

NOTICES

INTENT TO SOLE SOURCE

The South Carolina Department of Health & Environmental Control (DHEC) is seeking qualified vendors to develop templates that interface recently procured instruments with DHEC Public Health Laboratory's (PHL) Informational Management System known as OpenELIS. This procurement will be used to create a data migration tool that bundles packages of utility LIMS programs following development and transfer them automatically to the production environment; to redesign the PHL's web order structure and functionality by improving and expediting the manner in which major SC healthcare providers can electronically order all of the lab tests overseen by the PHL; receiving all of these results directly in their electronic health record systems (EHRs).

The enhancements **must** provide and address **all** of the following agency needs/requirements:

Technical/System Requirements must support instrument interfacing in that they:

1. Must be web based
2. Must provide a permanent copy of open source code
3. Must have an unrestricted deployment
4. Must be compliant with CLIA and HIPPA standards
5. Must have been designed for Public Health Laboratories
6. Must be able to interface electronic orders and results
7. Must provide web-based retrieval and reporting of results in real-time
8. Must be able to utilize PostgreSQL for setup, optimization, high availability configuration, and backup
9. Must have the following interoperability and data exchange requirements:
 - a. Data integration engines like Rhapsody or Mirth
 - b. HL7 and XML data formats
10. Rhapsody
 - a. Must integrate laboratory instruments to OpenELIS software utilizing Rhapsody
 - b. Must integrate OpenELIS and laboratory workflows into applications using Rhapsody.
 - c. Rhapsody integrations (where available) must be bi-directional, meaning it will send the run set up information to the instrument, parse, and load the instrument data back in the OpenELIS software
 - d. Must coordinate establishment of DHEC's Rhapsody to communicate with the networked instruments
 - e. Must map all test orders and results from instrument files to OpenELIS formats
 - f. Must create Rhapsody routes to parse and transmit data between DHEC instruments and the OpenELIS software
 - g. Must test and validate instrument interfaces with laboratory staff and IT personnel
 - h. Must review and modify as necessary workflows for all laboratory sections, to include instrument interfacing
 - i. Must perform required one-time installation and setup activities to prepare the laboratory for production implementation of all lab areas with instrument interfacing as part of all workflows
11. Must be able to coordinate with no less than the following laboratory instruments:
 - a. 7500 Fast
 - b. 7500 Fast Dx
 - c. 7700 Series ICP MS
 - d. Architect
 - e. Bac-Tec FX40
 - f. BAX Q7
 - g. Biofire Torch
 - h. Cepheid (Xpert 16 with 8 bays)
 - i. Dynex DSW
 - j. Elx-800 Plate Reader
 - k. GC MS
 - l. GeneUP
 - m. Genius
 - n. ICP MS

- o. LC MS
 - p. MALDI-TOF (Vitek MS3)
 - q. Olympus
 - r. Panther
 - s. Q TOF
 - t. Ruby
 - u. Tempo
 - v. Tigris
 - w. Versa Trek
 - x. VIDAS
 - y. VITEK
12. Must be able to coordinate with following hardware (scanners/label printers, etc.):
 - a. Cannon Image FORMULA DR-M16011 Office Document Scanners
 - b. Cannon Image FORMULA DR-G1100 Office Document Scanner
 - c. Zebra GX430T Printers
 - d. ZT410 Zebra Printers
 - e. Datalogic Barcode Scanners
 13. Must provide a period of postproduction support for the laboratory for one (1) year following implementation.

Vendor Requirements:

1. Vendor must have configured and implemented at least one (1) State Public Health/Environmental Laboratory using OpenELIS
2. Vendor must have configured and implemented at least one interface with a Public Health Laboratory currently utilizing OpenELIS and the electronic health record system (EHR) of 2-3 major hospital networks
Vendor must have experience in development of OpenELIS data migration utilities
3. Vendor must have configured system dictionary to support test matrix; test matrix must include the following requirements:
 - a. Must have configured tests that utilize LOINC codes
 - b. Must have configured parameters/Analytes using LOINC codes where applicable
 - c. Must have configured results using SNOMED codes where applicable
4. Vendor must have contributed to the base source code of OpenELIS
5. Vendor must have experience with messaging public health/laboratory data e.g. LRN, ELR, PHLIP
6. Vendor must have understanding of LDAP and Active Directory systems
7. Vendor must have system admin experience with Linux, Windows Shares (SAMBA), CUPS, HylaFAX, and Rhapsody
8. Vendor must have experience configuring JBOSS 7.1 or later
9. Vendor must have experience training PHL laboratory end users, super users, and training of trainers
10. Vendor must have experience working with no less than all of lab instruments outlined in the Technical/System Requirements
11. Vendor must have experience with bar code readers, scanners, and printers
12. Vendor must have following specific laboratory experience:
 - a. Experience with public health laboratory domains: clinical, environmental, animal, and newborn screening
 - b. Good understanding of various laboratory sections (Serology, Bacteriology, Chemistry, HPLC, Metals, Environmental Micro, etc.) and programs (SDWIS, Newborn Screening, Food Testing, etc.)
 - c. Experience with laboratory quality assurance and quality control
 - d. Understanding of messaging public health/laboratory data e.g. LRN, ELR,

Purpose: The primary intent or purpose of this procurement is threefold. First, it will assist in the creation of templates to interface additional instruments that have recently been purchased by the Agency and those that are slated to be used by the Agency in the next few years. In addition, these templates will provide the ability for SC DHEC to interface these new test instrumentations with our LIMS (OpenELIS). This would enable rapid deployment and integration of new instruments, reduce manual transcription and errors, and speed results reporting while reducing costs for an instrument interfacing solution.

Secondly, this procurement will assist in the creation of a data migration utility that could expeditiously bundle packages of utility programs following development. In doing so, this tool would easily and accurately allow SC DHEC to migrate data in the Test environments to the Production environments of its LIMS (OpenELIS). This requirement is currently extremely time intensive and often impairs the ability of

our teams to get upgrades, change requests, and other items over to the Production database in a timely and precise manner. In turn, this would positively impact the transfer of critical data to other State epidemiological systems interfacing with OpenELIS (i.e. SCION, DTRA, etc.), provide results back to healthcare providers and SC constituents, in an expedited manner, and better transition of statistical data to the CDC and other Federal Agencies that we report to.

Third, this procurement will assist SC DHEC in redesigning its web order structure and functionality, by improving and expediting the manner in which healthcare providers can electronically order lab tests and receive results as opposed to the manual method that they currently have to use (mailing 1332/1335 test request forms to the PHL and logging into a portal to receive results). In turn, this would expedite the ability of providers to order all of the tests that DHEC Public Health Laboratory oversees and directly receive results back into their electronic health records (EHRs). This purpose is particularly important during the COVID-19 pandemic. The total estimated dollar amount of the approximate 2-year project is \$2,025,000.00.

PROTESTS: If you are aggrieved in connection with the intended award or award of the contract, you may be entitled to protest, but only as provided in Section 11-35-4210. To protest an award, you must (i) submit notice of your intent to protest within five (5) business days of the date this notice is posted, and (ii) submit your actual protest within fifteen days of the date this notice is posted. Days are calculated as provided in Section 11-35-310(13). Both protests and notices of intent to protest must be in writing and must be received by the appropriate Chief Procurement Officer within the time provided. The grounds of the protest and the relief requested must be set forth with enough particularity to give notice of the issues to be decided. Any protest or notice of intent to protest must be addressed to the Chief Procurement Officer, Information Technology Management Office, and submitted in writing (a) by email to: protest-itmo@itmo.sc.gov or (b) by post or delivery to: 1201 Main Street, Suite 600, Columbia, SC 29201.

Qualified vendors should contact Rebecca Nichols via email at NICHOLRJ@dhec.sc.gov by Midnight, November 16, 2020 for additional information.