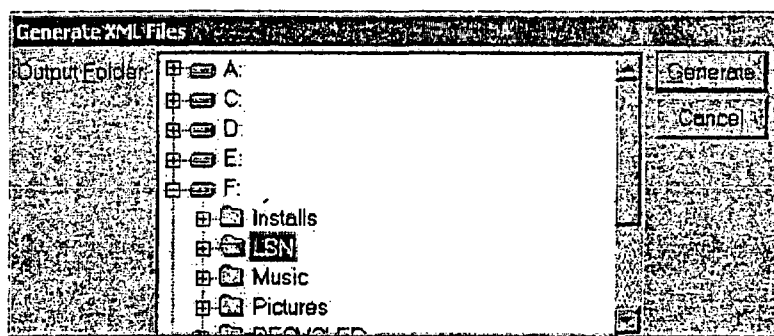
Report Name	Description
Last Modification	Displays the accession number, document title, and last modification date for each header being managed.

22.B.7 Generating XML Files

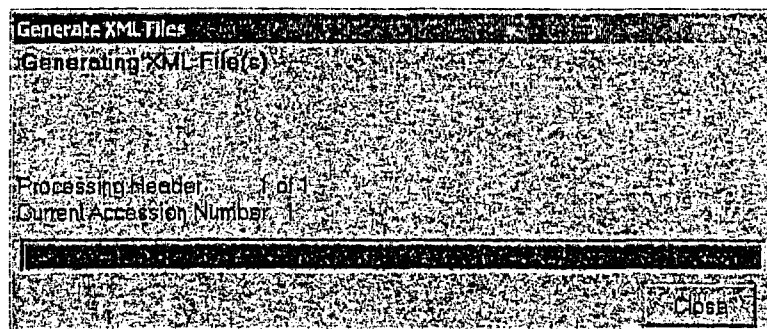
Any modified header can be written out to an XML file by selecting File, Generate XML Files from the Main Screen.

If no headers have been modified, the generation process will terminate immediately with a notification dialog.

If modified headers exist, you will be prompted for the Output folder. Using the tree, select the drive and the folder path in which the generator should place the files.



Once you have selected the destination directory, click the Generate button. The dialog will then show the generation progress as depicted below:

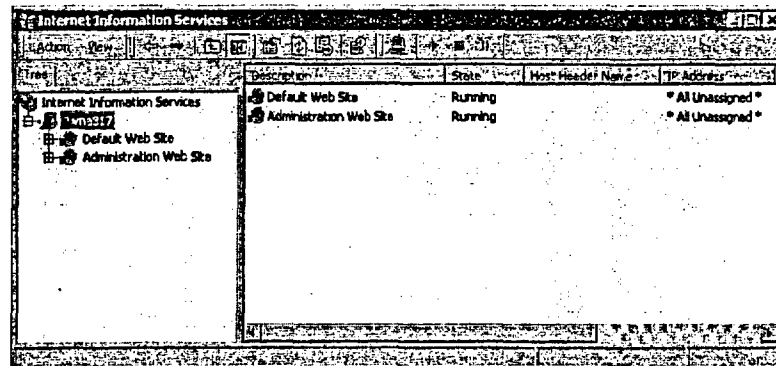


APPENDIX 22.C - SETTING UP A WS-FTP SERVER (FTP/FTPS)

Please contact Matt Schmit, US Nuclear Regulatory Commission, 301-415-7469,
MRS3@NRC.GOV for information.

APPENDIX 22.D - SETTING UP A MICROSOFT INTERNET INFORMATION SERVER (FTP)

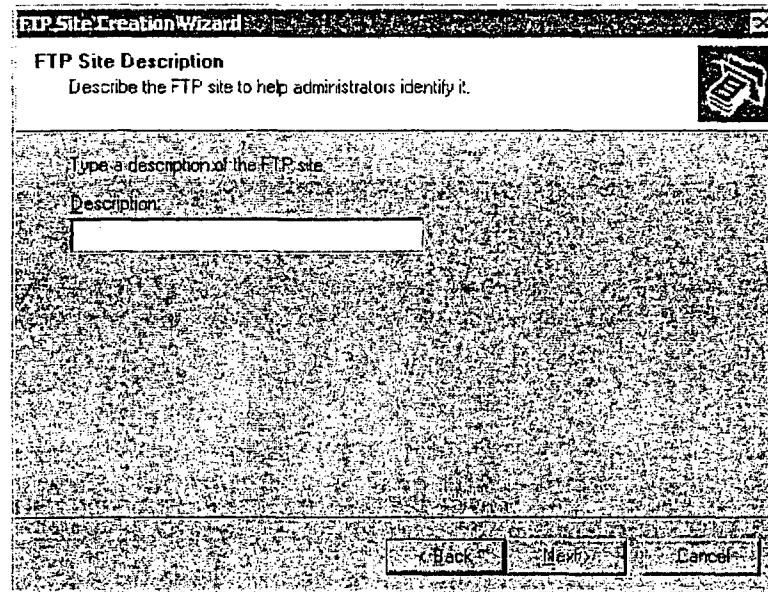
From the Start Menu, click Programs, Administrative Tools, and then Internet Services Manager. This will bring up the Internet Services Management window as depicted below:



Right click the machine name (vna317 in this picture) and select New, then FTP site. This will start the FTP Site Creation Wizard.

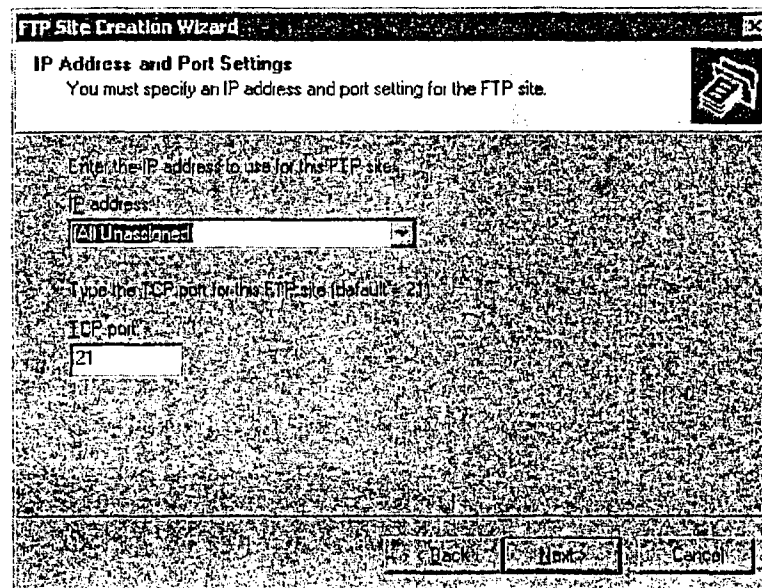


Click the Next button.



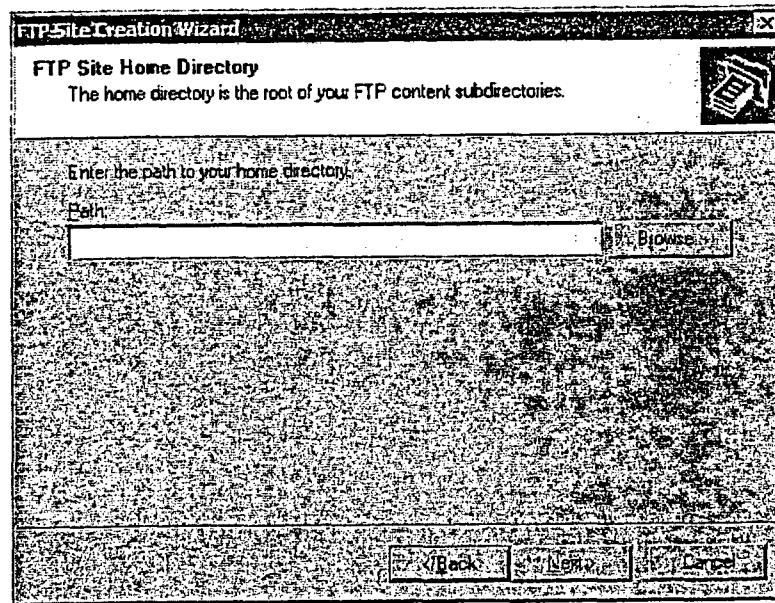
The screenshot shows the 'FTP Site Creation Wizard' window. The title bar reads 'FTP Site Creation Wizard'. The main heading is 'FTP Site Description'. Below it, a subtitle says 'Describe the FTP site to help administrators identify it.' There is a small icon of a floppy disk in the top right corner. The main area contains the text 'Type a description of the FTP site.' followed by 'Description:' and a large text input field. At the bottom, there are three buttons: 'Back', 'Next', and 'Cancel'.

Enter the name of your FTP site. This is merely for management purposes within your server. This name is not publicized. When ready, click the Next button.

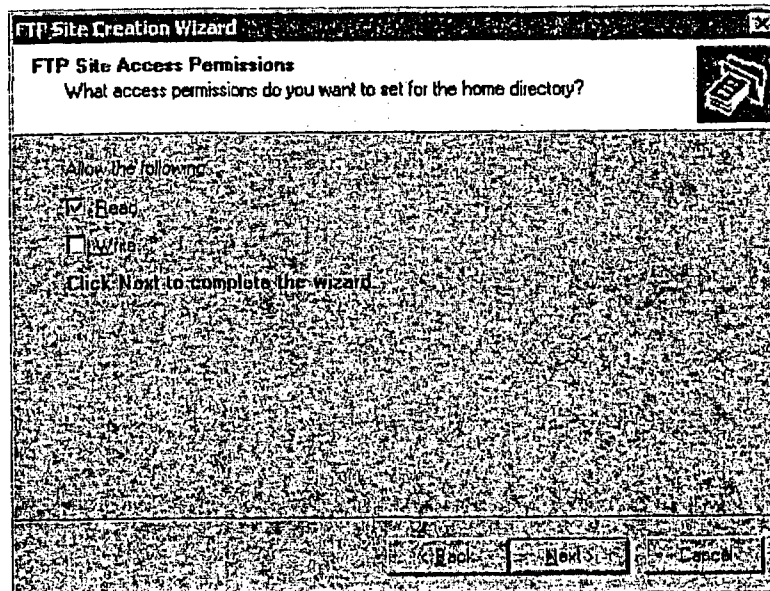


The screenshot shows the 'FTP Site Creation Wizard' window. The title bar reads 'FTP Site Creation Wizard'. The main heading is 'IP Address and Port Settings'. Below it, a subtitle says 'You must specify an IP address and port setting for the FTP site.' There is a small icon of a floppy disk in the top right corner. The main area contains the text 'Enter the IP address to use for this FTP site.' followed by 'IP address:' and a dropdown menu showing 'All Unassigned'. Below that, the text says 'Type the TCP port for this FTP site (default = 21)' followed by 'TCP port:' and a text input field containing '21'. At the bottom, there are three buttons: 'Back', 'Next', and 'Cancel'.

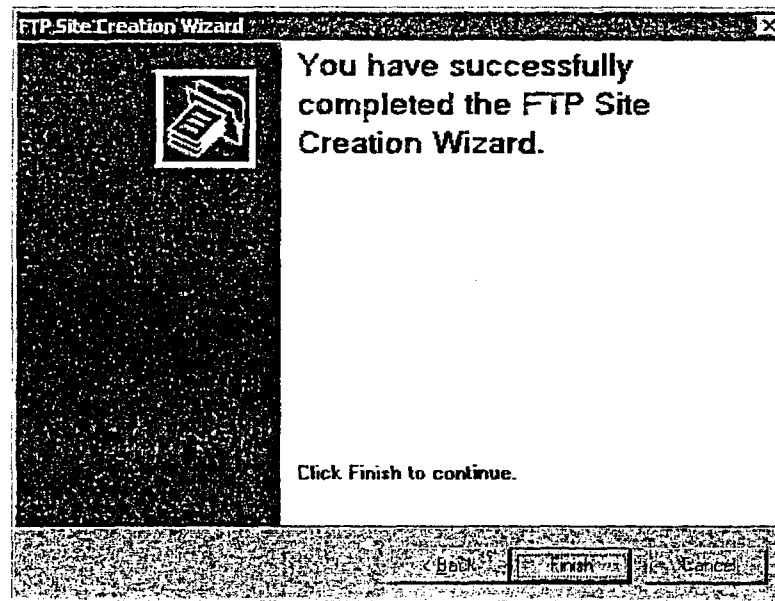
Enter or select the IP address to which the FTP server will respond. Enter the port to which the FTP server will respond (FTP is normally port 21). Click the Next button to continue the process.



Enter the path to the FTP home directory. This path must point to the LSN root directory you have previously created. Click the Next button to continue.



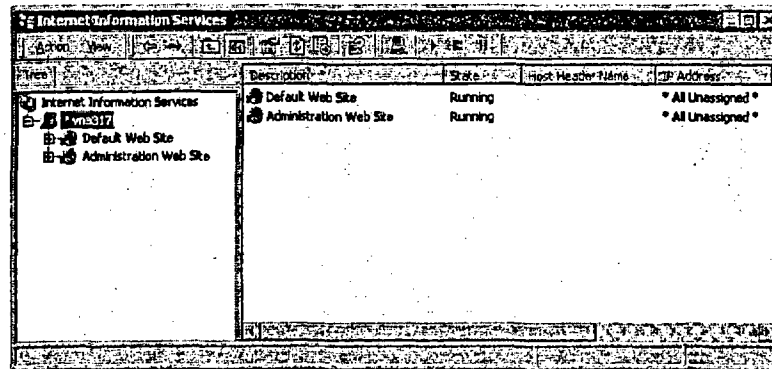
Set the permissions for the FTP server. Read access is required, but Write access is highly discouraged. Click the Next button to continue.



Click the Finish button to close the wizard.

APPENDIX 22.E - SETTING UP A MICROSOFT INTERNET INFORMATION SERVER (WEB)

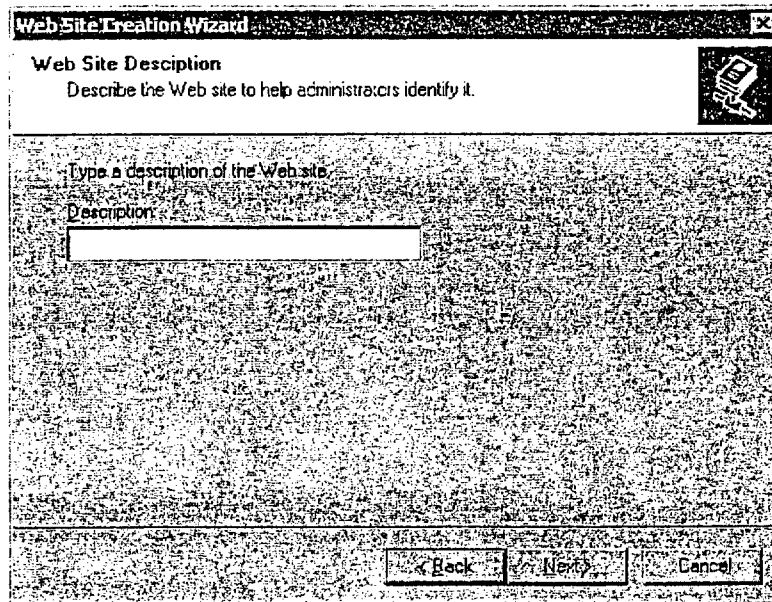
From the Start Menu, click Programs, Administrative Tools, and then Internet Services Manager. This will bring up the Internet Information Services window as depicted below:



Right click the machine name (vna317 in this picture) and select New, then Web site. This will start the Web Site Creation Wizard.

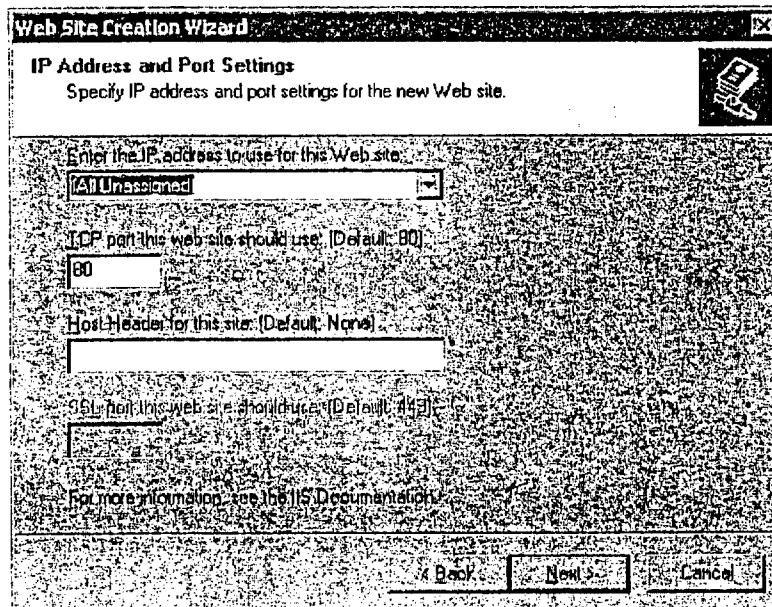


Click the Next button to start the process.



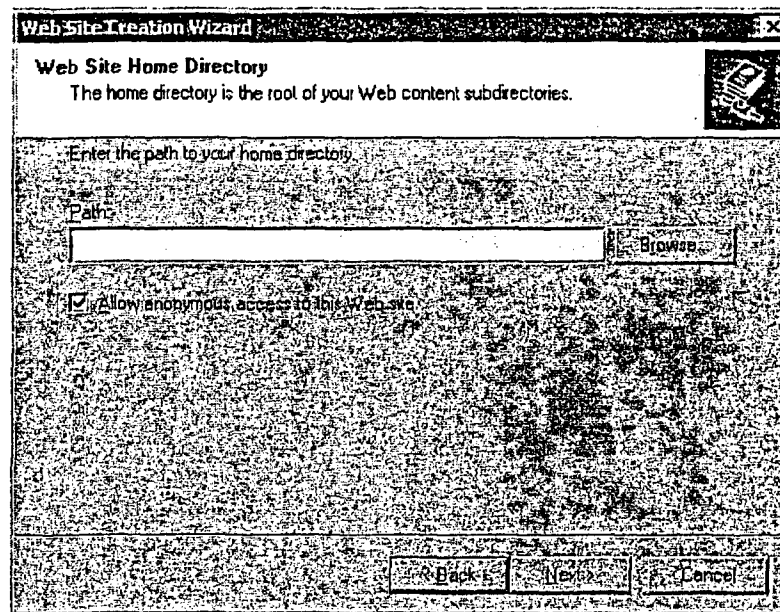
The screenshot shows the 'Web Site Creation Wizard' window. The title bar reads 'Web Site Creation Wizard'. The main heading is 'Web Site Description' with a sub-instruction: 'Describe the Web site to help administrators identify it.' Below this, there is a text box labeled 'Type a description of the Web site.' and 'Description:'. At the bottom, there are three buttons: 'Back', 'Next >', and 'Cancel'.

Enter a description for this web site. This is merely for management purposes within your server. This name is not publicized. When ready, click the Next button.

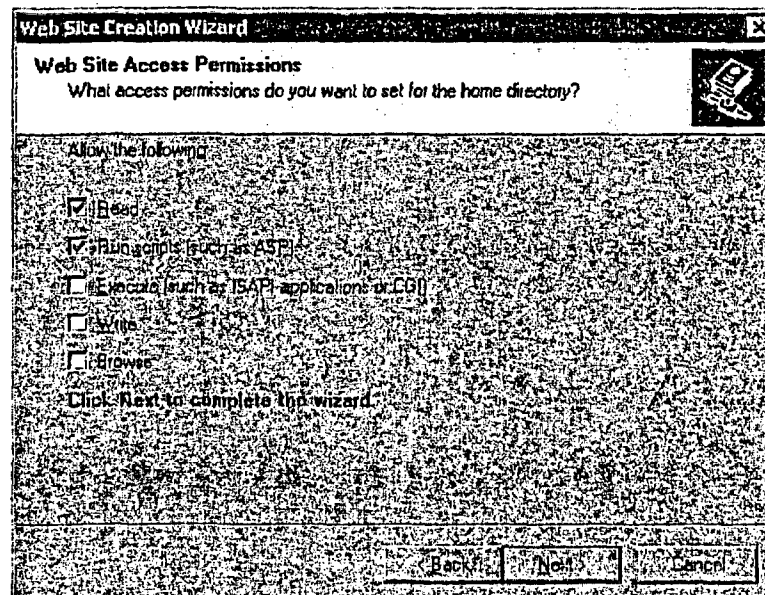


The screenshot shows the 'Web Site Creation Wizard' window at the 'IP Address and Port Settings' step. The title bar reads 'Web Site Creation Wizard'. The main heading is 'IP Address and Port Settings' with a sub-instruction: 'Specify IP address and port settings for the new Web site.' Below this, there are four input fields: 'Enter the IP address to use for this Web site:' with a dropdown menu showing 'All Unassigned'; 'TCP port this web site should use. (Default: 80)' with a text box containing '80'; 'Host header for this site. (Default: None)' with a text box; and 'SSL port this web site should use. (Default: 443)' with a text box. At the bottom, there is a link: 'For more information, see the IIS Documentation.' and three buttons: 'Back', 'Next >', and 'Cancel'.

Enter the IP address to which the web server will respond. Enter the port number to which the web server will respond. Web sites normally use port 80. If you are running multiple web sites on this server and you want this site to only respond to a particular domain name (i.e., www.lsnnet.gov), enter the domain address. Click the Next button to continue.



Enter the path to the web site home directory. This path must point to the LSN root directory you have previously created. The check box for anonymous access should be checked. Click the Next button to continue.



Set the web site permissions:

Read:	Checked
Run Scripts:	Checked if you have any script pages. (asp, etc.)
Execute:	Checked if you have a CGI scripts

Write: UNCHECKED
Browse: UNCHECKED

Click the Next button to continue.



Click the Finish button to close the wizard.

DR-21-06-234

ATTACHMENT C -
LSN NETWORK DIAGRAM



U.S. Nuclear Regulatory Commission's Licensing Support Network

Version 3.0 Architecture

AT&T Government Solutions

Integrated solutions from a trusted source

LSN v3 Hardware Configurations

Communications Server	[COMM]	DL360 - Dual Xeon 3.06 GHz – 1GB RAM – 72GB HDD (2)(0) [2]	
Web Server 1	[Web001]	DL360 - Dual Xeon 3.06 GHz – 1GB RAM – 36GB HDD (2)(0) [2]	
Web Server 2	[Web002]	DL360 - Dual Xeon 3.06 GHz – 1GB RAM – 36GB HDD (2)(0) [2]	
Web DB Server 1	[DB201]	DL380 - Dual Xeon 2.8 GHz – 2GB RAM – 36GB HDD (2)(4) [3]	✓
Web DB Server 2	[DB202]	DL380 - Dual Xeon 2.8 GHz – 2GB RAM – 36GB HDD (2)(4) [3]	✓
Main DB Server 1	[DB101]	DL560 – Quad Xeon 2.0 GHz– 4GB RAM – 36GB HDD (2)(0) [3]	✓
Main DB Server 2	[DB102]	DL560 – Quad Xeon 2.0 GHz– 4GB RAM – 36GB HDD (2)(0) [3]	✓
Fetch & Index Server 1	[Work001]	DL360 - Dual Xeon 3.06 GHz – 2GB RAM –146GB HDD(2)(0) [2]	
Fetch & Index Server 2	[Work002]	DL360 - Dual Xeon 3.06 GHz – 2GB RAM –146GB HDD(2)(0) [2]	
Fetch & Index Server 3	[Work003]	DL360 - Dual Xeon 3.06 GHz –2GB RAM –146GB HDD (2)(0) [2]	
Query Server 1	[Qry001]	DL380 - Dual Xeon 2.8 GHz – 2GB RAM – 36GB HDD (2)(4) [3]	✓
Query Server 2	[Qry002]	DL380 - Dual Xeon 2.8 GHz – 2GB RAM – 36GB HDD (2)(4) [3]	✓
Primary DRE Server 1	[DRE101]	DL580 - Quad Xeon 3.06 GHz – 4GB RAM–300GB HDD (2)(0) [2]	
Primary DRE Server 2	[DRE102]	DL580 - Quad Xeon 2.7 GHz – 4GB RAM–300GB HDD (2)(0) [2]	
Primary DRE Server 3	[DRE103]	DL580 - Quad Xeon 2.7 GHz – 4GB RAM–300GB HDD (2)(0) [2]	
Secondary DRE Server 1	[DRE201]	DL580 - Quad Xeon 3.06 GHz – 4GB RAM–300GB HDD (2)(0) [2]	
Secondary DRE Server 2	[DRE202]	DL580 - Quad Xeon 2.7 GHz – 4GB RAM–300GB HDD (2)(0) [2]	
Secondary DRE Server 3	[DRE203]	DL580 - Quad Xeon 2.7 GHz – 4GB RAM–300GB HDD (2)(0) [2]	

✓Indicates that the server utilizes disc space from the Storage Area Network; [x] is # of NICs; (x)(x) is # of Drives

LSN v3 Rack Configurations

	RACK 1 (Front)		RACK 1 (Back)		RACK 2 (Front)		RACK 2 (Back)	
42			pdu (Active)				pdu (Active)	
41			Firewall	IL			MS	
40								
39								
38								
37	CD-ROM							
36								
35								
34	COMM	IL	COMM	IL	IL	WEB001	IL	WEB001
33					IL	WEB002	IL	WEB002
32								
31					LD	QRY001	LD	QRY001
30								
29					LD	QRY002	LD	QRY002
28								
27								
26			pdu (Passive)				pdu (Passive)	
25								
24					L	DB101	L	DB101
23								
22	DB101		DB101		L	DB102	L	DB102
21								
20			SHELF (Dink FS100)					
19			Cisco 3550 12T (Internet)	L			IBL	SHELF (Dink DB104 x 3)
18			Cisco 3550 12T (LSNnet)	L			L	Cisco 3550 12T (LSNnet)
17	ROM		pdu (Active)		ROM		pdu (Active)	
16								
15	WORK001	IL	WORK001	IL	LD	DB201	LD	DB201
14	WORK002	IL	WORK002	IL				
13	WORK003	IL	WORK003	IL	LD	DB202	LD	DB202
12								
11	DRE101	LD	DRE101	LD				
10	DRE102	LD	DRE102	LD				
9	DRE103	LD	DRE103	LD				
8								
7			Dink FS518 (DREnet)	LD				
6								
5	DRE201	LD	DRE201	LD				
4	DRE202	LD	DRE202	LD	Space for Additional Drive Array		Space for Additional Drive Array	
3	DRE203	LD	DRE203	LD				
2								
1			pdu (Passive)				pdu (Passive)	
	I = Internet Network							
	L = LSNnet Network							
	D = DREnet Network							
	B = Backup Network							

DR-21-06-234

ATTACHMENT D -
LSN CONTINGENCY PLAN

NUCLEAR REGULATORY COMMISSION



<SYSTEM NAME>, Version <System Version Number>

Enterprise Architecture Unique ID: <unique ID>

**<MAJOR APPLICATION or GENERAL SUPPORT SYSTEM>
CONTINGENCY TEST REPORT**

<NRC Office/Organization Name>

Document Revision <Document Revision Number>

<Month Day, Year>

Document Change History

Date	Page	Description of Change
mm/dd/yy		

Table of Contents

1	INTRODUCTION.....	3
1.1	PURPOSE.....	3
1.2	ASSUMPTIONS.....	3
1.3	CONSTRAINTS.....	3
1.4	DEPENDENCIES.....	3
2	TEST SCHEDULE	3
3	TEAM COMPOSITION/ROLES & RESPONSIBILITIES	3
4	TEST EXECUTION	5
4.1	SYSTEM CONFIGURATIONS.....	5
4.2	ANOMALIES, IMPROMPTU TESTS, AND DEVIATIONS	5
5	CONTINGENCY TEST FINDINGS	5
6	NOTIFICATION AND ACTIVATION	7
7	DAMAGE ASSESSMENT.....	7
8	ALTERNATE ASSESSMENT.....	7
9	RECOVERY OPERATIONS	8
10	RETURN TO NORMAL OPERATIONS.....	8
10.1	CONCURRENT PROCESSING.....	8
10.2	PLAN DEACTIVATION.....	8
11	SUMMARY AND CONCLUSIONS	9

employee, provide the participants employer).]

Table 3-1 shows the contingency plan test participants by contingency plan team. Team leaders are marked with an asterisk.

Table 3-1 Contingency Test Participants

Name/Title	Office	Organization/ Employer	Role /Team

Table 5-1 Test Findings

Test Proc ID	Test Procedure Success	Issues	Recommendations
	< unconditionally successful, conditionally successful, not executable, unsuccessful>		

9 RECOVERY OPERATIONS

[Describe how the recovery operation phase was conducted, describing each recovery goal and the successes and problems encountered.]

[Provide a description of how well each team was able to perform their duties and identify any impediments encountered and how they were resolved.]

10 RETURN TO NORMAL OPERATIONS

[Describe how the return to normal operations phase was conducted.]

[Provide a description of how well each team was able to perform their duties and identify any impediments encountered and how they were resolved.]

10.1 CONCURRENT PROCESSING

[Describe how the concurrent processing phase was conducted.]

[Provide a description of how well each team was able to perform their duties and identify any impediments encountered and how they were resolved.]

10.2 PLAN DEACTIVATION

[Describe how the plan deactivation phase was conducted.]

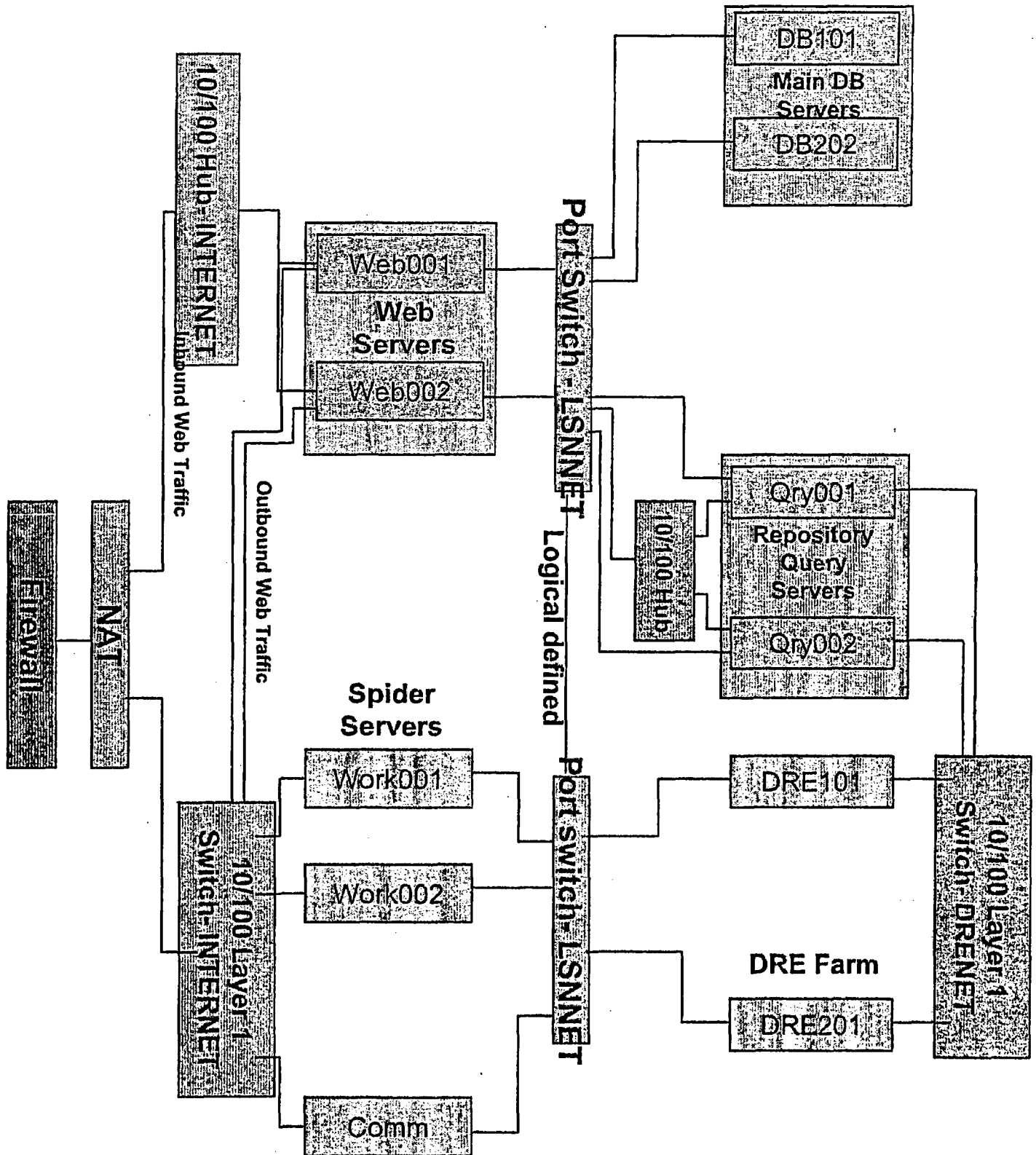
[Provide a description of how well each team was able to perform their duties and identify any impediments encountered and how they were resolved.]

DR-21-06-234

ATTACHMENT E -

LSN TEST NETWORK DIAGRAM

Licensing Support Network v3 Testing Architecture



DR-21-06-234

ATTACHMENT F –

LSN OPERATIONS GUIDE (DRAFT)

Process For Adding a new Participant –

1) Databases –

DB100SQL - lsndb

Add row to tblOrgs – will need orgprefix for tblServers

Add row to tblServers – will need serverId for tblActions

Add row to tblActions

DB200SQL – lsweb

Add row to tblOrgs

2) Directories –

On Work machine specified in lsndb.tblActions (to be on the safe side it doesn't hurt to add the directories to all 3 work machines)

Add D:\LSNData\<orgprefix>\documents

Add D:\LSNData\<orgprefix>\headers

Add file lsnnontextdoc.htm to the D:\LSNData\<orgprefix>\documents directory for header only processing.

3) Files -

Add the <orgprefix>.gif file to the D:\LSNAapps\lsnnet\images\participants directory on both Web servers (or since they're shared directories, from COMM add them to \\Web001\LSNAapps\lsnnet\images\participants and \\Web002\LSNAapps\lsnnet\images\participants)

4) Autonomy – DAHs & DIHs & SUIRs

Stop DIH services on DB202 via cluster admin (on COMM).

Stop DIH services on DRE101 and DRE102 machines.

Increment count and add database info to the SUIR#.cfg file for all 10 SUIRs.

Stop the services.

Start the services so it picks up the new configuration.

Increment count and add database info in the DAH.cfg on both query servers.

Stop DAH services on both qry001 and qry002.

Start DAH services so it picks up the new configuration.

Clean out and restart the DIH services (backup everything, then delete all files and directories except the executable and the configuration file).

DR-21-06-234

ATTACHMENT G -

GOVERNMENT PROPERTY INVENTORY COUNT SHEET

Government Property Inventory Count Sheet

Exhibit GP-10-A

Name
Contracts File No.
Contract

LSN

Hardware:

Model #	Serial #	Description	Qty	Location	Total Value (if known)
Proliant DL380	D049FD41K016	Computer	1	2049	\$6,016.00
Proliant DL380	D035FD51L573	Computer	1	2049	\$6,016.00
ML570	D105CXF1K204	Computer	1	2049	\$20,318.00
ML570	D10CXF1K077	Computer	1	2049	\$20,318.00
Proliant DL380	D048FD41L165	Computer	1	2049	\$6,016.00
Proliant DL380	D048FD41L039	Computer	1	2049	\$5,290.00
Proliant DL380	D049FD41K563	Computer	1	2049	\$14,978.00
Proliant DL380	D048FD41K523	Computer	1	2049	\$14,978.00
Proliant DL380	D048FD41K766	Computer	1	2049	\$6,016.00
RA4100	D039DBX10176	Fiber Channel Disc Array	1	2049	\$17,879.00
RA4100	DA047DBX10275	Fiber Channel Disc Array	1	2049	\$23,672.00
Proliant DL380	D035FD51L842	Computer	1	2049	\$5,290.00
DS104NA	DS14H1A702942	Hub	1	2049	\$40.00
NAS 4300	EE0213S2	Network Storage	1	2049	\$4,287.39
DL 360	M069LGP51S	Server, Web	1	AT&T Ashburn	\$8,000.00
DL 360	M08VLGP51S	Server, Web	1	AT&T Ashburn	\$8,000.00
DL 360	M03HLGP51S	Server, Web	1	AT&T Ashburn	\$8,000.00
DL 360	M068LGP51S	Server, Web	1	AT&T Ashburn	\$8,000.00
DL 360	M079LGP51S	Server, Web	1	AT&T Ashburn	\$8,000.00
DL 360	M06NLGP51S	Server, Web	1	AT&T Ashburn	\$8,000.00
DL 560	D328KZH2H012	Server, Web	1	AT&T Ashburn	\$41,200.00
DL 560	D328KZH2H002	Server, Web	1	AT&T Ashburn	\$41,200.00
DL 380	D348LDN1H428	Server, Web	1	AT&T Ashburn	\$14,000.00
DL 380	D348LDN1H178	Server, Web	1	AT&T Ashburn	\$14,000.00
DL 380	D348LDN1H330	Server, Web	1	AT&T Ashburn	\$14,000.00
DL 380	D347LDN1J023	Server, Web	1	AT&T Ashburn	\$14,000.00
DL 360	M07BLGP51S	Server, Web	1	AT&T Ashburn	\$10,000.00
DL 380	M04FLGP51S	Server, Web	1	2049	\$10,000.00
DL 360	M02KLGP51S	Server, Web	1	2049	\$10,000.00
DL 380	M00SLGP51S	Server, Web	1	2049	\$10,000.00
DL 380	M097LGP51S	Server, Web	1	2049	\$10,000.00
DL 360	M07JLGP51R	Server, Web	1	AT&T Ashburn	\$10,000.00
1000	US20350JZJ	SAN (Storage Attached Network)	1	AT&T Ashburn	\$75,000.00
BelkinKVM	3033112455	KVM Switch	1	AT&T Ashburn	\$60.00
BelkinKVM	3033112456	KVM Switch	1	AT&T Ashburn	\$60.00
JFS516	JS1613ACB004821	Switch, 10/100 (16 port)	1	AT&T Ashburn	\$205.00
FS108A	FS08236CB204221	Switch 10/100 (8 port hUB)	1	AT&T Ashburn	\$89.00
DS104NA	DS1413ADB089387	Hub 10/100 (8 port Switch)	1	AT&T Ashburn	\$60.00
DS104NA	DS1413ADB100139	Hub 10/100 (8 port Switch)	1	AT&T Ashburn	\$60.00
DS104NA	DS1413ADB110602	Hub 10/100 (8 port Switch)	1	AT&T Ashburn	\$60.00
DL 560	EA0SMF5349	Server, Web	1	AT&T Ashburn	\$20,000.00
DL 560	EA13MF524C	Server, Web	1	AT&T Ashburn	\$20,000.00
DL 560	EA0TMF524C	Server, Web	1	AT&T Ashburn	\$20,000.00
DL 560	EA00MF524F	Server, Web	1	AT&T Ashburn	\$20,000.00
DL 560	EA10MF5349	Server, Web	1	AT&T Ashburn	\$20,000.00
DL 560	EA0KMF524C	Server, Web	1	AT&T Ashburn	\$20,000.00
NEO 2000	2b51400085	Tape Drive unit with robot	1	AT&T Ashburn	\$16,000.00

Software:

Model #	Location	Description	QTY
A6009	AT&T Ashburn	Dynamic Index Handler (DIH)	3
L-2021-MNT	AT&T Ashburn	Dynamic Reasoning Engine (DRE)	12
A6010	AT&T Ashburn	Dynamic Action Handler (DAH)	2

DR-21-06-234

ENCLOSURE 2

**NRC FORM 187 – CONTRACT SECURITY AND/OR CLASSIFICATION
REQUIREMENTS**

The policies, procedures, and criteria of the NRC Security Program, NRCMD 12, apply to performance of this contract, subcontract or other activity.

CONTRACT SECURITY AND/OR CLASSIFICATION REQUIREMENTS

COMPLETE CLASSIFIED ITEMS BY
SEPARATE CORRESPONDENCE

1. CONTRACTOR NAME AND ADDRESS

AT&T GOVERNMENT SOLUTIONS, INC.
1900 GALLOWS RD STE 105
VIENNA, VA 22182-3865

A. CONTRACT NUMBER FOR COMMERCIAL
CONTRACTS OR JOB CODE FOR DOE
PROJECTS (Prime contract number must be shown
for all subcontracts.)

B. PROJECTED
START DATE

07/14/2006

C. PROJECTED
COMPLETION DATE

07/13/2009

2. TYPE OF SUBMISSION

- ☒ A. ORIGINAL
☐ B. REVISED (Supersedes all
previous submissions)
☐ C. OTHER (Specify)

3. FOR FOLLOW-ON CONTRACT, ENTER PRECEDING CONTRACT NUMBER AND PROJECTED COMPLETION DATE

A. DOES NOT APPLY

☐

B. CONTRACT NUMBER

DR-01-0078

DATE

07/13/2006

4. PROJECT TITLE AND OTHER IDENTIFYING INFORMATION

Licensing Support Network (LSN)

5. PERFORMANCE WILL REQUIRE

A. ACCESS TO CLASSIFIED MATTER OR CLASSIFIED INFORMATION

- ☐ YES (If "YES," answer 1-7 below)
☒ NO (If "NO," proceed to 5.C.)

NOT
APPLICABLE

NATIONAL SECURITY

RESTRICTED DATA

SECRET

CONFIDENTIAL

SECRET

CONFIDENTIAL

1. ACCESS TO FOREIGN INTELLIGENCE INFORMATION

☐
☐
☐
☐
☐

2. RECEIPT, STORAGE, OR OTHER SAFEGUARDING OF
CLASSIFIED MATTER. (See 5.B.)

☐
☐
☐
☐
☐

3. GENERATION OF CLASSIFIED MATTER.

☐
☐
☐
☐
☐

4. ACCESS TO CRYPTOGRAPHIC MATERIAL OR OTHER
CLASSIFIED COMSEC INFORMATION.

☐
☐
☐
☐
☐

5. ACCESS TO CLASSIFIED MATTER OR CLASSIFIED
INFORMATION PROCESSED BY ANOTHER AGENCY.

☐
☐
☐
☐
☐

6. CLASSIFIED USE OF AN INFORMATION TECHNOLOGY
PROCESSING SYSTEM.

☐
☐
☐
☐
☐

7. OTHER (Specify)

☐
☐
☐
☐
☐

B. IS FACILITY CLEARANCE REQUIRED?

☐ YES ☒ NO

C. ☐ UNESCORTED ACCESS IS REQUIRED TO PROTECTED AND VITAL AREAS OF NUCLEAR POWER PLANTS.

D. ☐ ACCESS IS REQUIRED TO UNCLASSIFIED SAFEGUARDS INFORMATION.

E. ☒ ACCESS IS REQUIRED TO SENSITIVE IT SYSTEMS AND DATA.

F. ☒ UNESCORTED ACCESS TO NRC HEADQUARTERS BUILDING.

FOR PROCEDURES AND REQUIREMENTS ON PROVIDING TEMPORARY AND FINAL APPROVAL FOR UNESCORTED ACCESS, REFER TO NRCMD 12.

NAME AND TITLE <i>Matt Schmit, Project Mgr.</i>	SIGNATURE <i>Matt Schmit</i>	DATE <i>2/16/06</i>
--	---------------------------------	------------------------

7. CLASSIFICATION GUIDANCE

NATURE OF CLASSIFIED GUIDANCE IDENTIFICATION OF CLASSIFICATION GUIDES

8. CLASSIFIED REVIEW OF CONTRACTOR / SUBCONTRACTOR REPORT(S) AND OTHER DOCUMENTS WILL BE CONDUCTED BY:

☐ AUTHORIZED CLASSIFIER (Name and Title) ☐ DIVISION OF FACILITIES AND SECURITY

9. REQUIRED DISTRIBUTION OF NRC FORM 187 Check appropriate box(es)

☐ SPONSORING NRC OFFICE OR DIVISION (Item 10A) ☐ DIVISION OF CONTRACTS AND PROPERTY MANAGEMENT
☒ DIVISION OF FACILITIES AND SECURITY (Item 10B) ☐ CONTRACTOR (Item 1)
☐ SECURITY/CLASSIFICATION REQUIREMENTS FOR SUBCONTRACTS RESULTING FROM THIS CONTRACT WILL BE APPROVED BY THE OFFICIALS NAMED IN ITEMS 10B AND 10C BELOW.

10. APPROVALS

SECURITY/CLASSIFICATION REQUIREMENTS FOR SUBCONTRACTS RESULTING FROM THIS CONTRACT WILL BE APPROVED BY THE OFFICIALS NAMED IN ITEMS 10B AND 10C BELOW.

NAME (Print or type)	SIGNATURE	DATE
A. DIRECTOR, OFFICE OR DIVISION <i>D. Paul Bellum</i>	SIGNATURE <i>D. Paul Bellum</i>	DATE <i>2/16/06</i>
B. DIRECTOR, DIVISION OF FACILITIES AND SECURITY Sharon D. Stewart	SIGNATURE <i>Sharon D. Stewart</i>	DATE <i>5/5/06</i>
C. DIRECTOR, DIVISION OF CONTRACTS AND PROPERTY MANAGEMENT (Not applicable to DOE agreements) Mary Lynn Scott	SIGNATURE <i>M. Lynn Scott</i>	DATE <i>5/8/06</i>

REMARKS

DR-21-06-234

ENCLOSURE 3

BILLING INSTRUCTIONS

**BILLING INSTRUCTIONS FOR
LABOR HOUR TYPE CONTRACTS
DR-21-06-234 (Enclosure 3.)**

General: The contractor shall prepare vouchers/invoices for reimbursement of costs in the manner and format described herein or a similar format. **FAILURE TO SUBMIT VOUCHERS/INVOICES IN ACCORDANCE WITH THESE INSTRUCTIONS WILL RESULT IN REJECTION OF THE VOUCHER/INVOICE AS IMPROPER.**

Number of Copies: An original and three copies, including supporting documentation shall be submitted. A copy of all supporting documents must be attached to each copy of your voucher/invoice. Failure to submit all the required copies will result in rejection of the voucher/invoice as improper.

Designated Agency Billing Office: Vouchers/invoices shall be submitted to the following address:

U.S. Nuclear Regulatory Commission
Division of Contracts
Mail Stop T-7-I-2
Washington, D.C. 20555

HAND DELIVERY OF VOUCHERS/INVOICES IS DISCOURAGED AND WILL NOT EXPEDITE PROCESSING BY NRC. However, should you choose to deliver vouchers/invoices by hand, including delivery by any express mail services or special delivery services which use a courier or other person to deliver the voucher/invoice in person to the NRC, such vouchers/invoices must be addressed to the above Designated Agency Billing Office and will only be accepted at the following location:

U.S. Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike - Mail Room
Rockville, MD 20852

HAND-CARRIED SUBMISSIONS WILL NOT BE ACCEPTED AT OTHER THAN THE ABOVE ADDRESS.

Note that the official receipt date for hand-delivered vouchers/invoices will be the date it is received by the official agency billing office in the Division of Contracts and Property Management.

Billing Instructions
Page 2 of 2

Agency Payment Office: Payment will be made by the following office:

U.S. Nuclear Regulatory Commission
Division of Accounting and Finance GOV/COMM
Mail Stop T-9-H4
Washington, DC 20555

Frequency: The contractor shall submit claims for reimbursement once each month, unless otherwise authorized by the Contracting Officer.

Format: Claims should be submitted in the format depicted on the attached sample form entitled "Voucher/Invoice for Purchases and Services Other Than Personal" (see Attachment) or a similar format. **THE SAMPLE FORMAT IS PROVIDED FOR GUIDANCE ONLY AND IS NOT REQUIRED FOR SUBMISSION OF A VOUCHER/INVOICE. ALTERNATE FORMATS ARE PERMISSIBLE PROVIDED ALL REQUIREMENTS OF THE BILLING INSTRUCTIONS ARE ADDRESSED.**

Billing of Costs After Expiration of Contract/Purchase Order: If the costs are incurred during the purchase order period and claimed after the purchase order has expired, the period during which these costs were incurred must be cited. To be considered a proper voucher/invoice, the contractor shall clearly mark it 'EXPIRATION VOUCHER" OR "EXPIRATION INVOICE".

Currency: Billings may be expressed in the currency normally used by the contractor in maintaining his accounting records; payments will be made in that currency. However, the U.S. dollar equivalent for all vouchers/invoices paid under the purchase order may not exceed the total U.S. dollars authorized in the purchase order.

ATTACHMENT

**INVOICE/VOUCHER FOR PURCHASES
AND
SERVICES OTHER THAN PERSONAL**

(SAMPLE FORMAT - COVER SHEET)

Official Agency Billing Office
U.S. Nuclear Regulatory Commission
Division of Contracts and Property
Management MS: T-7-12
Washington, DC 20555-0001

(a) Purchase Order No:

(b) Voucher/Invoice No:

(c) Date of Voucher/Invoice:

Payee's Name and Address

(d) Individual to Contact Regarding Voucher/Invoice
Name:
Telephone No:

(e) This voucher/invoice represents reimbursable costs for the billing period
_____ to _____.

	<u>Current Period</u>	<u>Amount Billed</u> <u>Cumulative</u>
(f) <u>Direct Costs:</u>		
(1) Direct Labor*	\$ _____	\$ _____
(2) Travel*	\$ _____	\$ _____
Total Direct Costs:	\$ _____	\$ _____

* The contractor shall submit as an attachment to its invoice/voucher cover sheet a listing of labor categories, hours billed, fixed hourly rates, total dollars, and cumulative hours billed to date under each labor category, authorized under the purchase order for each of the three activities to be performed under the purchase order. In addition, the contractor shall include travel costs incurred with the required supporting documentation, as well as, the cumulative total of travel costs billed to date by activity.