



National Centre for Information Technology

64, Kalaafaanu Hin'gun, Male', Republic of Maldives

Date: 26th October 2021

Announcement Reference no: (IUL)164-HR/1/2021/66

Project	Digital Development Project
Initiative	Government Technology Stack Initiative
Position	Senior Software Engineer
Vacancy	1
Type of Contract	Individual
Duration	24 Months

Terms of Reference

1. BACKGROUND

The Ministry of Environment, Climate Change and Technology (Ministry) through the National Centre for Information Technology (NCIT) is implementing the Digital Development Action Plan from the National Resilience and Recovery (NRR) Plan of the Government. The Project will be managed by the Project Management Unit (PMU) setup within NCIT and reporting to and working under the guidance of the Ministry.

The aim of the Project is to deliver on the digital development pledges of the Government, establishing the foundational components to drive the development of digital government, digital economy and digital society. The Project will prioritize the establishment of a government technology stack and open data platform, enhancing government productivity, enable work from home and hybrid workplaces, enhancing the regulatory framework for digital development, and digital transformation of health and national care systems.

The Government Technology Stack Initiative aims to develop a platform that enable the government to build digital services quickly and effectively. The tools and services provided on this shared platform will enable public and private sector to create digital services and facilitate innovation based on open data policies.



2. OBJECTIVES OF ASSIGNMENT

The Ministry intends to hire a Senior Software Engineer. The Senior Software Engineer will work for the PMU, which has been established for the implementation of the Project. The Senior Software Engineer will lead the development of the Government Technology Stack to support the delivery of Digital Development Action Plan. The Senior Software Engineer will be responsible for the design, implementation, and overall management of the Government Technology Stack. S/he will be supported by Software Engineers for the Initiative.

3. OVERALL RESPONSIBILITY

The overall responsibilities of the Senior Software Engineer include, but is not limited to the following:

- 1. Steering the implementation and operation of the Government Technology Stack in accordance with the NRR and Digital Development Action Plan by the Ministry to produce the envisaged outputs and outcomes;
- Leading the design, implementation and operation arrangements of the Government Technology Stack activities and ensure that activities are carried out in accordance with the best practices and recommendations of technologies used in developing the Government Technology Stack platform.
- 3. Identifying and resolving implementation problems, and assisting the Project Coordinator and Ministry leadership.
- 4. Supporting the Project Coordinator in planning, management and reporting on the progress of implementation of the Government Technology Stack Initiative in accordance with the Digital Development Action Plan by the Ministry and liaise with all partners in implementation including PMU Staff and Contractors, Minister, Permanent Secretary, and Delegated Official of the Ministry on all aspects of the implementation throughout the duration of the Initiative.



4. SCOPE OF SERVICES

The position is within the PMU of NCIT and will be under the supervision of the Project Coordinator of the Government Technology Stack Initiative. In addition, his/her duties will include, but will not be limited to:

- 1. Responsible for providing technical expertise to the Project Coordinator in leading the designing and implementation of the Government Technology Stack platform.
- 2. Plan, design and develop high-performance applications and APIs and software solutions, required for the Government Technology Stack services by studying information needs; conferring with users; studying systems flow, data usage and work processes; investigating problem areas; following the software development lifecycle
- 3. Determine operational feasibility by evaluating analysis, problem definition, requirements, solution development and proposed solutions.
- 4. Write, revise and maintain Standard Operating Procedures, software program documentation, operations documentation, and user guides following standards practiced by NCIT. The documentation must be clear and detailed and should use tools such as UML, flowcharts, layouts, diagrams, charts, code comments and clear code.
- 5. Ensure and enforce that all development activities are carried out in accordance with the set standards in the organization and fully adhere to change and configuration management best practices set forth by the Project Coordinator.
- 6. Prepare and install solutions by determining and designing system specifications, standards and programming.
- 7. Work closely with the infrastructure team to ensure the smooth operation of the production environment.
- 8. Ensure secure access and high availability to Government Technology Stack systems and troubleshoot and fix issues that compromise system performance or access to a Government



Technology Stack service. The responsibility involves regular system improvements, such as upgrades based on evolving end-user and business requirements and changes to technologies.

- 9. Improve team's operation by identifying bottlenecks and gaps; recommending changes in policies and procedures. Understand business needs and know how to create the tools to manage them.
- 10. Stay on the leading edge of development practices. Update job knowledge by studying state-of-theart development tools, programming techniques and computing equipment; participating in educational opportunities; reading professional publications; maintaining personal networks; participating in professional organizations.
- 11. Support and develop junior and mid-level software developers by providing advice, guidance and coaching to help continually improve the performance of the team and develop very high-quality work.
- 12. Continuously seek to improve technologies, promoting unused functionality and working with stakeholders to develop new ways of working and improving the Government Technology Stack infrastructure.
- 13. Work collaboratively with other departments and divisions to achieve organizational goals and accomplish the organization's mission by completing related results as needed.
- 14. Provide documentation and technical specifications to Government Technology Stack team for planning and implementing new or upgrades that are required to enhance the Government Technology Stack infrastructure.
- 15. Continuously monitor the utilization of the Government Technology Stack platform and lead capacity planning based on growth and demand.
- 16. Collaborate with team to brainstorm and create new products.
- 17. Grow software engineering teams by interviewing, recruiting and hiring in collaboration with the HR Section.



- 18. Assists in orientations, training programs, and preparation of user training manuals on related job posts and collaborate and be involved in activities to assure knowledge development, sharing and integration
- 19. Serves as a link between users (mostly end-users) and the development and infrastructure teams, interpreting user needs and formulating user specifications including complaints and dispute resolution, planning and implementing strategies to reduce user resistance to new or changing systems.
- 20. Any other duties that may be assigned from time to time.

5. QUALIFICATIONS AND EXPERIENCE

1. Master's or equivalent Degree in Computer Science or related field, with professional work experience of 7 years or more in the field of Software development;

OR

PhD in Computer Science or related field, with professional work experience of 5 years or more in the field of Software development;

- 2. Must have 5+ years' work experience in designing and developing enterprise service solutions using either .NET, Java, PHP (Laravel) or NodeJS with either MySQL, Postgres, MSSQL, MongoDB, MariaBD, Oracle.
- 3. Demonstrates good oral and written communication skills in substantive and technical areas. A thorough knowledge or demonstrated ability to rapidly acquire knowledge about technical assessments, research processes, procedures for performance monitoring and evaluation;
- 4. Should have strong leadership, management, and proactive interpersonal communication skills in presenting, discussing, and resolving difficult issues, and have the ability to work efficiently with a technical team.
- 5. Capability to work independently.
- 6. Must give attention to details even under pressure.
- 7. Time management skills with the ability to meet deadlines.



6. ADDED ADVANTAGE - ADDITIONAL SKILLS/EXPERTISE

- 1. Strong programming background with knowledge in modular based programming and use of emerging trends.
- 2. Knowledge of different databases (MySQL, Postgres, MSSQL, MongoDB, MariaDB, Oracle) and database types (centralized, distributed, real-time, relational etc.).
- 3. Experience in administering production level databases with proficient understanding of SQL.
- 4. Mobile Application Development experience.
- 5. Good graphics skills and knowledge in UI design to improve the usability of systems.
- 6. Project Management Skills Good planning, scheduling, and analytic skills.
- 7. Experience with cloud services such as AWS, Digital Ocean, Google Compute Engine, Oracle, Microsoft Azure or similar products.
- 8. Knowledge/experience in IT service management will be an additional advantage.
- 9. Knowledge and understanding of technical, commercial and legal aspects of government procurement will be an added advantage.

7. SCHEDULE FOR THE ASSIGNMENT

Duration of the assignment is 24 months with the potential extension based on need and performance. The successful candidate is expected to commence the services in November 2021.

This position is based at the PMU at the National Centre for Information Technology.

8. REMUNERATION AND OTHER BENEFITS

- 1. MVR 34,200 39,330 per calendar month, based on education and experience, as remuneration for the services provided.
- 2. Training and travel expenses under the PMU as budgeted under the Project and approved by the Ministry.
- 3. Participate in the "Maldives Retirement Pension Scheme"
- 4. Ramadan Allowance
- 5. Leave in accordance with the rules and regulations of Maldives.



9. REPORTING OBLIGATIONS

The Senior Software Engineer:

- 1. The role is based within the Project Management Unit under the Government Technology Stack Initiative and will be required to provide support to internal and external customers.
- 2. Shall report directly to the Government Technology Stack Project Coordinator on all aspects of the Government Technology Stack infrastructure throughout the duration of the contract.
- 3. Is expected to report to work on weekdays from 0800 1400 hours other than public holidays and provide services for an average of 44 hours a week.
- 4. Shall provide all the necessary report and updates to the Project Coordinator and Project Director whenever needed.
- 5. Is required to report to work in official attire.

10. SERVICES AND FACILITIES

1. Office space and other facilities such as computers will be provided as required.

11. SELECTION CRITERIA

1. The Government Technology Stack Specialist will be selected based on the following criteria's

Criteria	Points
Educational Qualification (Section E)	10
Work Experience (Section E)	20
Additional Skills/ Expertise (Section F)	30
Interview	40

12. APPLICATION

- 1. Curriculum Vitae (clearly stating the starting and ending month and year for previous experiences)
- 2. Copy of National ID Card
- 3. Accredited copies of Academic Certificates (Only documents accredited by Maldives Qualification Authority will be accepted)
- 4. Certificates/ Letter of completion from the university together with a written document from
- 5. Maldives Qualification Authority stating that the course completed is accredited to a certain level.



- 6. Employment Verification Letter from previous employer(s), detailing the works carried out, details of technologies and equipment involved in the work and duration of the responsibilities.
- 7. Candidates must submit additional documents to prove expertise/experience in areas highlighted in section

13. SUBMISSION

Interested candidates may email their proposals on or before 1330hrs of 04th November 2021 (Thursday) to the following address. Note that the time that the email is received will be considered as an on-time submission.

Human Resource Section jobs@ncit.gov.mv National Centre for Information Technology No 64, Kalaafaanu Hingun Male', 20064, Republic of Maldives