Overview

NATIONAL AGENCY FOR THE CONTROL OF AID (NACA)

REQUEST FOR PROPOSAL

ENGAGEMENT OF SERVICE PROVIDER FOR THE DEVELOPMENT OF ELECTRONIC NATIONAL LABORATORY INFORMATION SYSTEM (eN-LIS)

Background

The National Agency for the Control of AID is the Principal Recipient of the Global Fund Supported project – Resilient and Sustainable Systems for Health, RSSH. The agency is poised to strengthen the National health systems towards becoming more resilient and sustainable.

Currently, different types of laboratory information management systems LIS exist in Nigeria across implementing partners and disease programs. There is LIMS for HIV, TB, Malaria etc. The available LIS exists in fragments and are being managed by different stakeholders. The importance of a national LIS to manage the routine operations of medical laboratories cannot be overemphasized because it provides the opportunity of individualized dashboards for laboratories through which quality indicators, performance indicators, inventory management, data transfer/storage and analysis can be done at the laboratory level. One of the biggest and accessible LIS in the country is the one being used for HIV Viral load and EID sample management.

The N-LIS when implemented, will reduce paper reporting and manual interference in the system significantly leading to eventual savings of resources and shortening of Turn Around Time (TAT). The N-LIS will interface with different reporting systems such as SORMAS, DHIS 2, NDR having data sources like EMR, eTB, paper-based N-LIS and other Health Information Systems (HIS). The block diagram from the proposed system is shown below:
To this end, NACA seeks to engage a Service Provider (TSO) to undertake the development and management of the Nigeria Laboratory Information Systems (eN-LIS) software.

**Objective:**

**Specific objectives**

- To carry out **Site assessment and requirement gathering**
- To develop National Laboratory Information System (eN-LIS) software
- To carry out the pilot of eN-LIS in 74 facilities across the 36+1 states of the country
- To carry out analysis of pilot data and progress report.

The scope of work and expected outputs/deliverables will be the following:

There are five (5) sub activities that would be required to linking the 74 laboratories to the national N-LIS. If implemented, the sub activities would ensure the linkage and syncing of data to the national N-LIS and also the Off-site sample logging at the facilities to the referral labs.
Site assessment and requirement gathering; (this sub activity will be conducted during the pilot of the paper-based LIMS being implemented under RSSH II grant)

Bootcamp/stakeholder’s meeting (this sub activity will be merged with the stakeholder meeting also supported under the RSSH II grant). Stakeholders’ inputs will be sought and consensus will be drawn. A prototype of eN-LIS will be developed during the bootcamp.

eN-LIS Design of Coding; The proposed system will be designed with end-users’ inputs to ensure all the requirements needed are fully captured. The architecture of the eN-LIS with all essential modules will be drawn along with the interconnections with other external systems. The system will be developed using open-source technology (Postgres, RabbitMQ, Dotnet Core, JAVA, Python, React, D3JS, Highchart, etc.). The system will be subjected to unit test, user acceptance test and load balance testing to determine its reliability, robustness and resilience

Training

Users and stakeholders would be trained on the operation, usage, maintenance and upgrade of the system. This training will contain pool of different specialisation e.g., laboratory personnel, data entry assistants, health informaticians, M&E staff etc.

Pilot

The system would be piloted in 74 facilities across the 36+1 states of the country for a period of three (3) months. Upon completion of the pilot, feedback from users would be used to enhance the functionality of the system.

Deployment

National rollout of the eN-LIS will commence after the completion of the pilot. The modalities of the rollout will be fashioned out after all corrections of lessons learnt from the pilot.

Expected deliverables

- Conduct assessment and requirement gathering
- Conduct bootcamp/stakeholder’s meeting
- Develop eN-LIS software
- Support trainings on the use of N-LIS
- Handover source codes to NACA at all milestones during the development of the eN-LIS
- Delivery of finalized eN-LIS database.
- Servers (live and backup servers)
- Database server
- Domain name
- Secured Socket Layer (SSL)
- Interoperability/Data exchange Layer
- Web Platform
- Analytics Platform
- Configuration Platform
- Full Application Program Interface (API) documentation
- System Design
- Source Code
- Full Systems Documentation
- User manual

The Service Provider will strictly follow the work plan and the time schedule agreed with NACA in undertaking the contract assignment.

**Governance and Accountability;**

The successful Service Provider will report to and will be supervised by the Senior Technical Systems, Laboratory Systems, NACA/RSSH Program Management Unit and any other NACA/RSSH PMU personnel delegated by her, as well as other Government counterparts from FMOH/MLSD and NCDC. All deliverables shall be in English and submitted in appropriate format, in MS Word and in PDF as per requirement of the Client to the following address: the Senior Technical Systems, Laboratory Systems, NACA/RSSH Program Management Unit at hbolajoko@naca.gov.ng. There shall be no security restrictions on printing/editing in the deliverables. The service provider will have to submit all the deliverables where applicable, in draft form (in soft format – MS Word) in the first instance and should thereafter incorporate any comments the stakeholders may submit, prior to their finalization. Draft reports and documentation would have to be submitted at least 2 weeks before the final reports/documentation are due so that ample time is available for review. Payment will be made only on the final deliverables, and these final deliverables should be to the satisfaction of NACA and the FMOH/MLSD. The deliverables should be of high quality in form and substance and with appropriate professional presentation.

**Methodology;** The bidder should submit a detailed project methodology and approach in their submission for the implementation of the project in line with the prescribed scope and objectives as well as based on acceptable international best practices. The bidder should also provide a project implementation schedule to carry out this project aligning with the various milestones/deliverables identified further below. This project schedule shall indicate the detailed sequence of activities that will be undertaken by the bidder and their corresponding timing.
**Project Documentation:** The service provider is expected to submit the following documentation during the course of the project through the Senior Technical Specialist, Laboratory Systems;

(a) An inception report consisting of the following:

- A detailed Gantt chart showing milestones/major deliverables and highlighting the critical path as well as the duration for the assignment, including expected completion date(s).
- All mechanisms e.g. Incident Tracking tool, server monitoring tool among others that would be put in place
- Any other relevant section(s), document(s), process(es), literature and reference. The report should also be presented to NACA and FMoH/MLSD to ensure alignment with user expectations.

(b) System Appreciation Document of the whole eN-LIS and architecture. The System Appreciation Document should include documentation that describes, from a support standpoint:

1. what the system does in terms of its functional features,
2. how it achieves those features in terms of its architecture and design,
3. what are the elements that would require daily intervention/monitoring e.g. batch/cron jobs,
4. how to troubleshoot the system in case of crashes, errors etc.

(c) Monthly status reports summarizing:

- Achievements in the past month in terms of KPIs
- Report on details of incidents and problems, their classification, severity, open and close times
- Evidence of defect and problem prevention activities, actions taken and impact of actions
- Evidence of improvement to the Knowledge Base
- Status of completion of tasks in the scope of work, resolution of issues/bugs versus reported and expansion of knowledge base database for that particular period; and
- Any suggestions/recommendations for the effective continuation of the project; and
- Proposed activities for the coming month.
- The status reports should include all areas of the Project.

(d) Progress Report every three months comprising among others:

- Summary of achievements in the past 3 months in terms of KPIs
- Report on details of incidents, problems, classification, severity, open and close times
- Evidence of defect and problem prevention activities, actions taken and impact of actions
- Evidence of improvement to the Knowledge Base
- Status of completion of tasks in the scope of work, resolution of issues/bugs versus reported and expansion of knowledge base database for that particular period; and
• Pending items for that particular period and action plan with timeframes to resolve pending items

(e) Full knowledge transfer on all support activities provided during the contract supported by submission of 3 SSD hard disk drives (1 FMoH/MLSD, 1 NACA, 1 backup) containing full documentation in terms of guides, Standard Operation Procedures, access to systems, credentials, documentation records, software logs, updated source codes and all such relevant items that may be necessary for the transition process.

**Deliverables and Schedules/Expected Outputs:**

<table>
<thead>
<tr>
<th>SN</th>
<th>Deliverable</th>
<th>Tentative date (T=Contract Start Date)</th>
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<tbody>
<tr>
<td>1</td>
<td>Inception Report covering the whole assignment</td>
<td>T+2 weeks</td>
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<tr>
<td>2</td>
<td>Approved System Appreciation Document of the whole eN-LIS and architecture and presentation</td>
<td>T+6 weeks</td>
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<tr>
<td>3</td>
<td>Approved Quarterly Progress Report 1 along with all the weekly reports for the quarter</td>
<td>T+12 weeks</td>
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<tr>
<td>4</td>
<td>Approved Quarterly Progress Report 2 along with all the weekly reports for the period. 25% of upgraded labs submitting data electronically on eN-LIS platform.</td>
<td>T+24 weeks</td>
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<tr>
<td>5</td>
<td>Approved Quarterly Progress Report 3 along with all the weekly reports for the quarter. 50% of upgraded labs submitting data electronically on eN-LIS platform.</td>
<td>T+36 weeks</td>
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<tr>
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<td>Approved Quarterly Progress Report 4 along with all the weekly reports for the quarter. 75% of upgraded labs submitting data electronically on eN-LIS platform.</td>
<td>T+48 weeks</td>
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<tr>
<td>7</td>
<td>Approved Quarterly Progress Report 4 along with all the weekly reports for the quarter. 100% of upgraded labs submitting data electronically on eN-LIS platform.</td>
<td>T+52 weeks</td>
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<tr>
<td>8</td>
<td>Approved Quarterly Progress Report 5 along with all the weekly reports for the quarter.</td>
<td>T+64 weeks</td>
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<td>9</td>
<td>Approved Quarterly Progress Report 6 along with all the weekly reports for the quarter.</td>
<td>T+76 weeks</td>
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<td>10</td>
<td>Approved Quarterly Progress Report 7 along with all the weekly reports for the quarter.</td>
<td>T+88 weeks</td>
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<td>11</td>
<td>Full knowledge transfer on all support activities and submission of 3 SSD hard disk drives containing full documentation.</td>
<td>T+104 weeks</td>
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**Notes:**

- Bidders must abide to the above implementation schedule.
- Payments are directly linked to deliverables.
- All reports must be submitted in an editable draft version in Word, Excel or other as well as a PDF version (for comments) and then final version, following incorporation of all comments and suggestions by the relevant stakeholders before payment is effected.
Price proposed must be in an all-inclusive fee, supported by a breakdown of costs (*unit costs must be provided*).
Contract price is fixed for the duration of the project.
Contract signature does not warrant any advance payment.

**Facilities to be provided by NACA**

NACA and other national stakeholders (FMoH/MLSD, NCDC) may act as facilitator between Government entities and the service provider for the organization of meetings and site visits. All transportation costs and administrative costs related to the execution of the assignment are to be borne by the service provider. In the case of workshops/training sessions to be organized, all costs will be borne by NACA/RSSH. No additional costs to those in the financial proposal would be borne by NACA.

An appropriate methodology will have to be determined by the consultant in consultations with NACA and FMOH (MLSD)

- The consultant will work in close collaboration with NACA and FMOH (MLSD)
- The consultant will undertake collection of all the required data/information from various sources, including Government departments, Ministries and other relevant sources;
- The FMOH (MLSD)/NACA shall facilitate in collection of the data/information with required official letters and contact with focal person(s) wherever required;
- The consultant will undertake review, assessment and judgment of the data/information in close consultation with NACA and FMOH (MLSD)
- The consultant will facilitate in presentations and coordination of the stakeholder workshops/consultations organized as per the agreed work schedule;

**The duration of contract shall be for 24 months.**

- The Client will review all outputs/deliverables and their comments shall be communicated to the service provider within 14 working days of submission of the output/deliverable.
- The service provider will then have to consider and incorporate the comments within a period of 2 weeks from the date of receipt of comments.
- The service provider will have to provide for justifications when comments are not incorporated in the output/deliverable.

**Duty Station**

- The consultant will undertake the work in Abuja and travel with teams during N-LIS pilot based on the agreed work-plan and methodology.
- The consultant is expected to use own computer and other equipment required for the task.

**Professional Qualifications of the Successful Contractor and its key personnel**
**Firm’s General Experience**

The service provider to be awarded the contract would be expected to have at least 10 years of experience in the software development field.

The service provider should have experience in carrying at least 3 similar projects (providing software development and maintenance and technical support services) during the last 5 years. *Written evidence for experience claimed in the form of reference letters from the client should be provided in the technical proposal.*

Experience with Government processes, especially in Nigeria, would be an advantage.

**Key expert qualifications and competence for assignment**

The proposed support team shall comprise a minimum of four (4 key experts) under the supervision of the Project Manager. Each key expert should be clearly designated.

The team should be available full time (on site or offsite) during the whole duration of the project and work exclusively on it to ensure smooth and proper and timely implementation of the project. The team must be proficient in English.

Copies of staff academic certificates should be provided by firm in their submission

**Price and Schedule of Payments**

The financial offer should be quoted as a lump sum amount, all-inclusive (professional fee, insurance, all travel costs (local and international), per diem, etc.). Payments would be effected based on deliverables as per above.

**Documents:**

*Written evidence for experience claimed in the form of reference letters from the client should be provided in the technical proposal.*

While submitting the Technical Proposal, the Applicant Service Provider shall, in particular, ensure to attach the following:

- Profile of the firm (max 1 page) explaining why they are the most suitable for the work.
- Relevant Experience (max 2 page).
- Detailed methodology and conceptual framework with expected deliverables and timelines, team composition, man days required (3-5 pages).
- Recent CVs of key team members
## IMPLEMENTATION PLAN

<table>
<thead>
<tr>
<th>S/N</th>
<th>Item description</th>
<th>Assumptions</th>
<th>Timeline</th>
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</table>
| 1   | Engagement of Service Provider for the development of eN-LIS software | Scope of work for consultancy will include:  
1. Conduct assessment and requirement gathering  
2. Conduct bootcamp/stakeholder’s meeting  
3. Develop eN-LIS software  
4. Support trainings on the use of N-LIS  
5. Handover source codes  
6. Delivery of finalized eN-LIS database. | First Quarter 2022 |
<p>| 2   | Initiate the development of eN-LIS software | | First Quarter 2022 |
| 3   | Delivery of minimum viable product for eN-LIS | | June, 2022 |
| 4   | Conduct laboratory tool pilot test training for paper-based N-LIS | 72 participants drawn from 36HF in 12 states (2 states per GPZ); 3HF per state including 1 primary, 1 secondary and 1 tertiary | Mar, 2022 |</p>
<table>
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<tr>
<th></th>
<th><strong>5</strong></th>
<th>Evaluation and finalization of the tools of the Pilot</th>
<th>Development of the checklist, site visit will be done to assess the pilot, consultant will do an analysis</th>
<th>May, 2022</th>
</tr>
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<td><strong>6</strong></td>
<td>A wider stakeholder meeting for validation of the tools</td>
<td>Tool validation meeting with participants drawn from FMoH, NLTWG, NACA, CHAI, IHVN disease programs and Ips.</td>
<td>June, 2022</td>
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<td><strong>7</strong></td>
<td>Printing of finalized laboratory tools</td>
<td></td>
<td>May, 2022</td>
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<td></td>
<td><strong>8</strong></td>
<td>Support N-LIS Dissemination meeting</td>
<td>2 nights DSA for 94 persons; meeting will involve 74 participants (2 persons per state) and 20 national facilitators drawn from FMoH, NLTWG, NACA, CHAI, IHVN, disease programs and Ips.</td>
<td>June, 2022</td>
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<td><strong>9</strong></td>
<td>Conduct zonal ToT on laboratory information system including new data collection tools</td>
<td>DSA for 222 participants drawn from 36+1 states; 6 participants per state. Trainings to be held in each of the six (6) geopolitical zones.</td>
<td>October, 2022</td>
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<td><strong>10</strong></td>
<td>Conduct 2 days training for facility staff on LIS</td>
<td>DSA for 848 participants drawn from the 774 public secondary HFs and 37 tertiary HFs (at least 1HF per LGA in Nigeria); I participant per secondary HF while 2 participants per tertiary HF. Trainings to be held in each of the six (6) geopolitical zones.</td>
<td>December, 2022</td>
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<td><strong>11</strong></td>
<td>Conduct Biannual laboratory Data Quality assessment (DQA) and mentorship</td>
<td>Conduct DQA in 204 HFs (194 secondary HFs and 10 Tertiary HFs); 22 teams (2 persons per team) will visit 2 secondary HFs per day or 1 tertiary HFs per day</td>
<td>June, 2023</td>
</tr>
</tbody>
</table>
Support linkage of 74 supported laboratories onto national N-LIS (open-source platform)

- a. Procure computer hardware
- b. HR (Data entry clerks)
- c. Internet provision for syncing of lab data to national N-LIS

First Quarter 2022

12

Delivery of finalized product of eN-LIS software

December, 2023

13

Handing over of source code of the finalized product to the GoN and NACA

December, 2023

14

General Eligibility Criteria

Other documents required to be submitted with the proposal are:

**GENERAL ELIGIBILITY CRITERIA**

- Evidence of company registration (certificate of incorporation of the company) including Forms CAC2 and CAC7;
- Evidence of Company’s Income Tax Clearance Certificate for the last three (3) years *(2018, 2019 & 2020)* valid till 31st December 2021;
- Copy of Company Audited Accounts for the last 3 years (2018, 2019 and 2020);
- Evidence of PENCOM Compliance Certificate expiring by December 2021;
- Evidence of ITF Compliance Certificate expiring by December 2021;
- Evidence of NSITF Compliance certificate expiring by December 2021;
- Sworn Affidavit disclosing whether or not any officer of the relevant committees of the National Agency for the Control of Aids or the Bureau of Public Procurement is a former or present Director, shareholder or has any pecuniary interest in the bidder and to confirm that all information presented in its bid are true and correct in all particulars;
- The minimum validity period of the Tender should be One Hundred and Twenty *(120)* Days;
- Evidence of financial capability to execute the contract by submission of Reference Letter from a reputable commercial bank in Nigeria, indicating willingness to provide credit facility for the execution of the project when needed;
- Company’s Profile;
- Verifiable documentary evidence of at least three (3) similar jobs executed in the last five (5) years by showing copy of either Letters of Awards, or Job Completion Certificates or Contract Agreement.
- All documents for submission must be transmitted with a Covering/Forwarding letter under the Company Letter Head Paper using the **Tender Submission Sheet template in Form G-1** and bearing amongst others, the Registration Number (CAC), Contact Address, Telephone Number (Preferable GSM No.), and e-mail address, duly signed by the authorized officer of the firm. An unsigned bid will be disqualified.
- Copies of staff academic certificates should be provided by firm in their submission.

**COLLECTION OF REQUESTS FOR PROPOSAL (RFP) DOCUMENT**

The Request for Proposal (RFP) can be downloaded from this link;


**SUBMISSION OF TENDER DOCUMENTS**

Prospective consulting firms are to submit three (3) hard copies (one original & two copies) of the requested documents and financial bid. Thereafter, the Tenderer shall enclose the original in one (1) envelope and all the copies of the Tender in another envelope, duly marking the envelopes as **“ENGAGEMENT OF SERVICE PROVIDER FOR THE DEVELOPMENT OF LABORATORY INFORMATION SYSTEM  eN-LIS”** and **“FINANCIAL.”** The two (2) envelopes shall then be enclosed and sealed in one (1) single outer envelope after registration using the NACA bid register.

Prospective bidders can submit their documents as a Joint Venture with relevant documents provided in line with the requirements stated in the SBD.

**DEADLINE FOR SUBMISSION**

The deadline for the submission of Tender should not be later than **12 noon of 23 January, 2022.** Clarification can be obtained at the Office of the Head of Procurement, Ground Floor, NACA main building, 3 Ziguinchor Street. Wuse Zone 4. Abuja. The bids will be opened immediately after close of submission.

**GENERAL INFORMATION**

- Bids must be in English Language and signed by an official authorized by the bidder;
- Bids submitted after the deadline for submission would be rejected;
• NACA reserves the right to evaluate and award per line item and in the event of exigency, NACA may vary the quantities/quality of the items during the time of evaluation, award and execution of contract with respect to this invitation to tender;
• NACA is not bound to shortlist any Consultant, and reserves the right to annul the bidding process at any time without incurring any liabilities or providing reason.

ADDRESS FOR INFORMATION AND SUBMISSION OF PROPOSALS

Attention:

Head Procurement

National Agency for the Control of AIDS (NACA)

Ground Floor Room 1.08

No. 3 Zinguinchor Street, Beside AEDC Office, Wuse zone 4, Abuja

Email: procurement@naca.gov.ng

Tel: +234-9-4613726-9 Fax: +234 94613700

GLOBAL FUND CODE OF CONDUCT

You shall get acquainted with the global fund code of conduct for suppliers using this link below: https://www.theglobalfund.org/media/3275/corporate_codeofconductforsuppliers_policy_en.pdf

Accepting this invitation shall serve as an acknowledgement and agreement to abide by the Global Fund Code of Conduct for Suppliers.

Notes/Disclaimer

• Late submissions will not be accepted.
• NACA shall verify any or all documents and claims made by applicants and will disqualify consultants with falsified documents and claims.
• If it is determined that submitted documents and claims have been falsified, the consultant may face prosecution in a court of Law.
• NACA shall not be held responsible for any disqualified proposal as a result of any omission or deletion relating to the submission guidelines.
• This advertisement shall not be construe a contract to any Consultant, nor shall it entitle any Consultant submitting documents to claim any indemnity from NACA.
NACA is not bound to shortlist any Consultant, and reserves the right to annul the bidding process at any time without incurring any liabilities or providing reason.

Signed

Management