

**State of North Carolina
Employment Security Commission
Scope Statement**

ISSUING AGENCY:	Employment Security Commission 700 Wade Avenue Raleigh, North Carolina 27605
PROJECT NAME:	ESC Network Upgrade Project (Tracking No. TECH-002616)
ISSUED:	October 6, 2005
DEADLINE FOR QUESTIONS:	October 13, 2005 @ 10:00 am est
DEADLINE FOR PROPOSALS:	October 24, 2005 @ 2:00 pm est
ISSUING AGENCY:	Employment Security Commission
AGENCY CONTACT:	Sherry Matthews Email: sherry.matthews@ncmail.net Telephone: 919-733-5675
CATEGORY:	ITS Technical Services Contract Attachment 10 – Technology Advisory Services

General information

The purpose of this scope statement is to solicit proposals from eligible vendors to assist the Employment Security Commission (ESC) to:

Assess ESC's network environment and performance objectives for application host services, and provide recommendations to optimize application load balancing and segregate database services.

Questions should be sent to Sherry Matthews by the specified deadline. Please put "TECH-002616 Questions" in the subject line of your email. Responses to the questions will be emailed to all eligible vendors on Attachment 10 of the Technical Services Contract.

Sealed Proposals must be submitted to the address listed below and must be received by the time and date specified above.

**SEND ALL PROPOSALS DIRECTLY TO
ESC Purchasing Office
Attn: Sherry Matthews
700 Wade Avenue
Raleigh, NC 27605**

IMPORTANT: Indicate firm name and scope statement tracking number on the front of each proposal envelope or package. Include the original and three (3) copies of the proposal.

The proposal shall contain an execution page signed by an authorized officer of the company. Do not mark your entire response as “Confidential and/or Proprietary”. Only Vendor information referenced in the NC Information Technology General Terms and Conditions for Goods and Related Services, Section 17, “Confidentiality” may be confidential. *Acceptance of proposals for evaluation when marked confidential or proprietary, or as exempt from disclosure under N.C. Public Records laws, shall not constitute a determination by the State that any materials or information contained therein are exempt from disclosure.*

Table of Contents

1.	Project Description	
1.1	Background	4
1.2	Purpose and Objectives	4
1.3	Problem Definition	4
1.4	Technical / Business Issues	5
2.	Scope and Objectives	
2.1	Technical Approach	5
2.2	Scope Management Structure	6
2.3	Detailed Scope of Work	6
2.4	Timetable / Schedule	8
2.5	Vendor Qualifications	9
2.6	Additional Terms	10
2.7	Payment Terms	11
2.8	Developing a Statement of Work Cost	11
2.9	Statement of Work Checklist	12
2.10	Evaluation Criteria	12

1. Project Description

1.1 Background

The Employment Security Commission (ESC) of North Carolina provides application services to its employees and the public in two forms: mainframe services and World Wide Web (WWW) services. WWW services are the subject of this scope statement. All of ESC's WWW services are centralized and supported at ESC's computing center in Raleigh, NC.

ESC's WWW services support three user communities: 1) employees of ESC and partner state agencies who use applications to deliver unemployment insurance and employment services to the public, 2) citizens and businesses of the state who use applications to file claims, seek assistance, perform business transactions, and submit reports, and 3) specifically defined groups who use special purpose applications.

1.2 Purpose and Objectives

The purpose of this scope statement is twofold:

1. To obtain technical services to allow ESC to more effectively manage requests for application services among multiple hosts by migrating from software-based to hardware-based load balancing; and
2. To design and establish a secure data subnet segregating database servers from all other hosts on the network.

1.3 Problem Definition

This scope statement is designed to address security, network performance, and network management objectives, as follows:

- ESC plans to refine its host WWW environment to satisfy best security practices.
- Network performance objectives relate to: 1) communications between applications servers and database servers that are segregated on different subnets and 2) effective distribution of WWW access to multiple application hosts using load balanced switching to manage performance.
- Network management objectives relate to leveraging ESC's existing Cisco network and Cisco performance management tools, and assuring that the recommendations are consistent with ESC's network design and management capabilities.

1.4 Technical / Business Issues

Additional technical and business issues affecting this project include the following:

- For more than 4 years, ESC has distributed web queries to its applications servers using software load balancing. Actual performance and stress testing of this technique have indicated that the server overhead for performing software load balancing is excessive. Therefore, a hardware load balancing architecture has been selected as a means to improve the throughput capacity and processing speed of user queries.
- ESC desires a solution that is the best combination of technical approach and cost.
- In their recommendations (Deliverables 3-1 and 3-2) the vendor must include an assessment of costs to support the vendor's proposed solution (v. costs to support the current infrastructure) and costs to complete conversion from the existing architecture to full implementation of the recommendation. ESC will provide unit values and performance measures for the vendor's calculations.
- Potential alternatives shall consider fault protection and redundancy in their design.
- Novell Directory Services (NDS) / eDirectory and Microsoft's Active Directory are directory services used on ESC's network. NDS user accounts control application authorization. NDS calls are made from the applications using SOAP. All WWW servers are members of an Active Directory domain. The domain definition is internal to the ESC central office.

2. Scope and Objectives

2.1 Technical Approach

ESC will employ the selected vendor to:

- 2.1.1 Work with ESC staff to evaluate business and technical requirements;
- 2.1.2 Develop alternative logical network models for analysis;
- 2.1.3 Recommend technical designs consistent with best practices;
- 2.1.4 Estimate costs associated with implementing recommendations;
- 2.1.5 Define a technical approach (i.e., a task management plan) that will incorporate all technical requirements associated with a recommendation and produce an implementation "work flow." This relates to two (2) designs and two (2) implementation plans. These two subjects are hardware (switch) load balancing for web servers in the ESC DMZ and secure subnet design for database services.
- 2.1.6 Implementation plans must include procedures documentation that will be exercised in test and production by the vendor. The vendor's documentation must be complete and clear. This documentation will be used after the completion of this engagement by ESC network staff for continuing operations and management.
- 2.1.7 Additionally, the vendor shall prepare a set of deliverables that shall document the network environment that serves as the baseline for this

engagement and the vendor's recommendations. The deliverables shall include:

- Document the **business and technical requirements** that will be used to evaluate the success of proposed recommendations. This shall be in the form of text.
- Document the **existing ESC network environment** for communications between local offices, ESC central office, state mainframe services, and the Internet. This shall be in the form of one or more logical network diagrams.
- Document the two (2) recommended solutions: 1) hardware (switch) load balancing for web servers in the ESC DMZ and 2) secure subnet design for database services. This documentation shall clearly identify the steps required to achieve compliance with security and performance objectives. Documentation shall be in the form of a **Recommendations** document. The document shall describe the recommendations, reference the **Business and Technical Requirements** and discuss in a narrative how each alternative meets / fails to meet specific requirements. This document shall be in the form of text with supplementary diagrams.
- Develop detailed **implementation plans** that will identify the tasks, dependencies, critical path, and critical success factors for carrying out the recommended solutions. This shall be in the form of Microsoft Project software output with text descriptions including technical procedures for implementation of the vendor's recommendations.

2.2 Scope (Work Order) Management Structure

All work under this scope of services will be managed by the Network Engineering Supervisor, Information Systems Division of ESC. The vendor shall develop a Task Management Plan that will serve as a management tool for all elements of this SOW. All work shall be performed as specified in the Task Management Plan.

2.3 Detailed Scope of Work

2.3.1 Task 1: Task Management Management Plan

The vendor shall meet with ESC's work order manager to review requirements and the approach for this engagement. The vendor shall develop a Task Management Plan that will guide work to be performed and establish a timeline for project progress and completion. The vendor's Task Management Plan must be approved by the ESC work order manager or designee before any work is to begin.

Deliverable 1: Task Management Plan (shall be completed within 10 workdays after notice of award)

2.3.2 Task 2: Requirements Definition

Based on the approved plan, the vendor shall meet with ESC management and technical staff to review the business services performed by the agency, to review existing technical architecture and the performance of the existing network, and to review environmental security requirements. Reference materials will be provided to the vendor in order to provide necessary descriptive information concerning existing network architecture and performance and in response to questions necessary to clarify requirements.

The vendor shall prepare a draft Requirements Document. This document will be reviewed and modified or approved by the ESC project manager.

Deliverable 2:

Requirements Document to include ESC Network Diagrams

2.3.3 Task 3: Recommended Design

This task will include two deliverables. For each deliverable the vendor shall complete an: 1) an assessment of ESC's existing network architecture against the requirements established in Task 3, and 2) a network design recommendation.

The deliverables shall address the two network objectives identified for this study:

- Hardware load balancing design for WWW applications, and
- Design of a secure database subnet.

The recommendations must address ESC's network performance requirements for business services, incorporate accepted technologies for achieving compliance, and complement ESC's existing network resources to the maximum degree practical. The term "complement ESC's existing resources" shall involve consideration of infrastructure components, staff resources, technical standards, and agency knowledge in considering cost and complexity (success probability) of potential alternatives.

The vendor shall review the network architecture assessment and the recommendations at a conceptual stage with ESC management and senior technical staff. The review is necessary to assure inclusiveness of high-level requirements and to identify technical details that may become challenges in migrating from the existing network architecture to the proposed solution.

This review stage is intended to provide additional technical requirements that shall be incorporated in the vendor's analysis before completion of the required deliverables.

Deliverables:

3-1 Recommended Design for Content Switching

3-2 Recommended Design for Database Security

2.3.4 Task 4: Implementation Plans

This task shall require the development of detailed implementation plans that will delineate technical tasks that must be completed for each recommendation. These plans shall be presented as Gantt Charts and tabular output from Microsoft Project software and as detailed technical procedures.

The Microsoft Project software shall identify major tasks, identify dependences between primary and dependent tasks, and provide estimates for the staff effort to accomplish these tasks. These plans will require close coordination with ESC management and technical supervisors in order to provide the vendor with a complete understanding of the technical capabilities and limitations that must be considered.

The vendor shall develop technical procedures in sufficient detail to support configuration of network resources and testing of the configuration in a laboratory environment. The vendor shall execute these procedures; however, the procedures shall be documented in writing to enable ESC staff to perform them successfully.

Deliverables:

4-1 Implementation Plan for Content Switching

4-2 Implementation Plan for Database Security

2.4 Timetable / Schedule

The Technical Approach for this SOW includes global and detailed phases. The Requirements Definition Phase (see Task 2) can be addressed as a global task that would define the requirements for both design objectives concurrently.

However, the design and implementation planning phases of this SOW must be treated individually for each of the objectives. Therefore, each objective would have a design and each would have an implementation plan.

Deliverables required in this document are intended to be content focused. ESC requires that the substance of each deliverable must be clearly presented in text, tabular, and graphic, form.

Implementation Plan is a general term that requires the detailed thought and presentation of steps to complete a recommended design. An Implementation Plan is necessary to assure that testing parameters are properly identified and to assure that the installation / deployment steps are accomplished under acceptable change management discipline including back out procedures.

The following table presents specific milestones for completed tasks. All milestones do not have a clear dependency that would allow the development of a clear Gantt chart at this time. Some dependencies will require negotiation and determination after award based upon factors that will be determined by the vendor's proposed staff and ESC priorities among the objectives at the time of Task Management Plan development.

Tasks / Activities / Deliverables (denoted by # in parentheses)	Estimated Completion Schedule
Begin Work	Within 10 work days of Vendor Selection
Task Management Plan (# 1)	Within 10 work days after beginning work
Requirements Document (# 2)	Within 20 workdays after acceptance of Task Management Plan
Content Switching:	
• Recommended Design (# 3-1)	TBD by Task Management Plan
• Implementation Plan (# 4-1)	Within 10 work days after acceptance of Recommended Design
• Review with ESC project manager	Within 3 workdays after completion of the Implementation Plan
• Test design & Modify	Within 5 work days after ESC approval
• Deploy	Within 10 calendar days after completion of the Testing (NOTE: The milestone timeframe assumes the need to identify an off-hours target date for application of tested changes into the production environment.
Database Security:	
• Recommended Design (# 3-2)	TBD by Task Management Plan
• Implementation Plan (# 4-2)	Proposed switch / firewall configurations within 5 work days after acceptance of Recommended Design
• Review with ESC project manager	Within 3 workdays after completion of the Implementation Plan
• Test design & Modify	Within 5 work days after ESC approval
• Deploy	Within 10 calendar days after completion of the Testing (NOTE: The milestone timeframe assumes the need to identify an off-hours target date for application of tested changes into the production environment.

2.5 Vendor Qualifications

ESC's expectations are that the vendor shall propose fully qualified and experienced network engineer(s) to perform the tasks defined in this SOW. Skills of the proposed staff are paramount in determining the rate of progress to completion and the quality of work.

This scope statement identifies the tasks and deliverables to be performed. The technical staff proposed by the vendor should possess the following qualifications:

Mandatory:

- Proficiency with Cisco switching equipment including Catalyst 3550, 4500, 5500, and 6500 series switches, and Cisco 11501 content switches,
- Proficiency with Cisco PIX firewall configuration including fail over capability,
- Experience with DNS design, operations, and support (BIND v. 8 and above) on Solaris,
- Five (5) years experience in network management including three (3) years experience with Cisco switching and security products.

Desired:

- Cisco Certified Internetwork Expert (CCIE),
- Experience with DNS design, operations, and support (BIND v. 8 and above) on Solaris 2.9 and above,

2.6 Additional Terms

Due to the priority of this work, ESC desires to begin this work as soon after award as practical. Therefore, the availability of proposed staff is a concern. The vendor's proposal shall clearly identify the earliest date when its proposed staff would be available to begin work.

The selected vendor shall be required to sign a standard ESC "Non Disclosure Agreement," stating that any information provided by ESC as necessary to perform the technical requirements is confidential and that the vendor agrees to maintain the confidentiality of that information.

The selected vendor shall provide a weekly status report to the ESC work order manager due at 10 a.m. every Monday morning. The status report will identify the following for each week (defined as the period ending at 5 p.m. the previous Friday) and cumulative for the work order to date:

- Completion percentage for each active task (see section 2.4 for definitions)
- Hours and costs incurred for each active task for the report week and for the work order to date
- Proposed activities, progress, hours, and cost for the next week.

The vendor shall provide a laptop computer(s) for its staff. Due to the nature of the work, ESC expects to provide a work area for the vendor's staff to ensure the necessary communications between the staff and ESC's work order manager, and to provide flexibility in scheduling meetings with various ESC technical staff. Therefore, ESC does not envision that the vendor will incur other direct charges than consultant labor.

All work will be performed at ESC's central office, 700 Wade Avenue, Raleigh, NC.

VENDOR UTILIZATION OF WORKERS OUTSIDE U.S.: In accordance with Executive Order #60, the Vendor must detail in the bid response, the manner in which it intends to utilize resources or workers located outside of the United States. The State of North Carolina will evaluate the additional risks, costs, and other factors associated with such utilization prior to making an award for any such Vendor's

proposal. The Vendor shall provide the following for any proposal or actual utilization or contract performance outside of the United States:

1. The location of work performed under a state contract by the Vendor, any subcontractors, employees, or other persons performing the contract
2. The corporate structure and location of corporate employees and activities of the Vendors, its affiliates or any other subcontractors
3. Notice of the relocation of the Vendor, employees of the Vendor, subcontractors of the Vendor, or other persons performing services under a state contract outside of the United States
4. Any Vendor or subcontractor providing call or contact center services to the State of North Carolina shall disclose to inbound callers the location from which the call or contact center services are being provided

2.7 Payment Terms

Following ESC acceptance of the vendor's deliverables (as identified below), the vendor shall be authorized to invoice ESC for payment according to the following schedule.

Accepted Deliverable or Milestone	Authorized Payment
#2 Requirements Document	20% of vendor's bid price
#4-1 Content Switching Implementation Plan	25% of vendor's bid price
#4-2 Database Security Implementation Plan	25% of vendor's bid price
Test and Deployment of Content Switching	15% of vendor's bid price
Test and Deployment of Database subnet	15% of vendor's bid price

2.8 Developing A Statement of Work Cost

The purpose of this engagement is to obtain technical advisory services for a critical information technology infrastructure implementation that will have to be made by the Employment Security Commission of North Carolina. ESC will provide necessary data for the vendor to evaluate requirements, generate alternatives, and perform cost analyses. ESC will make appropriate staff available for the vendor to effectively perform data collection and analysis.

The vendor shall provide all necessary equipment, material and supplies for its staff to conduct work.

This work order will require the completion of deliverables specified in this scope statement and Section 2.4. Vendors may use discretion in determining whether their management of the work under this scope of services can be completed by the technical representative(s) who will perform the work elements, or whether a separate vendor manager is required on a part-time basis to supplement the vendor's technical specialist.

The vendor's proposal shall identify hours and total fixed costs estimated for completion of the itemized tasks in this SOW.

Cost Table

Task	Hours	Cost
1 Task Management Plan		
2 Requirements Definition		
3 Recommended Design		
4 Implementation Plan & Cost Estimate		
5 ESC Review Meeting		
6 Total Fixed Cost		

2.9 Statement of Work Checklist

The vendor must submit a proposal containing the following information. All Proposals must include:

- Name and tracking number of project (ESC Server Retrofit)
- All information in “Cost Table”
- Resumes of proposed staff and the earliest available start dates for proposed staff
- Confirmation of Start Date
- Proposed Completion Date
- All deliverables must be addressed
- Confirmation of Acceptance of payment terms
- Clear demonstration of understanding of what is required to complete the technical study and recommendations.
- References to at least three customers for whom the vendor has done similar work.

2.10 Evaluation Criteria

The evaluation and vendor selection process will be based on “best value”. The particular procurement methods used are selected so as to result in the best buy for the state in terms of the function to be performed. Competitive Best Value Procurement allows for the use of alternate competitive purchasing techniques in addition to low price analysis in the selection of supply sources determined to represent best value.

In this particular procurement, a trade off method of source selection will be utilized. Proposals will be evaluated based on the criteria listed below. Each of the criteria will be weighted as specified. Evaluation methodology shall be in accordance with Title 9 of the NCAC Subchapter 06B, Section .0302. The state may, at its sole option, elect to conduct negotiations with one or more vendors and make requests of vendors as may be necessary or proper for best and final offers. However, bidders’ responses may be evaluated without further information or submissions, and

therefore, the bidders should submit their best and most competitive bid without regard to any potential for clarification or negotiations.

- | | | |
|----|--|-----|
| 1. | Knowledge and Skill level of proposed staff– | 40% |
| 2. | Availability of proposed staff prepared to begin work - | 10% |
| 3. | Cost – | 25% |
| 4. | Clear understanding of what is required to complete work – | 15% |
| 5. | Corporate past performance on similar engagements – | 10% |

Execution of Scope Statement

By signing the below, the Offeror certifies that:

- this Scope Statement Response was signed by an authorized representative of the Offeror;
- this Scope Statement Response was not derived through any acts of collusion as stated in NCGS 147-33-100.
- the Offeror agrees to all the mandatory terms and conditions and agrees to pay the 2% administrative fee to ITS per Section I, Paragraph B of the ITS Technical Services Contract,
- the Offeror agrees to abide by all State CIO Policies, Standards and Procedures and in addition, adhere to the Statewide Technical Architecture.

Therefore in compliance with the foregoing Scope Statement and subject to all terms and conditions of the ITS Technical Services Contract, including all exhibits, the undersigned offers and agrees to furnish the services set forth in the Scope Statement if the Scope Statement Response is accepted by the State.

Failure to execute/sign scope statement prior to submittal shall render it invalid. Late bids are not acceptable.

BIDDER:		FEDERAL ID OR SOCIAL SECURITY NO.	
STREET ADDRESS:		P.O. BOX:	ZIP:
CITY & STATE & ZIP:		TELEPHONE NUMBER:	TOLL FREE TEL. NO
TYPE OR PRINT NAME & TITLE OF PERSON SIGNING:		FAX NUMBER:	
AUTHORIZED SIGNATURE:	DATE:	E-MAIL:	

Acceptance by Agency is contingent upon Statewide IT Procurement Office’s approval of the Agency’s recommendation of award. This contract award was approved by ITS on _____, 2005, as indicated by attached certification letter from ITS.

ACCEPTANCE OF SCOPE STATEMENT RESPONSE

If any or all parts of this scope are accepted, an authorized representative of Using Agency shall affix their signature hereto and this document along with the provisions of the Umbrella Contract shall then constitute the written agreement between the parties. A copy of this acceptance will be forwarded to the successful offeror(s).

FOR CONTRACTING AGENCY USE ONLY

Offer accepted this ____ day of _____, 2005, as indicated on attached certification or purchase order,
 by _____ (Authorized representative of Contracting Agency)