



## **TERMS OF REFERENCE**

### **RECRUITING A CONSULTING FIRM TO EVALUATE THE CURRENT IT MASTER PLAN AND DEVELOP A NEW WAHO IT MASTER PLAN FOR 2017-2021**

#### **1. Background and Rationale**

The West African Health Organisation (WAHO) is ECOWAS' specialized Institution responsible for Health Issues. As such, WAHO is responsible for promoting cooperation and regional integration in health in the West African region. In addition, WAHO developed during its second Strategic Plan (2009-2013) an IT Master Plan which covered the period 2010 - 2014 and was extended to 2016. The said strategic document currently guides IT activities and supports the Institution's various programs in the field.

ECOWAS and all its institutions, including WAHO, are going through institutional reforms. Hence, departments in WAHO will be reduced from 6 to 4. A major change in this reform has been the creation of an ICT and Documentation Unit under the supervision of the Internal Services Department (Originally DAF: Department of Administration and Finance since 1<sup>st</sup> April 2016. Prior to that date, the IT Team was under the supervision of the Department of Research and Health Information System, running some activities supervised by the DAF.

To date, IT staff have been conducting the following activities:

- **Internal IT Development** : IT infrastructure (hardware, software, LAN and Internet security);
- **Provision of platforms for information sharing**: web application portal for regional health information system, WAHO Website, virtual library, etc.
- **Support to Ministries of Health in ECOWAS member countries**: developed regional e-health plan, supported countries to develop or implement their National eHealth Plan and supplied comprehensive videoconferencing equipment.

Specifically, the implementation of projects included in the previous IT Master Plan provided an opportunity to start-up implementation and security activities of infrastructure and systems, fiber optic interconnection of buildings housing WAHO's various departments. In addition, the IT Master Plan enhanced the implementation of new applications or update of existing applications, the establishment of a comprehensive communication system via videoconferencing among WAHO, countries and Partners.

Despite these achievements and significant progress made, there remain several strategic issues and major challenges:

#### **2. Objectives**

##### **2.1. Overall Objective**

The overall objective of the assignment is to develop the 2017-2021 IT Master Plan after evaluating the previous IT Master Plan.

##### **2.2. Specific Objectives**

More specifically, the Consulting firm shall:

- Define the scope of the study, identify and validate expected results and propose a methodological approach
- Assess the level of implementation of the previous IT Master Plan and recommend its consideration in the new IT Master Plan;
- Get an accurate mapping of the current IT status including technical, professional, organizational and economic aspects ;
- Present an updated vision of the norms, standards and best practices and put forward a proposal ;
- Identify current and future needs with a view to determining their impact on the current IT status;
- Define the main strategic thrusts for WAHO's computerization and upgrading;
- Provide a breakdown of the strategic thrust into scenarios in order to define optimal target;
- Define the optimal organizational target ;
- Establish and update the project portfolio to align it with the set target;
- Develop the IT Master Plan;
- Develop a change management plan.

### **3. Expected Outcomes**

The expected outcomes from the consultancy are:

- The scope of the study is well defined and a methodological approach including the deliverables and milestones have been proposed and validated ;
- Accurate mapping out of the current IT status including technical, professional, organizational and economic aspects has been carried out ;
- A repository of best practices: norms, standards, has been proposed and validated;
- A list of current and future needs has been drawn up;
- The main strategic thrusts for WAHO's computerization and upgrading have been defined;
- A project portfolio established, validated and aligned with the set target ;
- IT Master Plan as well as change management plan developed and validated.

### **4. Consultant's Tasks**

The Consulting Firm shall mainly run the following actions below: Deliverables must be provided at the end of each task.

#### **Prepare the Mission Scope**

##### **Square up the Mission**

**Objective:** Define the scope of the study, specify and validate expected results from the mission and propose a methodological approach.

#### **Tasks to be performed**

- Present and validate the proposed approach;
- Plan detailed evaluation of previous IT Master Plan and development of new IT Master Plan
- Identify key stakeholders to meet with ;
- Identify needed information for a successful mission;
- Organize and conduct launching operations meeting.

## **Deliverables**

- The launching operations report / the concept note ;
- The detailed project planning ;
- Minutes of launching operations meeting.

## **Conduct a critical analysis on the current IT status including IT Master Plan.**

### **Analyze the current IT status**

**Objective:** Provide accurate mapping out of the current IT status including technical, professional, organizational and economic aspects.

The Consulting Firm shall actually provide update on implementation of the 2010 – 2014 IT Master Plan and draw lessons learned from this exercise in terms of process, technologies and human resources in order to take such lessons into account in the development of the next IT Master Plan (2017-2021).

### **Tasks to be performed**

- Collect and review existing documentation (master plan, inventory, architecture, process, service contracts, budget, activities conducted, minimum technical specifications for ECOWAS Institutions' equipment and any other required document available and requested by the Consulting Firm etc.);
- Arrange interviews with key stakeholders, including the Director General, Deputy Director General, Divisional Directors, Professional Officers, and some other Staff members ;
- Highlight strengths and weaknesses, opportunities and threats, analyze potential risks and assess their impacts ;
- Assess the level of implementation of the 2010-2014 IT Master Plan;
- Conduct analysis of the architecture of computer and telecommunication network (LAN, WAN, MAN);
- Analyze job procedures and process;
- Assess the maturity of Information System : The Consulting Firm shall define the level of maturity and performance of the information system by clearly stating the strengths and weaknesses of the current IT status and determining and proposing areas to improve upon
- Study the budget and investments ;

### **Description**

During this phase, the Consultant will conduct interviews with all Departments that will express their needs, both current and medium term (three to five years).

The Consultant will analyze the collected needs and rank them in order of priority based on strategic choices, functional guidance and cost / benefits to be made later.

### **Deliverables**

- Interview guide formalized ;
- Mapping out of IS and job processes ;
- Assessment Report on Previous IT Master Plan including recommendations for improvement, the analysis report on IT infrastructure, processes, budget, organization, etc.), and IS-related risks analysis.
- Interview Report

## **Update on the Art of Best Practices**

**Objective:** Present an updated vision of the norms, standards and best practices repository and put forward a proposal;

### **Tasks to be performed**

- Develop status of repositories based on experience feedback;
- Compile “best practices”, norms and standards of information systems governance, quality management and project management, etc.
- Propose a reference framework of best practices for information system governance

### **Deliverables**

- Report on status of the art of “best practices”
- Define the strategic thrusts

### **Collect technical and professional needs**

**Objective:** Identify current and future needs with a view to determining their impact on the current IT status;

### **Tasks to be performed**

- Organize working sessions to collect the IS needs and assess the internal perception of the performance of the current system ;
- Collect the professional needs in all areas of health information system and in the fields of communication, human resource management, procurement of goods and services, etc. taking into account the functional SAP software-based ECOLINK project.

### **Note**

During this process, collection of needs must take account of the following objectives:

- Strategic alignment which will focus on ensuring that there is a link between WAHO’s upgrading strategy and IT schemes, definition, maintenance and validation of IT value proposition as well as aligning IT activities with WAHO’s activities;
- Value assignment which consists in ensuring that computerization delivers profits promised by the strategy and focusing on optimized costs and evidence of intrinsic value of Information and Communication Technologies (ICT );
- Risk management: risk awareness and implementation of an adequate control environment ;
- Resource management: ICT investment optimization and efficient management of critical resources
- Performance measurement for monitoring and supervision of the implementation of strategy.

### **Deliverables**

- Interview Guide
- Interview Report
- Summary Report (Concept note) on needs expressed

### **Define the strategic thrusts**

**Objective:** Define the main strategic thrusts for WAHO’s computerization and upgrading;

### **Tasks to be performed**

- Define a planning process and approval framework and validate the IS Strategic Guidelines. This process should be based on standards and best practices in the field of ICT governance such as COBIT and ITIL. This process must take into account the needs to build the capacity of policymakers that will be responsible for validating the identified processes;
- Organize working meetings to define and fine-tune the list of strategic thrusts based on the results of the study of the current IT status and taking into account WAHO’s overall strategic orientations.

## **Deliverables**

- Interview Guide
- Minutes of Meetings
- Strategic Framework Report

## **Study the various scenarios**

**Objective:** Provide a breakdown of strategic thrust into scenarios in order to define optimal target;

## **Tasks to be performed**

- Define scenarios by crossing different development areas in terms of organization, function, technique, budget, structure, etc. ;
- Evaluate the scenarios according to criteria reflecting selected strategic thrusts and future needs based on identified strengths and weaknesses, advantages and disadvantages ;
- Organize a meeting to report back on defined scenarios and validate the selected scenario.

## **Deliverables**

Study Report on different scenarios

## **Define the target information system**

**Objective:** Define the optimal organizational target.

## **Tasks to be performed**

- Organize a meeting to present and validate the choice of target scenario ;
- Breakdown the target scenario in terms of target architecture, target functional architecture, target organization and governance and target budget structuring.

## **Deliverables**

- Description of selected target scenario
- Complete specifications on the target

## **Develop IT Master Plan**

### **Define the project portfolio**

**Objective:** Establish and update the project portfolio to align it with the defined target;

The plan should be organized so as to take into account the IS's 3 dimensions namely: Processes, people and technology. This implies the definition of an urbanization strategy for WAHO's IS from which will come out a strong technical architecture, an IT function organized in accordance with existing standards and practices, and an IT team with skills and abilities required for the management of next IS

## **Tasks to be performed**

- Identify the projects to be undertaken on the basis of gaps between the current IT status and the target;
- Articulate the various implementation strategies into programs and projects. A project management methodology and performance measurement framework (value and compliance) will be developed for each scenario.
- Characterize and qualify the listed projects based on the following essential criteria: cost of the projects, functional flows, return on investment, complexity, planning.

## **Deliverables**

### Project Portfolio

#### **Establish a macro planning and resource allocation**

**Objective:** Identify potential paths to the target

#### **Tasks to be performed**

- Explain compliances between projects
- Define macro-planning
- Plan resource allocation

#### **Deliverables**

- Provisional Macro planning
- Economic Study Report.

#### **Draft the IT Master Plan**

**Objective:** Produce the final version of the Master Plan

#### **Tasks to be performed**

- Design the optimal target trajectory
- Develop a change management plan
- Draft the IT Master Plan on the basis of all the documentation produced during the mission
- Organize and facilitate a meeting to report back on the assignment

#### **Deliverables**

- IT Master Plan
- Change Support Plan
- Final report back Material
- Reception/delivery Minutes

Throughout the duration of their mission, the Consulting Firm will work closely with the Office of the Director General and all Departments

#### **Profile of the Consulting Firm**

Services provided under these Terms of Reference must be conducted by a Consulting Firm with proven experience in the various fields of expertise covered by the study, including development of blueprints, IT strategies and Master Plan. The Consortium must have strong experience in conducting similar work.

#### **Consultants' Profile**

The Firm should assemble a team of experts/consultants with thorough and demonstrated experience having among them the following profiles:

- Project Manager;
- IS Security Expert
- Networks and Systems Expert;
- Information System Expert

The Firm must provide detailed curriculum vitae of each designated Expert. These Experts must have the required profiles as follows:

### **Project Manager**

The project Manager must have at least a university degree, no less than Master 2 in Computer Science, Information Systems or equivalent field (5-Year post-secondary school qualification).

He/She shall among others:

- Possess at least a fifteen (15)-year experience in IT projects management and IT strategic development plans;
- Have a professional experience for conducting at least four (4) similar projects (IT Master Plan Development) over the last six (6) years ;
- Have a perfect knowledge of health management system;
- Have a good command of at least two of the three ECOWAS languages (French, English, Portuguese);
- Have a perfect command of a project management tool.

### **IS Security Expert**

The IT Security Expert must have at least an engineering degree (no less than a 5-year post-secondary school qualification) or a Master 2 in Computer Science, Telecommunication or Information and Communication Technology (ICT).

He/She shall among others:

- Have at least a seven (7)-year experience in the development and implementation of complex security systems in international or public administrations;
- Have completed at least three (3) recent missions over the past five years, in the definition of complex network architectures, the implementation of a security management system;
- Have knowledge of international and public administrations and proven experience in the development of master plans;

The Expert must also have proven and thorough knowledge of networks, systems and information systems security:

- Networks: Routing Protocols, Switching operations between LAN, TCP / IP Stack BLR, Fiber Optics, VoIP; Firewalls, proxy, etc.
- Systems: e-mail systems, groupware, intranet, LDAP directories, Active Directory, Operating Systems, Windows, Unix / Linux, etc.
- Security: Risk Assessment Methods (EBIOS, MEHARI, OCTAVE) information security management system (ISO 27000 family).
- Technical knowledge: intrusion detection and prevention systems (IDS / IPS), DLP, firewalls, VPN, PKI, Backup and Recovery, Supervision, SIEM, equipment protection system, Datacenter, virtualization, cloud computing, etc.

### **Networks and Systems Expert**

The Systems, Networks and Security Expert must have at least an engineering degree (no less than a 5-year post-secondary school qualification) or a Master 2 in Computer Science, Telecommunication or Information and Communication Technology (ICT).

He/She shall among others:

- Have at least a seven (7)-year experience in the setting up of complex computer networks in international or public administrations.

- Have completed at least three (3) recent missions over the past five years, in the definition of complex network architectures ;
- Have knowledge of international and public administrations and proven experience in the development of master plans;

Moreover, the Expert must have proven and thorough knowledge of networks and systems:

- Networks : Routing Protocols , Switching operations between LAN, TCP / IP Stack BLR, Fiber Optics, VoIP; Firewalls, proxy,
- Systems: e-mail systems, groupware, intranet, LDAP directories, Active Directory, Operating Systems, Windows, Unix / Linux, etc.

### **Information System Expert**

The Information System Expert must have at least an engineering degree (no less than a 5-year post-secondary school qualification) or a Master 2 in Computer Science, Telecommunication or Information and Communication Technology (ICT).

He/She shall among others:

- Have at least a seven (7)-year experience in the establishment of complex information systems in public or international administrations, including reference data management systems (MDM), Business Rule Management Business (BRMS), Business Process Management (BPM) systems, as well as architecture, urbanization and information system governance etc.
- Have completed at least three (3) recent missions over the past five years, in the definition of complex architectures, urbanization and governance of information systems, development of interfaces for systems interconnection.
- Have completed at least three (3) projects on integration and setting up of Integrated Management Software (network architecture, security, database)
- Have knowledge of international and public administrations and proven experience in the development of master plans ;
- Have a demonstrated professional experience and technical skills in software engineering, agile methods, analysis and modeling techniques methods, Web and Internet technologies, knowledge management, etc.

### **Required Attributes for all Experts:**

- Excellent analytical skills
- Rigorous and methodical;
- Solid team player and social
- Ability to adapt
- Multi-skilled, independent and responsive

## **DURATION OF THE MISSION, PLACE AND IMPLEMENTATION SCHEDULE**

### **Duration of Mission**

The mission will run for two (02) months from the date of notification of the contract or the order to start the service.

### **End date of Mission**

The mission is scheduled to run continuously and will end no later than two (02) months after the effective start of the study

### **Mission Location**

The mission will be conducted mainly at WAHO Headquarters, in Bobo-Dioulasso, Burkina Faso.



**Responsibility and Confidentiality**

The Firm will work under the supervision of the IT Unit.

Firm's Experts are required to comply with the rules of professional ethics and confidentiality regarding the use of information and documents to which they have access or they have produced within the framework of the mission.

**Deliverables**

Upon arrival, Consultants will draw up a work schedule and produce progress reports and a comprehensive report at the end of mission (master plan, specific feasibility study report, and terms of reference).

The following deliverables are expected:

- The assessment document of the previous IT Master Plan
- The final report (IT Master Plan)
- The summary of the final report (Summary IT Master Plan)
- All presentation materials (working sessions, etc.)
- Change Management Plan