Terms of Reference and Scope of Services

Health Sector Enhancement Project (HSEP) Advisor for Information Technology

A.   Background information

Health Sector Enhancement Project - Additional Financing (HSEP-AF) (hereinafter referred to as the Project) has been implemented since 2011 in accordance with the Credit Agreement number 4912-BA signed between Bosnia and Herzegovina and the International Development Agency (IDA) and co-financed by the Council of Europe Development Bank credit in accordance with the Framework Credit Agreement between Bosnia and Herzegovina and the Council of Europe Development Bank (LD 1747 (2011), including local co-financing by the Federation of Bosnia and Herzegovina Government. Due to delayed effectiveness of the Council of Europe Development Bank's credit, the Agreement with this organization has been extended through 30 June 2016 when the Project is expected to finally end.

The Project effectively supports implementation of goals defined under the strategic documents of health sector reforms, particularly strategic goals of the Primary Health Care reform.

Goals of the project include:

- Improve efficiency of the health care system by restructuring and strengthening of Primary Health Care through continued development of Family Medicine model,
- Improve health sector management capacities,
- Strengthen policy making process by development and implementation of the health sector performance monitoring and evaluation system.

Implementation of the Health Sector Enhancement Project (HSEP), specifically its subcomponent Primary Health Care Informatization, started the process of informatization at PHC level, which effectively contributed to strengthening of IT infrastructure in the community health care centers in the Federation of BiH with special focus on Family Medicine model. This assignment has included procurement of both hardware and software application for PHC (Electronic Health Record for PHC). As a result of the project activities implemented thus far the Federation of BiH now has a well developed network of Family Medicine offices which are included into a single IT network and furnished with required equipment. Also, in a number of cantons in the Federation of BiH the Project has already worked to implement Electronic Health Record.

Based on the results achieved thus far, the Project created necessary preconditions for this reform to continue and expand to higher levels of health care system, i.e. specialist and consultative outpatient and hospital health care. The needs to rationalize and improve quality of this level of health care system are enormous, and the further development of Information Technologies, as an essential instrument in

any rationalization of health care system, is imperative. The long-term objective here is to create an integrated system of health care, where quality Primary Health Care is supplemented by more efficient and more rational specialist and consultative outpatient and hospital health care, which to some extent, can be achieved by introducing required Information Technologies.

In order to achieve the abovementioned goals, and in order to ensure expert coordination of activities related to introduction of Information Technologies in the health sector, the Sector for Project Implementation is seeking to hire a part time Information Technology Expert for the period of maximum one year.

B Job description

Working in the Sector for Project Implementation under direct supervision of the Federation of BiH Minister of Health, the IT Adviser is expected to advise on and provide support in the process of improvement of IT management at the level of both Primary Health Care and specialist and consultative outpatient and hospital health care. This will include advising on standardization, architecture design, and implementation.

1.   Role of the IT Advisor will be significant in:

   − Communication with the relevant agencies/care providers and other stakeholders;
   − Communication with the relevant cantonal authorities;
   − Communication and coordination of operational and contracted activities with suppliers hired to deliver hardware and/or software;
   − Intensive team work with other members of the Sector for Project Implementation
   − Intensive team work with staff of the relevant agencies/care providers selected for implementation or where prospective implementation of project activities is planned;
   − Intensive communication with members of the Sector for Project Implementation in relation to coordination of other project components.
   − Cooperation and communication with the Creditors.

2.   Technical role in planning of improvements in the area of IT management at the levels of both Primary Health Care specialist and consultative outpatient and hospital health care in the Federation of BiH; the IT Advisor will responsible for the design of the follow-up development process in the area of Information Technologies and advising on the system design, including processes of organizational reengineering and system relevance with respect to the needs of the relevant agencies/care providers and other stakeholders;

3.   Needs analysis in the Federation of BiH agencies and in cantons, oversee the detailed design of specific systems of specialist and consultative services and provide assistance in development of key specifications in relation to key specifications related to organizational reengineering of the specialist and consultative services system; the IT Advisor is expected to carry out an contextual

analysis of the relevant agencies/care providers and other stakeholders; the IT Advisor is expected to develop design of procedures and the project plan to be implemented on the ground.

4. Support to reaching consensus and agreement in relation to the plan for improvement of IT management with the Federation of BiH health care providers, all cantonal ministers of health, cantonal health insurance institutes, and cantonal public health institutes.

5. Design of architecture and key specifications related to implementation of IT systems of specialist and consultative services with special focus to current situation and integration of the existing health information systems in cantons including community health care centers, public health institutes, and health insurance institutes, flow of the health information on patients from PHC to hospitals.

6. Recommendations for required changes to legislation, regulatory framework, and planning frameworks necessary for improvement of information management in the Federation of BiH; Recommendations aimed at ensuring functional sustainability of improved health sector information management based on principles of corporative management; Recommendations for introduction of standardized data categorization, identification of rules for data collection and safekeeping, and use of data registers, while ensuring compliance with data security and confidentiality requirements aimed at harmonizing the reference books and classifiers with the international reference books and classifiers, including, inter alia, the following:

- E-exchange mechanism (such as adjustment to and compliance with ISO 17090);
- Human Resources management including ID for health professionals and regulations related to health sector HR register;
- Medical records (EHR, EMR, HL7, DICOM, ISO, and similar) compliant to, for example, ISO/TS 18308:2004, ISO/TR 22221:2006, ISO/TR 20514:2005, etc.;
- Health services quality management (accreditation standards, clinical pathways, etc.) and compliance with ISO 9001 requirements as to the quality management system and ISO/TR 27809:2007 Health Informatics – Measures to Ensure Security of Patient Data in the Health Software;
- Accounting system and financial management system for health care providers entailing different legal status with development of (i) standards for general requests within payments systems; (ii) standards for e-businesses/cross payment process (general requests);
- Medication supply system for hospitals, Primary Health Care, outpatient health care, package of services compliant with, for example, ISO/TR 22790:2007 and ISO 21549-7:2007;
- Standards for Laboratory Management System based on ISO 18812:2003;
- Disease Monitoring System compliant with ISO/TS 11073-92001:2007;
- Health Statistics Data Collection and Processing compliant with, for example, ISO/TS 21667:2004 and ISO/TS 17117:2002;
- Standards for Patient Management System compliant with, for example, ISO 20301:2006, ISO 20302:2006, and ISO 21549-x:2004;
- Standards and recommendations for improvement of systemic architecture and infrastructure of the PHC information system, compliant with, for

example, ISO/TS 21298:2008, ISO/TR 22221:2006, and standards of service architecture compliant with ISO 12967-x:2009;
- Recommendations to improve health telecommunications network compliant with, for example, ISO/TR 16056-1:2004, ISO/TR 16056-2:2004, ISO/IEEE 11073-10101:2004 and ISO/TR 21730:2007;
- Recommended methodology for needs assessment of health care providers regarding IT equipment and development of IT structure.

Recommendations can be developed by using different processes and resources to be defined by the relevant line ministry taking into account inputs of the Project IT Advisor. However, it is by all means necessary to adhere to the principles that the Federation of BiH Ministry of Health is going to manage and coordinate the process, and that this process will include the relevant cantonal agencies/care providers and the authorities which will contribute to preparation of the content, in order to ensure adequate level of consensus regarding the key issues.

The IT Adviser is expected to be intensively included in support to this process, and the IT Adviser is also going to be responsible to develop draft recommendations.

7.   Coordination and monitoring of the project implementation and quality assurance in realization of the project activities; sustained, every-day communication with contracted companies and/or organizations; work on design and carry out technical acceptance tests to clear implemented products; provide support in implementation of the system in the field; coordination of implementation teams; and any other duties and responsibilities as instructed by the Federation Minister of Health.

C Experience and qualifications

Education background:
- Bachelor degree in electrical engineering or computer science.

Work experience and competences:
- Minimum 1 year of experience in IT management positions in health sector or in IT projects in health sector as a project manager or a lead consultant;
- Minimum 5 years of experience working as manager or consultant in IT;
- Proven track record of ability to analyze business processes related to IT processes and ability to develop recommendation for improvement or automatization of such processes;
- Knowledge of structuring, management, and security in IT processes (ITIL v3, ISO 20000, ISO 27001) is an advantage.

Language proficiency:
- Excellent working proficiency in English language.

D Duration of assignment

The IT Advisor is going to be hired on part-time basis over the period of maximum 12 months. The consultant is going to be remunerated on monthly basis, on the basis of work provided report.