HEALTH SECTOR PROGRAM
(Grant No: 0458 –SAM (SF): Samoa Submarine Cable Project)

Outcome 6: Improved Health Systems, Governance and Administration

TOR SP6.1:
Technical Support Team (Firm) to assist the Health Sector in Managing and Operating the eHealth Project to implement the eHealth Policy Area and Strategies.

Project Background

1. The Government of Samoa (GoS) has received a grant from the Asian Development Bank (ADB) to support the implementation of the eHealth Project. It has therefore articulated the direction for eHealth in the eHealth Policy and Strategy (2017-2022) with the implicit aim to support the Ministry Of Health's (MOH) mission to regulate and provide quality, accountable and sustainable health services (Health Strategic Plan 2008 – 2018).

2. The ADB will support the GoS through the MOH and the health sector to strengthen health service delivery and system efficiency through investments in digital health, under the Samoa Submarine Cable Project (the Project). The Project will improve health information and governance through the establishment of a digital health information system (HIS) incorporated into the government's broader information, communication and technology (ICT) platform.[1]

3. This project forms part of the GoS's approach to improve HIS as part of strengthened service delivery using ICT. The overall objective of the project is to provide quality broadband services available at an affordable price, with a sub-objective to enhance digital health. More specifically, the project aims to develop a digital HIS that provides timely, credible, complete, and patient centric data to support quality service delivery and public health management. This will be done through institutional capacity strengthening for the health sector and procurement of ICT infrastructure and information systems to move the fragmented paper based system to a digital HIS.

4. The digital HIS envisioned by the health sector is an interoperable, and durable system designed and built, based on standards that are able to meet current health service requirements. The interoperable architecture design will allow for additional software modules to automate other requirements in the future. It will support modern "best business practices" and enterprise-wide business processes with the goals of : (i) eliminating multiple handling of data and inefficiencies; (ii) increasing

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[1] Government of Samoa. 2012. *Strategy for the Development of Samoa 2012-2016.* Apia

accuracy and timelines and; (iii) improving health sector performance and quality of health care and health services by improving individual patient's data management.

5. ADB is providing assistance through the Project to support the MOH and the health sector to: design, prioritize, plan, implement and manage the digital health architecture and supporting structures (legislations, policies and capacity building) that would be most appropriate for Samoa's context and ensure compliance with ADB Safeguard Policy Statement (2009), Procurement Guidelines (April 2015,as amended from time to time) as well as the GoS (Tenders Board) Procurement Guidelines.

Scope of Services

6. The firm selected will have a strong Pacific regional health experience, ICT and HIS industry footprint and an understanding of the (purchaser/provider) role of the MOH and service providers in Samoa. They will work in partnership with national and international lead industry associations, and with the Asia ehealth Information Network (AeHIN), the Pacific Health Information Network (PHIN) involved in health ICT strategy development and evaluation.

7. The key personnel should have strong skills of both ICT and health, and how health information is used for decision making at the various levels (clinical and public health management). The firm will work closely with the HIS users and ensure that the ICT solution is based on the data content needs. They will be responsible for assigning its team members to each task to produce the outputs as effectively and efficiently as possible. The quality and cost-based selection (QCBS) procurement method, using full technical and financial proposal procedures, will be used for hiring a consulting firm. The quality and cost ratio for this QCBS contract will be 90:10.

8. The Firm shall meet the following requirements:

   (i) Register as a consulting firm under the ADB Consultant Management System (CMS) in accordance with the terms of both firm legal registration and home country status of each individual team members (all experts engaged under the contract must be citizens of one of the ADB member countries).[2]

   (ii) Over the past 10 years, shall have successfully completed at least three major projects providing national governments with support to develop digital information systems and ideally HMIS.

   (iii) Collectively, the consulting firm should have in-depth knowledge of health information systems in small population countries, preferably in the Pacific, and key personnel will have knowledge of both ICT and health, and how health information is used for decision making at the various levels.

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[2]For further information, see: https://uxdmz06.adb.org/OA_HTML/adb/adbpos/jsp/ADBPOSRegisterInfo.htm

9. The firm will assist the MOH and the health sector to (i) implement the key policy areas and strategy of the eHealth Policy and Strategy 2017 – 2022; (ii) assess which business processes will be automated; (iii) define the content of the new HIS taking into consideration the prioritized and phased components already identified, including the design; the ICT architecture, (iv) review and improve upon user requirement specifications for the HIS eHealth already developed, (v) develop a detailed implementation plan; (vi) support implementation and (vii) lead the capacity development of the involved health sector staff.

10. The firm will perform the following detailed tasks:

(i) Assess the existing and recommend the digital enterprise architecture, identifying necessary data and ICT standards required to plan, deploy, and effectively manage existing and new ICT solutions. Including compliance with data privacy standards/legislation, data storage and management capacities, and network connectivity and capacity;

(ii) Design the system architecture - Prepare a profile of each component of the HIS incorporating hardware and software for the specific systems and content needs including (but not limited to) an integration platform, information security, and unified authentication. Provide recommendations regarding the use of open source versus proprietary software. The overall system will incorporate specialized information systems for digitalizing personal health records and a central data processing facility. The team will document the digital health architecture and digital HIS implementation plan.

(iii) Recommend, develop and implement risk management measures - Assess the supporting environment and constraints (legislation, policy, financial and capacity) for ICT in the health sector, especially for the implementation and maintenance of the system after installment and develop a risk management plan.

(iv) Support the eHealth Local Counterpart Support Team(eLCST) that will be led by the Assistant Chief Executive Officer HIS/ICT, MOH with stakeholder and users engagement and consultations on the proposed digital HIS to be implemented throughout the health services.

(v) Develop and implement a capacity development program with detailed implementation plan for each phase of the project (design, instalment, training implementation and maintenance) including detailed requirements, dependencies, key timelines and costing. This should a list of additional training needs, opportunities, and activities associated with its implementation, and detailed costing; develop a communication and change management plan towards implementation of the requirements identified.

(vi) Provide technical support to the MOH and Health Sector eHealth Steering Committee on vendor selection process.

(vii) Ensure compliance with ADB Safeguard Policy Statement (2009) and identify mitigation measures and institutional strengthening.

(viii)   Support MOH and health sector with project management documentation, implementation and monitoring of the digital HIS for 6 months following implementation.

(ix) The firm will report to the eHealth Steering Committee through the eLCST. Consultants should highlight the following critical factors: implementation time, scope, and cost in their approach by clearly defining the scope of the project, allowing for more accurate task projections and subsequently, expense control.

Key Expertise Required :

Team Composition:

11.   The Health sector has determined the composition of the experts needed to achieve the objectives of the assignment. They are as follows: (i) Digital HIS expert/team leader; (ii) Business Analyst and; (iii) Change Management and Trainer Expert.

12. The team will be led by the Digital HIS Expert/ Team Leader : His/her key tasks will include: (i) coordinating the activities of team members and develop detailed work plan and implementation schedule; (ii) ensuring quality and timely project deliverables including the HIS implementation; (iii) Ensuring adherence to applicable quality standards, collaborating with the various stakeholders through established structures/ protocols to ensure the highest and most adapted quality of the deliverables; (iv) work closely with the team members to determine which health, demographic indicators and data elements for indicators are needed to derive information for service delivery, monitoring and decision- making; (v) lead the bidding and selection process (vii) assist the IA in the preparation of the Master Bidding documents; (viii) draft procurement plan, cost estimates of equipment and Bill of Quantities (BOQs); and (xi)conduct and provide technical assessment and advise to the IA of Bidding documents..

13. The Digital HIS Expert / Team Leader should meet the following minimum qualifications :

(i) A post graduate degree in ICT with direction towards health and management (i.e., computer science, cybernetics, mathematical modeling of production management processes);

(ii) At least 10 years of experience in health system strengthening including HIS design, management and implementation. Preference will be given to candidates with previous experience in the Pacific region.

(iii) Demonstrated ability and experience to oversee and implement ICT projects in the health sector including experience in design and organization of business processes;

(iv) Demonstrated experience in undertaking procurement plan and financial cost estimates for health information systems related projects including procurement risk assessments;

(v) Experience in health sector organization and management particularly in the WHO's Western Pacific Region relevant to Samoa.

(vi) Demonstrated ability to supervise a team of experts oversee and implement successful ICT projects in the health. The Team will interface with the various stakeholders of the project, will address contract execution issues as they arise, and will ensure the timely delivery of contract Demonstrated ability to work with multiple stakeholders, including government agencies, private sector, NGOs, Development Partners and donor agencies; and

(vii) Excellent English language skills, including ability to conduct oral presentations and to produce written reports of high quality.

14. The key tasks of the <u>ICT Business Analyst</u> will include (i) developing and assessing the digital enterprise architecture, identify necessary data and ICT standards required to plan, deploy, and effectively manage existing and new ICT solutions; (ii) undertaking a review for the current network connectivity and data management and storage capacity; and (iii) preparing the technical specifications of the ICT components in a procurement ready state to meet the requirements of MOH, the health sector and ADB guidelines; (iv) prepare all technical specifications for all the equipment and physical components required of the system solutions for each component/ phase; (v) provide financial cost and cost estimate for all components of the system solutions; and (iv) evaluating vendors,conduct and provide technical assessment and advise to the IA. The Business Analyst should meet the following minimum qualifications:

(i) Post graduate degree in ICT and/or Computer Science and management (i.e., computer science, cybernetics, mathematical modeling of production management processes) is mandatory;

(ii) Expertise in leading the Architectural design of broader eGovernment solutions in healthcare in low-income countries, preferably HIS;

(iii) Experience with Enterprise support software, project management, and finance related software;

(iv) Certificate and hands-on experience of ISO 9001 knowledge application is considered as advantage;

(v)

(vi) Ability to work with multiple stakeholders, including civil society, government, community organizations, private sector, and donor agencies;

(vii) Ability to formulate a Disaster Recovery Plan (DRP) for the ICT Infrastructure.

(viii) Excellent English language skills.

(ix) Effective Communication style.

15. The key tasks of the <u>Change Management and Trainer Expert</u> will (i) develop a capacity building and institutional development program with a detailed implementation plan which includes the detailed requirements, dependencies, key timelines and costing. This should take into account: (a) a list of additional training needs, opportunities, and activities associated with its implementation, and approximate costing; (ii) develop training materials and user training sessions (clinicians) (nurse and doctors) and allied health service delivery (staff); (iii) facilitate the transfer of knowledge and professional capacity building for the eLCST and relative support entities related to the assignment (minimum 20 people); (iv) support the other team members and leader to ensure effective health information reporting, automation of clinical workflow processes, monitoring and evaluation and training.

The expert proposed will be expected to meet the following minimum requirements:

(i) At least 10 years of experience in organizational change management and training development and delivery ideally in government projects;

(ii) A postgraduate qualification in training or related field;

(iii) Familiarity with health information reporting, automation of clinical workflow processes, monitoring and evaluation and training.

(iv) Demonstrated change management outcomes; and experience in developing and undertaking capacity building and institutional development programs including cost estimates - ideally in the health sector; and

(v) Excellent English language skills and effective communication style.

Terms of the assignment

16. The team of experts will be based in or travel to Apia based on negotiations for the duration of the assignment from October 2017 to January 2021. The duration of the assignment is three years from the start date, and is expected to commence by October 2017. The intermittent terms of the three technical experts will be revised based on negotiations between the GoS and the selected firm.

Institutional Arrangements :

17. The following are the institutional arrangements: The Counterpart will be the eHealth Local Counterpart Support Team (eLCST) for technical coordination and management (Led by MOH-ACEO HIS/ICT) as per Annex 5 of Samoa eHealth Policy and Strategy 2017 – 2022.

18. Reports to the eHealth Steering Committee (eSC) through the Counterpart (eLCST). The reports to be shared with the MoH HSCRM Division for Health Sector Program purposes.

19. The firm will be housed in the Ministry of Health Headquarters, Motootua and located with the HIS/ICT Division. The Ministry will be responsible for the administration support as listed-printing, photocopy, telephone connection, and

transport during official work hours, and internet and email access as per internal arrangements already in place for MoH staff.

20. The support team is to provide a monthly progress reports to the eLCST a week before all eSC meetings.

Provisional Plan of Milestones and Deliverables

Table 1 below outlines the provisional schedule of deliverables. The contract will be time based and linked to the deliverables.

Table 1 The Deliverables:

Deliverable/Milestone	Dates
Inception Report including a detailed implementation plan	November 2017
Develop and Recommend the Digital health architecture assessment report for implementation of new eHealth solution.	February 2018
Financial capacity required for a functioning digital HIS assessment report	
Draft proposed digital HIS model for approval based country requirements as well as technical analysis, reports, reviews already developed	
Draft Disaster Recovery Plan for eHealth for approval	
Draft full scale capacity building, institutional professional development for Health Sector for successful implementation and roll out of eHealth project for approval	
Develop Plan for change management approach and training implementation approach necessary for implementation of new solution.	
Develop a detailed cost estimate of the proposed new eHealth solution system inclusive of all areas which needs to be financed (e.g. training, staffing fills, etc.)	
Final digital HIS model report	March 2018

Tender documents prepared	May 2018
Vendor selection completed	July 2018
eHealth Annual report - 2018	February 2019
eHealth Annual report - 2019	February 2020
Final Capacity building, institutional development program report	August 2019
Final Report	October 2019
eHealth Vendor Implementation Assessment Report Quarterly Basis	October 2018 First Report; Quarterly thereafter