

# State of Nebraska REQUEST FOR INFORMATION FORM

RETURN TO:  
Nebraska Dept of Roads  
1500 Highway 2  
PO Box 94759  
Lincoln, NE 68509-4759  
Attn: Bill Wehling  
Phone: (402) 479-3986  
Fax: (402) 479-4325

SOLICITATION NUMBER	RELEASE DATE
<b>RFI 130901</b>	<b>September 24, 2013</b>
OPENING DATE AND TIME	PROCUREMENT CONTACT
<b>November 4<sup>th</sup>, 2013 9:30 a.m. Central Time</b>	<b>Bill Wehling</b>

This form is part of the specification package and must be signed and returned, along with information documents, by the opening date and time specified.

## PLEASE READ CAREFULLY!

### SCOPE OF SERVICE

The State of Nebraska, Department of Roads, is issuing this Request for Information, RFI 130901 for the purpose of gathering information related to 'NDOR mainframe migration services'.

Written questions are due no later than October 11, 2013, and should be submitted via e-mail to [Bill.Wehling@nebraska.gov](mailto:Bill.Wehling@nebraska.gov). Written questions may also be sent by facsimile to (402) 479-4325.

Sealed information must be received in the Department of Roads on or before November 4<sup>th</sup>, 2013, 9:30 a.m. Central Time, at which time information will be publicly opened.

Bidder should submit one (1) original and one (6) copies of the entire RFI response. RFI responses must be submitted by the information due date and time.

RFI RESPONSE MUST MEET THE FOLLOWING REQUIREMENTS TO BE CONSIDERED VALID.  
RFI RESPONSE WILL BE REJECTED IF NOT IN COMPLIANCE WITH THESE REQUIREMENTS.

1. Sealed RFI response must be received by the date and time of RFI opening indicated above. No late information will be accepted. No electronic, e-mail, fax, voice, or telephone information will be accepted.
2. RFI response must meet all specifications of the RFI
3. This form "REQUEST FOR INFORMATION" MUST be manually signed, in ink, and returned by the information opening date and time along with your information and any other requirements as specified in the RFI.
4. It is understood by the parties that in the State of Nebraska's opinion, any limitation on the contractor's liability is unconstitutional under the Nebraska State Constitution, Article XIII, Section 3, and that any limitation of liability shall not be binding on the State of Nebraska despite inclusion of such language in documents supplied with the contractor's bid or in the final contract.

### BIDDER MUST COMPLETE THE FOLLOWING

By signing this Request For Information form, the bidder guarantees compliance with the provisions stated in this Request for Information.

FIRM: \_\_\_\_\_

COMPLETE ADDRESS: \_\_\_\_\_

TELEPHONE NUMBER: \_\_\_\_\_ FAX NUMBER: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

TYPED NAME & TITLE OF SIGNER: \_\_\_\_\_

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**I. SCOPE OF THE REQUEST FOR INFORMATION**

The State of Nebraska, Department of Roads, is issuing this Request for Information, RFI 130901 for the purpose of gathering information to perform ‘NDOR mainframe application migration services’.

**ALL INFORMATION PERTINENT TO THIS REQUEST FOR INFORMATION CAN BE FOUND ON THE INTERNET AT:** (<http://www.das.state.ne.us/materiel/purchasing/rfp.htm> )

**A. SCHEDULE OF EVENTS**

The State expects to adhere to the tentative procurement schedule shown below. It should be noted, however, that some dates are approximate and subject to change.

<b>ACTIVITY</b>		<b>DATE/TIME</b>
1	Release Request for Information	9/24/2013
2	Last day to submit written questions	10/11/2013
3	State responds to written questions through Request for Information “Addendum” and/or “Amendment” to be posted to the internet at: <a href="http://das.nebraska.gov/materiel/purchasing/rfp.htm">http://das.nebraska.gov/materiel/purchasing/rfp.htm</a>	10/18/2013
4	RFI Opening Location:  Nebraska Dept of Roads Business Technology Support Division 1500 Highway 2 PO Box 94759 Lincoln, NE 68509-4759	11/04/2013 9:30 AM Central Time
5	Conduct oral interviews/presentations and/or demonstrations (if required)	TBD

## **II. RFI RESPONSE PROCEDURES**

### **A. OFFICE AND CONTACT PERSON**

Responsibilities related to this Request for Information reside with the Nebraska Department of Roads. The point of contact for the procurement is as follows:

Name: Bill Wehling  
Agency: Nebraska Department of Roads  
Address: 1500 Highway 2  
PO Box 94759  
Lincoln, NE 68509-4759

Telephone: (402) 479-3986  
Facsimile: (402) 479-4325  
E-Mail: [Bill.Wehling@nebraska.gov](mailto:Bill.Wehling@nebraska.gov)

### **B. GENERAL INFORMATION**

A subsequent Request for Proposal (RFP) may not be issued as a result of this RFI. There will not be a contract as a result of this RFI and the State is not liable for any cost incurred by vendors in replying to this RFI. If an RFP is issued, the information provided will assist the State of Nebraska in developing the Request for Proposal. This RFI does not obligate the State to reply to the RFI responses, to issue an RFP, or to include any RFI provisions or responses provided by vendors in any RFP.

### **C. COMMUNICATION WITH STATE STAFF**

From the date the Request for Information is issued and until RFI opening (as shown in the Schedule of Events), contact regarding this RFI between potential vendors and individuals employed by the State is restricted to written communication with the staff designated above as the point of contact for this Request for Information.

The following exceptions to these restrictions are permitted:

1. written communication with the person(s) designated as the point(s) of contact for this Request for Information;
2. contacts made pursuant to any pre-existing contracts or obligations; and
3. state-requested presentations, key personnel interviews, clarification sessions or discussions.

Violations of these conditions may be considered sufficient cause to reject a vendor's response to the RFI. No individual member of the State, employee of the State, or member of the Interview Committee is empowered to make binding statements regarding this RFI. The State of Nebraska will issue any clarifications or opinions regarding this RFI in writing.

### **D. WRITTEN QUESTIONS AND ANSWERS**

Any explanation desired by a bidder regarding the meaning or interpretation of any Request for Information provision must be submitted in writing to the State Purchasing Bureau and clearly marked "RFI Number 130901; "NDOR Mainframe Migration Services". It is preferred that questions be sent via e-mail to [Bill.Wehling@nebraska.gov](mailto:Bill.Wehling@nebraska.gov). Questions may also be sent by facsimile to 402-479-4325, but must include a cover sheet clearly indicating that the transmission is to the attention

of Bill Wehling, showing the total number of pages transmitted, and clearly marked "RFI Number 130901; "NDOR Mainframe Migration Services".

Written answers will be provided through an addendum to be posted on the Internet at <http://www.das.state.ne.us/materiel/purchasing/rfp.htm> on or before the date shown in the Schedule of Events.

**E. ORAL INTERVIEWS/PRESENTATIONS AND/OR DEMONSTRATIONS**

The State reserves the right to conduct oral interviews/presentations and/or demonstrations if required at the sole invitation of the State.

Any cost incidental to the oral interviews/presentations and/or demonstrations shall be borne entirely by the vendor and will not be compensated by the State

**F. SUBMISSION OF RESPONSE**

The following describes the requirements related to the RFI submission, handling and review by the State.

To facilitate the response review process, one electronic copy of the entire RFI response should be submitted, preferably in PDF format. RFI responses must be submitted by the RFI due date and time. RFI responses must be submitted to [Bill.Wehling@nebraska.gov](mailto:Bill.Wehling@nebraska.gov) with the RFI number included in the subject line.

A separate sheet must be provided that clearly states which sections have been submitted as proprietary or have copyrighted materials.

**G. PROPRIETARY INFORMATION**

Data contained in the response and all documentation provided therein, become the property of the State of Nebraska and the data become public information upon opening the response. If the vendor wishes to have any information withheld from the public, such information must fall within the definition of proprietary information contained within Nebraska's public record statutes. All proprietary information the vendor wishes the state to withhold must be submitted in a sealed package, which is separate from the remainder of the response. The separate package must be clearly marked PROPRIETARY on the outside of the package. Vendor may not mark their entire Request for Information as proprietary. Failure of the vendor to follow the instructions for submitting proprietary and copyrighted information may result in the information being viewed by other vendors and the public. Proprietary information is defined as trade secrets, academic and scientific research work which is in progress and unpublished, and other information which if released would give advantage to business competitors and serve no public purpose (see Neb. Rev. Stat. §84-712.05(3)). In accordance with Attorney General Opinions 92068 and 97033, vendors submitting information as proprietary may be required to prove specific, named competitor(s) who would be advantaged by release of the information and the specific advantage the competitor(s) would receive. Although every effort will be made to withhold information that is properly submitted as proprietary and meets the State's definition of proprietary information, the State is under no obligation to maintain the confidentiality of proprietary information and accepts no liability for the release of such information.

### **III. PROJECT DESCRIPTION AND SCOPE OF WORK**

#### **A. PURPOSE AND BACKGROUND**

The purpose of this RFI is to gather information from vendors that can help the Nebraska Department Of Roads (NDOR) migrate applications to a technology centered on Microsoft operating systems, application servers, development tools, languages, and components. Most of the applications we need to migrate are mainframe based. But some of our other key applications are client applications tied to the mainframe DB2 database.

The NDOR division BTSD has an Enterprise Technology Plan, in which we have defined and documented goals, strategies to obtain these goals, action items to execute strategies, and projects which employ approaches and technology to execute strategies.

As a part of this larger BTSD Enterprise Plan, we created an annual action plan which identifies actions and projects to be undertaken in the next 12 to 14 months. Our Action Plan calls for the creation of a BTSD Enterprise Migration Plan (project) that will guide the migration of legacy systems running on legacy technology (referred to as mainframe) to a more supportable modern platform and technology. This Enterprise Migration Plan is part of the strategy to migrate our legacy technology to a technology centered on the use of Microsoft tools, languages and components (Visual Studio, C#, .NET, SQL Server). This plan supports the strategy to identify and publish technologies that NDOR BTSD will support and align with the State of Nebraska and other agencies plans and technology objectives. This plan also directly executes the strategy to create and publish plans to achieve the goal of communicating technical strategies, platforms, tools and architecture.

#### **PROJECT HISTORY**

It began with an assessment, evaluation and recommendation completed in 2008. The basic recommendations taken from this evaluation were to implement a change management system (iSupport completed), provide a C# .NET mentor to lead an effort to train and provide a proof-of-concept for a business application (Bridge Information System completed), and continue mentoring, educating staff and using the established proven concepts, procedures and standards in other business application solutions. Of course this included the purchase and establishment of a completely new set of tools and architecture.

The following has been accomplished in support of BTSD's vision and mission; An evaluation of our current architecture platforms, application systems and development processes and development methodologies revealed that we support too many technical tools and architectures for the size of the staff. We had duplicate support systems. We did not have a sufficient inventory of applications. We had trouble finding source code. We lacked collaboration in development and across projects. We did not have a stable development or production platform for the new environment.

We gathered a group of technical experts which we called the Architecture Advocacy Group (AAG) to create and document BTSD goals, strategies and plans, to oversee and guide the construction of project architectures, to act in a proactive manner, to prevent problems, and to establish collaboration at an enterprise level.

We established multiple projects to address problems in our support structure and to test our new architectures. These included creating test environments, source code consolidation, new development toolsets, new procedures and standards, review of code and tiered architectures.

We converted multiple VB based systems to C# .NET. We have a few left.  
We converted Permits from DB2 to SQL Server.

We converted or rewrote several business application systems from Microsoft's Access, JAVA, etc. to C# .NET systems which use SQL Server and some DB2 with DB2 positioned to eventually migrate to SQL Server. Examples; Bridge Information System, WALLS, SALT, EAF and ARS.

We installed Microsoft's Team Foundation Server (TFS) which allows users and developers to share information on projects.

We instituted the use of Agile (scrum) development methodology to facilitate collaboration and quicker delivery of value based systems.

We promoted and allocated time for the staff to learn and use new techniques and patterns.

We are currently engaged in developing a new Enterprise Database Architecture based solely on Microsoft's SQL Server.

We are currently engaged in consolidating all reports from IBM COBOL APS DB2 and Crystal Reports to a single reporting service called Microsoft's SSRS using a SQL Server Data Warehouse.

We are currently engaged in rewriting and implementing PFS Obligations systems from Excel and Access and DB2 COBOL systems to C# .NET SQL Server based WEB system.

In summarization, we are currently engaged in a migration project not just starting one.

## **B. CURRENT BUSINESS PRACTICES**

- A state government agency dealing with roads management systems.

## **C. CURRENT ENVIRONMENT**

### **Environment we are migrating from:**

- IBM z/OS, CICS, COBOL, DB2 and RACF.

### **Environment we are (currently) migrating to:**

- Converting DB2 to SQL Server
- Converting RACF to Active Directory
- Converting Crystal Reports to SQL Server Reporting Services and SQL Server Analysis Services.

- Migrating/rewriting mainframe applications to SQL Server, C#, .NET, Microsoft windows/web using Visual Studio and Team Foundation Server.
- Migrating legacy JAVA and WebSphere apps that depend on DB2 z/OS to .NET C#, Microsoft windows/web using Visual Studio and Team Foundation Server.
- Migrating .NET C# apps that use DB2 z/OS and DB2 LAN to SQL Server.

#### **D. SYSTEM OVERVIEW**

- Multiple mainframe systems/applications consisting of approximately 1500 CICS programs, 1500 BMS maps, 1500 COBOL batch programs, related 1500 procs, related 1500 JCL and approximately 1300 DB2 tables using MicroFocus tools including AppMaster Builder. We also have five to ten minor JAVA and VB applications that have dependencies to mainframe DB2.

#### **E. SCOPE OF WORK**

As a response to this RFI, it is NDOR's expectation that vendors supply;

- Approach (solution and tools used)
- Experience
- References are optional
- Duration estimates
- Range of costs
- Readiness (mobilization should the vendor accept an offer)

#### **Project Objectives**

The Enterprise Migration project will accomplish the following objectives:

- A documented application development platform.
- A means to produce an impact analysis related to applications and their dependencies.
- High level models of architecture
- Preferred method of exchanging data with vendors, the OCIO and other State and Local agencies.
- Establish a consistent application development environment to migrate to.
- Preferred software deployment process (includes Dev, Demo, QA, Prod)
- A documented maintenance support system for business applications.
- A single database management system from Microsoft called SQL Server.
- A single report generation system using Sql Server Reporting Services and data warehouse concepts.
- Elimination of all COBOL (replaced by C#/.NET).
- Elimination of all IBM CICS systems (replaced by C#/.NET).
- Elimination of MicroFocus tools including AppMaster Builder.
- Elimination of all DB2 and RACF (SQL Server/Active Directory).
- Elimination of all JAVA and VB (applications)
- Elimination of client applications that have a dependency on mainframe DB2.
- Eliminate all mainframe costs.

## **Project Scope**

### **In Scope:**

- Accomplish all objectives stated above

### **Out of Scope:**

- Business Enhancement Projects
- No conversion of Access Database Applications, Excel, OnBase or other vendor based products.

## **Deliverables Produced**

### Methodology

- Provide a summary of any existing industry best practices to implement a mainframe legacy data migration project.
- Provide a summary of the methodology that you would use to implement such a mainframe legacy data migration project. Specify limitations and constraints of the methodology.
- Currently NDOR is not utilizing an Enterprise Data Management solution. What are the current industry state-of-the-art practices and tools for providing a standard solution that supports data management policies and practices? Please explain.

### Archival and Retrieval

- What is the best strategy for archiving related historical data from different legacy platforms like DB2 and partitioned datasets? Can this strategy be extended to current database platforms like SQL Server? Please state advantages and disadvantages of the strategy.
- What retrieval mechanisms would you suggest for data archived using the above strategy? Specify in terms of the ability to browse, search and filter, index, etc.
- What security measures need to be implemented to prevent unauthorized access to archived data particularly in a tiered architecture?
- What user access audit trail mechanism do you suggest for tracking data archived data usage?

### Project Management

- What are the risks associated with such a project? What measures can be taken to mitigate such risks?
- What performance indicators would you suggest to measure project performance and progress?

### Procurement and Contract

- What are the major components of such a procurement?
- What contract type would best fit this procurement (i.e. time and materials, fixed price etc.) and why?
- What information would you need to know in order to develop a comprehensive solution?
- What additional information, if any, would you need in order to develop a detailed contractor performance work statement and cost proposal?

- Would you envision a need to form a team and subcontract with other companies to meet all performance objectives? If yes, what specific tasks would you likely subcontract out and why?

Schedule and Cost

- Provide an estimated timeframe for completing this project.
- Provide estimated ballpark costs (Low to High) along with cost drivers.
- What hardware costs should be considered?

Solution

- Do you have a standardized solution to implement a mainframe data migration project? If your solution entails a product would you provide the complete solution (product and services)? If not how would you split the implementation? What client side preparation and support would you need to implement your solution? What are the hardware and software requirements of your solution? What is the pricing strategy of your solution? Specify licensing strategies? Provide ballpark costs of the various components of your solution stating all assumptions made.

Documentation and Training

- What general documentation and training would be needed?

**Form A**

**Vendor Contact Sheet**

**Request for Information Number 130901**

Form A should be completed and submitted with each response to this solicitation document. This is intended to provide the State with information on the vendor's name and address, and the specific persons who are responsible for preparation of the vendor's response.

Preparation of Response Contact Information	
Vendor Name:	
Vendor Address:	
Contact Person & Title:	
E-mail Address:	
Telephone Number (Office):	
Telephone Number (Cellular):	
Fax Number:	

Each vendor shall also designate a specific contact person who will be responsible for responding to the State if any clarifications of the vendor's response should become

necessary. This will also be the person who the State contacts to set up a presentation/demonstration, if required.

Communication with the State Contact Information	
Vendor Name:	
Vendor Address:	
Contact Person & Title:	
E-mail Address:	
Telephone Number (Office):	
Telephone Number (Cellular):	
Fax Number:	