**BOSNIA AND HERZEGOVINA**
**FEDERATION OF BOSNIA AND HERZEGOVINA**
**FEDERAL MINISTRY OF HEALTH**


**Health Sector Enhancement Project - Additional Financing (HSEP-AF)**


**CONTRACT No. BA/FB&H/HSEP/AF/G/ICB-44g/14**


**Procurement of Electronic Health Record Software for Zenica-Doboj Canton
Primary Health Care Centers**


between


**Federal Ministry of Health
Health Sector Enhancement Project (HSEP)**


and


**MEDIT d.o.o., Sarajevo**


Sarajevo, October 2014.

# **CONTENTS**

# A. Contract Agreement

THIS AGREEMENT is made the _____ day of **October, 2014**

BETWEEN

(1) **Federal Ministry of Health; Health Sector Enhancement Project** having its principal place of business at Titova 9, 71000 Sarajevo, (hereinafter called "the Purchaser"), and

(2) **Medit d.o.o. Sarajevo**, a corporation incorporated under the laws of Bosnia and Herzegovina and having its principal place of business at Hamdije Čemerlića 2/14, 71000 Sarajevo (hereinafter called "the Supplier").

WHEREAS the Purchaser desires to engage the Supplier to supply, install, achieve Operational Acceptance of, and support the following Information System: **Procurement of Electronic Health Record Software for Zenica-Doboj Canton Primary Health Care Centers** ("the System"), and the Supplier has agreed to such engagement upon and subject to the terms and conditions appearing below in this Contract Agreement.

NOW IT IS HEREBY AGREED as follows:

**Article 1.**

**Contract Documents**

1.1 Contract Documents (Reference GCC Clause 1.1 (a) (ii))
The following documents shall constitute the Contract between the Purchaser and the Supplier, and each shall be read and construed as an integral part of the Contract:
(a) This Contract Agreement and the Appendices attached to the Contract Agreement
(b) General Conditions of Contract
(c) Special Conditions of Contract
(d) Technical Requirements (including Implementation Schedule)
(e) The Supplier's bid and original Price Schedules
(f) The Purchaser's Notification of Award
(g) Security Form**s**

1.2 Order of Precedence (Reference GCC Clause 2)
In the event of any ambiguity or conflict between the Contract Documents listed above, the order of precedence shall be the order in which the Contract Documents are listed in Article 1.1 (Contract Documents) above, provided that Appendix 7 shall prevail over all provisions of the Contract Agreement and the other Appendices attached to the Contract Agreement and all the other Contract Documents listed in Article 1.1 above.

1.3 Definitions (Reference GCC Clause 1)
Capitalized words and phrases used in this Contract Agreement shall have the same meanings as are ascribed to them in the General Conditions of Contract.

**Article 2.**

**Contract Price and Terms of Payment**

2.1 Contract Price (Reference GCC Clause 1.1(a)(viii) and GCC Clause 11)
The Purchaser hereby agrees to pay to the Supplier the Contract Price in consideration of the performance by the Supplier of its obligations under the Contract. The Contract Price shall be the aggregate of: **BAM 1,075,334.13** (*one million seventy five thousand three hundred thirty four and and 13/100 BAM*), as specified in the Grand Summary Price Schedule.

The Contract Price shall be understood to reflect the terms and conditions used in the specification of prices in the detailed price schedules, including the terms and conditions of the associated Incoterms, and the taxes, duties and related levies if and as identified.

**Article 3.**     3.1    Effective Date (Reference GCC Clause 1.1 (e) (ix))

**Effective Date for Determining Time for Operational Acceptance**

The time allowed for supply, installation, and achieving Operational Acceptance of the System shall be determined from the date when all of the following conditions have been fulfilled:

(a)   This Contract Agreement has been duly executed for and on behalf of the Purchaser and the Supplier;

(b)   The Supplier has submitted to the Purchaser the performance security and the advance payment security, in accordance with GCC Clause 13.2 and GCC Clause 13.3;

(c)   The Purchaser has paid the Supplier the advance payment, in accordance with GCC Clause 12.

Each party shall use its best efforts to fulfill the above conditions for which it is responsible as soon as practicable.

3.2    If the conditions listed under 3.1 are not fulfilled within two (2) months from the date of this Contract Agreement because of reasons not attributable to the Supplier, the parties shall discuss and agree on an equitable adjustment to the Contract Price and the Time for Achieving Operational Acceptance and/or other relevant conditions of the Contract.

**Article 4.**    4.1    The Appendixes listed below shall be deemed to form an integral part of
**Appendixes**          this Contract Agreement.

4.2    Reference in the Contract to any Appendix shall mean the Appendixes listed below and attached to this Contract Agreement, and the Contract shall be read and construed accordingly.

APPENDIXES

Appendix 1.    Supplier's Representative
Appendix 2.    Adjudicator
Appendix 3.    List of Approved Subcontractors
Appendix 4.    Categories of Software
Appendix 5.    Custom Materials
Appendix 6.    Revised Price Schedules (if any)
Appendix 7.    Minutes of Contract Finalization Discussions and Agreed-to Contract Amendments

IN WITNESS WHEREOF the Purchaser and the Supplier have caused this Agreement to be duly executed by their duly authorized representatives the day and year first above written.

For and on behalf of the Purchaser                             For and on behalf of Supplier

_____                  _____

Prof. dr. Rusmir Mesihović, Minister                     Mr. Samir Dedović, Director

# Appendix 1.  Supplier's Representative

In accordance with GCC Clause 1.1 (b) (iv), the Supplier's Representative is:

      Name:    *Samir Dedović*

      Title:    *Director*

In accordance with GCC Clause 4.3, the Supplier's addresses for notices under the Contract are:

      Address of the Supplier's Representative:

      Hamdije Čemerlića 2/14
      71000 Sarajevo
      Tel.: 00 387 33 721 910
      Fax: 00 387 33 664 579
      E-mail: info@medit.ba

# Appendix 2. Adjudicator

In accordance with GCC Clause 1.1 (b) (vi), the agreed-upon Adjudicator is:

Name:  *Ms. Rabija Idrizbegović*

Title:  Civil Engineer

Address: Milana Preloga 6

Tel.: 00 387 33 659 142

In accordance with GCC Clause 6.1.3, the agreed-upon fees and reimbursable expenses are:

Hourly Fees: 100 BAM

Reimbursable Expenses: None

Pursuant to GCC Clause 6.1.4, if at the time of Contract signing, agreement has not been reached between the Purchaser and the Supplier, an Adjudicator will be appointed by the Appointing Authority named in the SCC.

# Appendix 3.  List of Approved Subcontractors

| Item | Approved Subcontractors | Place of Registration |
|---|---|---|
|  |  |  |
|  | **N/A** |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

# Appendix 4.  Categories of Software

| Software Item | System Software | General-Purpose Software | Application Software | Standard Software | Custom Software |
|---|---|---|---|---|---|
| Linux | x | | | x | |
| Linux | | x | | x | |
| E Medit | | | x | x | |

# Appendix 5.  Custom Materials

| Custom Materials |
| --- |
| User Quide |

# Appendix 6. Revised Price Schedules

Not applicable

# Appendix 7.  Minutes of Contract Finalization Discussions and Agreed-to Contract Amendments

Not applicable

# B. General Conditions of Contract

## A. CONTRACT AND INTERPRETATION

**1. Definitions**  1.1  In this Contract, the following terms shall be interpreted as indicated below.

(a) contract elements

(i) "Contract" means the Contract Agreement entered into between the Purchaser and the Supplier, together with the Contract Documents referred to therein. The Contract Agreement and the Contract Documents shall constitute the Contract, and the term "the Contract" shall in all such documents be construed accordingly.

(ii) "Contract Documents" means the documents specified in Article 1.1 (Contract Documents) of the Contract Agreement (including any amendments to these Documents).

(iii) "Contract Agreement" means the agreement entered into between the Purchaser and the Supplier using the form of Contract Agreement contained in the Sample Forms Section of the Bidding Documents and any modifications to this form agreed to by the Purchaser and the Supplier. The date of the Contract Agreement shall be recorded in the signed form.

(iv) "GCC" means the General Conditions of Contract.

(v) "SCC" means the Special Conditions of Contract.

(vi) "Technical Requirements" means the Technical Requirements Section of the Bidding Documents.

(vii) "Implementation Schedule" means the Implementation Schedule Sub-section of the Technical Requirements.

viii) "Contract Price" means the price or prices defined in Article 2 (Contract Price and Terms of Payment) of the Contract Agreement.

(ix) "Procurement Guidelines" refers to the edition **specified in the SCC** of the World Bank Guidelines: Procurement under IBRD Loans and IDA Credits.

(x) "Bidding Documents" refers to the collection of documents issued by the Purchaser to instruct and inform potential suppliers of the processes for bidding, selection of the winning bid, and Contract formation, as well as the contractual conditions governing the relationship between the Purchaser and the Supplier. The General and Special Conditions of Contract, the Technical Requirements, and all other documents included in the Bidding Documents reflect the Procurement Guidelines that the Purchaser is obligated to follow during procurement and administration of this Contract.

(b) entities

(i) "Purchaser" means the entity purchasing the Information System, as **specified in the SCC.**

(ii) "Project Manager" means the person **named as such in the SCC** or otherwise appointed by the Purchaser in the manner provided in GCC Clause 18.1 (Project Manager) to perform the duties delegated by the Purchaser.

(iii) "Supplier" means the firm or Joint Venture whose bid to perform the Contract has been accepted by the Purchaser and is named as such in the Contract Agreement.

(iv) "Supplier's Representative" means any person nominated by the Supplier and named as such in the Contract Agreement or otherwise approved by the Purchaser in the manner provided in GCC Clause 18.2 (Supplier's Representative) to perform the duties delegated by the Supplier.

(v) "Subcontractor" means any firm to whom any of the obligations of the Supplier, including preparation of any design or supply of any Information Technologies or other Goods or Services, is subcontracted directly or indirectly by the Supplier.

(vi) "Adjudicator" means the person named in Appendix 2 of the Contract Agreement, appointed by agreement between the Purchaser and the Supplier to make a decision on or to settle any dispute between the Purchaser and the Supplier referred to him or her by the parties, pursuant to GCC Clause 6.1 (Adjudication).

(vii) "The World Bank" (also called "The Bank") means the International Bank for Reconstruction and Development (IBRD) or the International Development Association (IDA).

(b) scope

(i) "Information System," also called "the System," means all the Information Technologies, Materials, and other Goods to be supplied, installed, integrated, and made operational (exclusive of the Supplier's Equipment), together with the Services to be carried out by the Supplier under the Contract.

(ii) "Subsystem" means any subset of the System identified as such in the Contract that may be supplied, installed, tested, and commissioned individually before Commissioning of the entire System.

(iii) "Information Technologies" means all information processing and communications-related hardware, Software, supplies, and consumable items that the Supplier is required to supply and install under the Contract.

(iv) "Goods" means all equipment, machinery, furnishings, Materials, and other tangible items that the Supplier is required to supply or supply and install under the Contract, including, without limitation, the Information Technologies and Materials, but excluding the Supplier's Equipment.

(v) "Services" means all technical, logistical, management, and any other Services to be provided by the Supplier under the Contract to supply, install, customize, integrate, and make operational the System. Such Services may include, but are not restricted to, activity management and quality assurance, design, development, customization, documentation, transportation, insurance, inspection, expediting, site preparation, installation, integration, training, data migration, Pre-commissioning, Commissioning, maintenance, and technical support.

(vi)    "The Project Plan" means the document to be developed by the Supplier and approved by the Purchaser, pursuant to GCC Clause 19, based on the requirements of the Contract and the Preliminary Project Plan included in the Supplier's bid. The "Agreed and Finalized Project Plan" is the version of the Project Plan approved by the Purchaser, in accordance with GCC Clause 19.2. Should the Project Plan conflict with the Contract in any way, the relevant provisions of the Contract, including any amendments, shall prevail.

(vii)    "Software" means that part of the System which are instructions that cause information processing Subsystems to perform in a specific manner or execute specific operations.

(viii)    "System Software" means Software that provides the operating and management instructions for the underlying hardware and other components, and is identified as such in Appendix 4 of the Contract Agreement and such other Software as the parties may agree in writing to be Systems Software. Such System Software includes, but is not restricted to, micro-code embedded in hardware (i.e., "firmware"), operating systems, communications, system and network management, and utility software.

(ix)    "General-Purpose Software" means Software that supports general-purpose office and software development activities and is identified as such in Appendix 4 of the Contract Agreement and such other Software as the parties may agree in writing to be General- Purpose Software. Such General-Purpose Software may include, but is not restricted to, word processing, spreadsheet, generic database management, and application development software.

(x)    "Application Software" means Software formulated to perform specific business or technical functions and interface with the business or technical users of the System and is identified as such in Appendix 4 of the Contract Agreement and such other Software as the parties may agree in writing to be Application Software.

(xi)    "Standard Software" means Software identified as such in Appendix 4 of the Contract Agreement and such other Software as the parties may agree in writing to be Standard Software.

(xii)    "Custom Software" means Software identified as such in Appendix 4 of the Contract Agreement and such other Software as the parties may agree in writing to be Custom Software.

(xiii)    "Source Code" means the database structures, dictionaries, definitions, program source files, and any other symbolic representations necessary for the compilation, execution, and subsequent maintenance of the Software (typically, but not exclusively, required for Custom Software).

(xiv)    "Materials" means all documentation in printed or printable form and all instructional and informational aides in any form (including audio, video, and text) and on any medium, provided to the Purchaser under the Contract.

(xv)   "Standard Materials" means all Materials not specified as Custom Materials.

(xvi)   "Custom Materials" means Materials developed by the Supplier at the Purchaser's expense under the Contract and identified as such in Appendix 5 of the Contract Agreement and such other Materials as the parties may agree in writing to be Custom Materials. Custom Materials includes Materials created from Standard Materials.

(xvii)   "Intellectual Property Rights" means any and all copyright, moral rights, trademark, patent, and other intellectual and proprietary rights, title and interests worldwide, whether vested, contingent, or future, including without limitation all economic rights and all exclusive rights to reproduce, fix, adapt, modify, translate, create derivative works from, extract or re-utilize data from, manufacture, introduce into circulation, publish, distribute, sell, license, sublicense, transfer, rent, lease, transmit or provide access electronically, broadcast, display, enter into computer memory, or otherwise use any portion or copy, in whole or in part, in any form, directly or indirectly, or to authorize or assign others to do so.

(xviii)   "Supplier's Equipment" means all equipment, tools, apparatus, or things of every kind required in or for installation, completion and maintenance of the System that are to be provided by the Supplier, but excluding the Information Technologies, or other items forming part of the System.

(d)   activities

(i)   "Delivery" means the transfer of the Goods from the Supplier to the Purchaser in accordance with the current edition Incoterms specified in the Contract.

(ii)   "Installation" means that the System or a Subsystem as specified in the Contract is ready for Commissioning as provided in GCC Clause 26 (Installation).

(iii)   "Pre-commissioning" means the testing, checking, and any other required activity that may be specified in the Technical Requirements that are to be carried out by the Supplier in preparation for Commissioning of the System as provided in GCC Clause 26 (Installation).

(iv)   "Commissioning" means operation of the System or any Subsystem by the Supplier following Installation, which operation is to be carried out by the Supplier as provided in GCC Clause 27.1 (Commissioning), for the purpose of carrying out Operational Acceptance Test(s).

(v)   "Operational Acceptance Tests" means the tests specified in the Technical Requirements and Agreed and Finalized Project Plan to be carried out to ascertain whether the System, or a specified Subsystem, is able to attain the functional and performance requirements specified in the Technical Requirements and Agreed and Finalized Project Plan, in accordance with the provisions of GCC Clause 27.2 (Operational Acceptance Test).

(vi)   "Operational Acceptance" means the acceptance by the Purchaser of the System (or any Subsystem(s) where the Contract provides for acceptance of the System in parts), in

accordance with GCC Clause 27.3 (Operational Acceptance).

(e)   place and time

(i)     "Purchaser's Country" is the **country named in the SCC.**

(ii)    "Supplier's Country" is the country in which the Supplier is legally organized, as named in the Contract Agreement.

(iii)    "Project Site(s)" means the place(s) **specified in the SCC** for the supply and installation of the System.

(iv)   "Eligible Country" means the countries and territories eligible for participation in procurements financed by the World Bank as defined in the Procurement Guidelines. (**Note:** The World Bank maintains a list of countries from which Bidders, Goods, and Services are not eligible to participate in procurement financed by the Bank.  The list is regularly updated and can be obtained from the Public Information Center of the Bank or its web site on procurement.  A copy of the list is contained in the Section of the Bidding Documents entitled "Eligible Countries for the Provision of Goods, Works, and Services in Bank-Financed Procurement").

(v)     "Day" means calendar day of the Gregorian Calendar.

(vi)    "Week" means seven (7) consecutive Days, beginning the day of the week as is customary in the Purchaser's Country.

(vii)   "Month" means calendar month of the Gregorian Calendar.

(viii)  "Year" means twelve (12) consecutive Months.

(ix)    "Effective Date" means the date of fulfillment of all conditions specified in Article 3 (Effective Date for Determining Time for Achieving Operational Acceptance) of the Contract Agreement, for the purpose of determining the Delivery, Installation, and Operational Acceptance dates for the System or Subsystem(s).

(x)     "Contract Period" is the time period during which this Contract governs the relations and obligations of the Purchaser and Supplier in relation to the System, as **specified in the SCC.**

(xi)    "Defect Liability Period" (also referred to as the "Warranty Period") means the period of validity of the warranties given by the Supplier commencing at date of the Operational Acceptance Certificate of the System or Subsystem(s), during which the Supplier is responsible for defects with respect to the System (or the relevant Subsystem[s]) as provided in GCC Clause 29 (Defect Liability).

(xii)   "The Post-Warranty Services Period" means the number of years **defined in the SCC** (if any), following the expiration of the Warranty Period during which the Supplier may be obligated to provide Software licenses, maintenance, and/or technical support services for the System, either under this Contract or under separate contract(s).

(xiii)  "The Coverage Period" means the Days of the Week and the hours of those Days during which maintenance, operational, and/or technical support services (if any) must be available.

**2. Contract Documents**

2.1 Subject to Article 1.2 (Order of Precedence) of the Contract Agreement, all documents forming part of the Contract (and all parts of these documents) are intended to be correlative, complementary, and mutually explanatory. The Contract shall be read as a whole.

**3. Interpretation**

3.1 Governing Language

    3.1.1 All Contract Documents and related correspondence exchanged between Purchaser and Supplier shall be written in the language **specified in the SCC,** and the Contract shall be construed and interpreted in accordance with that language.

    3.1.2 If any of the Contract Documents or related correspondence are prepared in a language other than the governing language under GCC Clause 3.1.1 above, the translation of such documents into the governing language shall prevail in matters of interpretation. The originating party, with respect to such documents shall bear the costs and risks of such translation.

3.2 Singular and Plural
The singular shall include the plural and the plural the singular, except where the context otherwise requires.

3.3 Headings
The headings and marginal notes in the GCC are included for ease of reference and shall neither constitute a part of the Contract nor affect its interpretation.

3.4 Persons
Words importing persons or parties shall include firms, corporations, and government entities.

3.5 Incoterms
Unless inconsistent with any provision of the Contract, the meaning of any trade term and the rights and obligations of parties thereunder shall be as prescribed by the current Incoterms ("Incoterms 2000" or a more recent version if and as published). Incoterms are the international rules for interpreting trade terms published by the International Chamber of Commerce, 38 Cours Albert 1er, 75008 Paris, France.

3.6 Entire Agreement
The Contract constitutes the entire agreement between the Purchaser and Supplier with respect to the subject matter of Contract and supersedes all communications, negotiations, and agreements (whether written or oral) of parties with respect to the subject matter of the Contract made prior to the date of Contract.

3.7 Amendment
No amendment or other variation of the Contract shall be effective unless it is in writing, is dated, expressly refers to the Contract, and is signed by a duly authorized representative of each party to the Contract.

3.8 Independent Supplier
The Supplier shall be an independent contractor performing the Contract. The Contract does not create any agency, partnership, joint venture, or other joint relationship between the parties to the Contract. Subject to the provisions of the Contract, the Supplier shall be solely

responsible for the manner in which the Contract is performed. All employees, representatives, or Subcontractors engaged by the Supplier in connection with the performance of the Contract shall be under the complete control of the Supplier and shall not be deemed to be employees of the Purchaser, and nothing contained in the Contract or in any subcontract awarded by the Supplier shall be construed to create any contractual relationship between any such employees, representatives, or Subcontractors and the Purchaser.

3.9     Joint Venture
If the Supplier is a Joint Venture of two or more firms, all such firms shall be jointly and severally bound to the Purchaser for the fulfillment of the provisions of the Contract and shall designate one of such firms to act as a leader with authority to bind the Joint Venture. The composition or constitution of the Joint Venture shall not be altered without the prior consent of the Purchaser.

3.10    Nonwaiver
3.10.1  Subject to GCC Clause 3.10.2 below, no relaxation, forbearance, delay, or indulgence by either party in enforcing any of the terms and conditions of the Contract or the granting of time by either party to the other shall prejudice, affect, or restrict the rights of that party under the Contract, nor shall any waiver by either party of any breach of Contract operate as waiver of any subsequent or continuing breach of Contract.
3.10.2  Any waiver of a party's rights, powers, or remedies under the Contract must be in writing, must be dated and signed by an authorized representative of the party granting such waiver, and must specify the right and the extent to which it is being waived.

3.11    Severability
If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable, such prohibition, invalidity, or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.

3.12    Country of Origin
"Origin" means the place where the Information Technologies, Materials, and other Goods for the System were produced or from which the Services are supplied. Goods are produced when, through manufacturing, processing, Software development, or substantial and major assembly or integration of components, a commercially recognized product results that is substantially different in basic characteristics or in purpose or utility from its components. The Origin of Goods and Services is distinct from the nationality of the Supplier and may be different.

**4. Notices**     4.1     Unless otherwise stated in the Contract, all notices to be given under the Contract shall be in writing and shall be sent, pursuant to GCC Clause 4.3 below, by personal delivery, airmail post, special courier, cable, telegraph, telex, facsimile, electronic mail, or Electronic Data Interchange (EDI), with the following provisions.
4.1.1   Any notice sent by cable, telegraph, telex, facsimile, electronic mail, or EDI shall be confirmed within two (2) days after dispatch

by notice sent by airmail post or special courier, except as otherwise specified in the Contract.

4.1.2 Any notice sent by airmail post or special courier shall be deemed (in the absence of evidence of earlier receipt) to have been delivered ten (10) days after dispatch.  In proving the fact of dispatch, it shall be sufficient to show that the envelope containing such notice was properly addressed, stamped, and conveyed to the postal authorities or courier service for transmission by airmail or special courier.

4.1.3 Any notice delivered personally or sent by cable, telegraph, telex, facsimile, electronic mail, or EDI shall be deemed to have been delivered on the date of its dispatch.

4.1.4 Either party may change its postal, cable, telex, facsimile, electronic mail, or EDI addresses for receipt of such notices by ten (10) days' notice to the other party in writing.

4.2 Notices shall be deemed to include any approvals, consents, instructions, orders, certificates, information and other communication to be given under the Contract.

4.3 Pursuant to GCC Clause 18, notices from/to the Purchaser are normally given by, or addressed to, the Project Manager, while notices from/to the Supplier are normally given by, or addressed to, the Supplier's Representative, or in its absence its deputy if any. If there is no appointed Project Manager or Supplier's Representative (or deputy), or if their related authority is limited by the SCC for GCC Clauses 18.1 or 18.2.2, or for any other reason, the Purchaser or Supplier may give and receive notices at their fallback addresses.  The address of the Project Manager and the fallback address of the Purchaser are as **specified in the SCC** or as subsequently established/amended.  The address of the Supplier's Representative and the fallback address of the Supplier are as specified in Appendix 1 of the Contract Agreement or as subsequently established/amended.

**5. Governing Law**

5.1 The Contract shall be governed by and interpreted in accordance with the laws of the country specified in the SCC.

**6. Settlement of Disputes**

6.1 Adjudication

6.1.1 If any dispute of any kind whatsoever shall arise between the Purchaser and the Supplier in connection with or arising out of the Contract, including without prejudice to the generality of the foregoing, any question regarding its existence, validity, or termination, or the operation of the System (whether during the progress of implementation or after its achieving Operational Acceptance and whether before or after the termination, abandonment, or breach of the Contract), the parties shall seek to resolve any such dispute by mutual consultation.  If the parties fail to resolve such a dispute by mutual consultation within fourteen (14) days after one party has notified the other in writing of the dispute, then, if the Contract Agreement in Appendix 2 includes and names an Adjudicator, the dispute shall, within another fourteen (14) days, be referred in writing by either party to the Adjudicator, with a copy to the other party.  If there is no Adjudicator specified in the Contract Agreement, the mutual

consultation period stated above shall last twenty-eight (28) days (instead of fourteen), upon expiry of which either party may move to the notification of arbitration pursuant to GCC Clause 6.2.1.

6.1.2 The Adjudicator shall give his or her decision in writing to both parties within twenty-eight (28) days of the dispute being referred to the Adjudicator. If the Adjudicator has done so, and no notice of intention to commence arbitration has been given by either the Purchaser or the Supplier within fifty-six (56) days of such reference, the decision shall become final and binding upon the Purchaser and the Supplier. Any decision that has become final and binding shall be implemented by the parties forthwith.

6.1.3 The Adjudicator shall be paid an hourly fee at the rate specified in the Contract Agreement plus reasonable expenditures incurred in the execution of duties as Adjudicator, and these costs shall be divided equally between the Purchaser and the Supplier.

6.1.4 Should the Adjudicator resign or die, or should the Purchaser and the Supplier agree that the Adjudicator is not fulfilling his or her functions in accordance with the provisions of the Contract, a new Adjudicator shall be jointly appointed by the Purchaser and the Supplier. Failing agreement between the two within twenty-eight (28) days, the new Adjudicator shall be appointed at the request of either party by the Appointing Authority **specified in the SCC,** or, if no Appointing Authority is **specified in SCC,** the Contract shall, from this point onward and until the parties may otherwise agree on an Adjudicator or an Appointing Authority, be implemented as if there is no Adjudicator.

6.2 Arbitration

6.2.1 If

(a) the Purchaser or the Supplier is dissatisfied with the Adjudicator's decision and acts before this decision has become final and binding pursuant to GCC Clause 6.1.2, or

(b) the Adjudicator fails to give a decision within the allotted time from referral of the dispute pursuant to GCC Clause 6.1.2, and the Purchaser or the Supplier acts within the following fourteen (14) days, or

(c) in the absence of an Adjudicator from the Contract Agreement, the mutual consultation pursuant to GCC Clause 6.1.1 expires without resolution of the dispute and the Purchaser or the Supplier acts within the following fourteen (14) days,

then either the Purchaser or the Supplier may act to give notice to the other party, with a copy for information to the Adjudicator in case an Adjudicator had been involved, of its intention to commence arbitration, as provided below, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given.

6.2.2 Any dispute in respect of which a notice of intention to commence arbitration has been given, in accordance with GCC Clause 6.2.1, shall be finally settled by arbitration. Arbitration may be commenced prior to or after Installation of the Information System.

6.2.3 Arbitration proceedings shall be conducted in accordance with the rules of procedure **specified in the SCC.**

6.3    Notwithstanding any reference to the Adjudicator or arbitration in this clause,

(a)    the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree;

(b)    the Purchaser shall pay the Supplier any monies due the Supplier.

## B. SUBJECT MATTER OF CONTRACT

**7. Scope of the System**

7.1    Unless otherwise expressly **limited in the SCC** or Technical Requirements, the Supplier's obligations cover the provision of all Information Technologies, Materials and other Goods as well as the performance of all Services required for the design, development, and implementation (including procurement, quality assurance, assembly, associated site preparation, Delivery, Pre-commissioning, Installation, Testing, and Commissioning) of the System, in accordance with the plans, procedures, specifications, drawings, codes, and any other documents specified in the Contract and the Agreed and Finalized Project Plan.

7.2    The Supplier shall, unless specifically excluded in the Contract, perform all such work and / or supply all such items and Materials not specifically mentioned in the Contract but that can be reasonably inferred from the Contract as being required for attaining Operational Acceptance of the System as if such work and / or items and Materials were expressly mentioned in the Contract.

7.3    The Supplier's obligations (if any) to provide Goods and Services as implied by the Recurrent Cost tables of the Supplier's bid, such as consumables, spare parts, and technical services (e.g., maintenance, technical assistance, and operational support), are as **specified in the SCC,** including the relevant terms, characteristics, and timings.

**8. Time for Commencement and Operational Acceptance**

8.1    The Supplier shall commence work on the System within the period **specified in the SCC,** and without prejudice to GCC Clause 28.2, the Supplier shall thereafter proceed with the System in accordance with the time schedule specified in the Implementation Schedule in the Technical Requirements Section and any refinements made in the Agreed and Finalized Project Plan.

8.2    The Supplier shall achieve Operational Acceptance of the System (or Subsystem(s) where a separate time for Operational Acceptance of such Subsystem(s) is specified in the Contract) within the time **specified in the SCC** and in accordance with the time schedule specified in the Implementation Schedule in the Technical Requirements Section and any refinements made in the Agreed and Finalized Project Plan, or within such extended time to which the Supplier shall be entitled under GCC Clause 40 (Extension of Time for Achieving Operational Acceptance).

**9. Supplier's Responsibilities**

9.1    The Supplier shall conduct all activities with due care and diligence, in accordance with the Contract and with the skill and care expected of a competent provider of information

technologies, information systems, support, maintenance, training, and other related services, or in accordance with best industry practices. In particular, the Supplier shall provide and employ only technical personnel who are skilled and experienced in their respective callings and supervisory staff who are competent to adequately supervise the work at hand.

9.2     The Supplier confirms that it has entered into this Contract on the basis of a proper examination of the data relating to the System provided by the Purchaser and on the basis of information that the Supplier could have obtained from a visual inspection of the site (if access to the site was available) and of other data readily available to the Supplier relating to the System as at the date twenty-eight (28) days prior to bid submission. The Supplier acknowledges that any failure to acquaint itself with all such data and information shall not relieve its responsibility for properly estimating the difficulty or cost of successfully performing the Contract.

9.3     The Supplier shall be responsible for timely provision of all resources, information, and decision making under its control that are necessary to reach a mutually Agreed and Finalized Project Plan (pursuant to GCC Clause 19.2) within the time schedule specified in the Implementation Schedule in the Technical Requirements Section. Failure to provide such resources, information, and decision making may constitute grounds for termination pursuant to GCC Clause 41.2.

9.4     The Supplier shall acquire in its name all permits, approvals, and/or licenses from all local, state, or national government authorities or public service undertakings in the Purchaser's Country that are necessary for the performance of the Contract, including, without limitation, visas for the Supplier's and Subcontractor's personnel and entry permits for all imported Supplier's Equipment. The Supplier shall acquire all other permits, approvals, and/or licenses that are not the responsibility of the Purchaser under GCC Clause 10.4 and that are necessary for the performance of the Contract.

9.5     The Supplier shall comply with all laws in force in the Purchaser's Country. The laws will include all national, provincial, municipal, or other laws that affect the performance of the Contract and are binding upon the Supplier. The Supplier shall indemnify and hold harmless the Purchaser from and against any and all liabilities, damages, claims, fines, penalties, and expenses of whatever nature arising or resulting from the violation of such laws by the Supplier or its personnel, including the Subcontractors and their personnel, but without prejudice to GCC Clause 10.1. The Supplier shall not indemnify the Purchaser to the extent that such liability, damage, claims, fines, penalties, and expenses were caused or contributed to by a fault of the Purchaser.

9.6     The Supplier shall, in all dealings with its labor and the labor of its Subcontractors currently employed on or connected with the Contract, pay due regard to all recognized festivals, official

holidays, religious or other customs, and all local laws and regulations pertaining to the employment of labor.

9.7    Any Information Technologies or other Goods and Services that will be incorporated in or be required for the System and other supplies shall have their Origin, as defined in GCC Clause 3.12, in a country that shall be an Eligible Country, as defined in GCC Clause 1.1 (e) (iv).

9.8    The Supplier shall permit the Bank and/or persons appointed by the Bank to inspect the Supplier's offices and/or the accounts and records of the Supplier and its sub-contractors relating to the performance of the Contract, and to have such accounts and records audited by auditors appointed by the Bank if required by the Bank. The Supplier's attention is drawn to Sub-Clause 41.2.1(c), which provides, inter alia, that acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under Sub-Clause 9.8 constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility under the Procurement Guidelines).

9.9    Other Supplier responsibilities, if any, are as **stated in the SCC.**

**10. Purchaser's Responsibilities**

10.1    The Purchaser shall ensure the accuracy of all information and/or data to be supplied by the Purchaser to the Supplier, except when otherwise expressly stated in the Contract.

10.2    The Purchaser shall be responsible for timely provision of all resources, information, and decision making under its control that are necessary to reach an Agreed and Finalized Project Plan (pursuant to GCC Clause 19.2) within the time schedule specified in the Implementation Schedule in the Technical Requirements Section. Failure to provide such resources, information, and decision making may constitute grounds for Termination pursuant to GCC Clause 41.3.1 (b).

10.3    The Purchaser shall be responsible for acquiring and providing legal and physical possession of the site and access to it, and for providing possession of and access to all other areas reasonably required for the proper execution of the Contract.

10.4    If requested by the Supplier, the Purchaser shall use its best endeavors to assist the Supplier in obtaining in a timely and expeditious manner all permits, approvals, and/or licenses necessary for the execution of the Contract from all local, state, or national government authorities or public service undertakings that such authorities or undertakings require the Supplier or Subcontractors or the personnel of the Supplier or Subcontractors, as the case may be, to obtain.

10.5    In such cases where the responsibilities of specifying and acquiring or upgrading telecommunications and/or electric power services falls to the Supplier, as specified in the Technical Requirements, SCC, Agreed and Finalized Project Plan, or other parts of the Contract, the Purchaser shall use its best endeavors to

assist the Supplier in obtaining such services in a timely and expeditious manner.

10.6 The Purchaser shall be responsible for timely provision of all resources, access, and information necessary for the Installation and Operational Acceptance of the System (including, but not limited to, any required telecommunications or electric power services), as identified in the Agreed and Finalized Project Plan, except where provision of such items is explicitly identified in the Contract as being the responsibility of the Supplier. Delay by the Purchaser may result in an appropriate extension of the Time for Operational Acceptance, at the Supplier's discretion.

10.7 Unless otherwise specified in the Contract or agreed upon by the Purchaser and the Supplier, the Purchaser shall provide sufficient, properly qualified operating and technical personnel, as required by the Supplier to properly carry out Delivery, Pre-commissioning, Installation, Commissioning, and Operational Acceptance, at or before the time specified in the Technical Requirements Section's Implementation Schedule and the Agreed and Finalized Project Plan.

10.8 The Purchaser will designate appropriate staff for the training courses to be given by the Supplier and shall make all appropriate logistical arrangements for such training as specified in the Technical Requirements, SCC, the Agreed and Finalized Project Plan, or other parts of the Contract.

10.9 The Purchaser assumes primary responsibility for the Operational Acceptance Test(s) for the System, in accordance with GCC Clause 27.2, and shall be responsible for the continued operation of the System after Operational Acceptance. However, this shall not limit in any way the Supplier's responsibilities after the date of Operational Acceptance otherwise specified in the Contract.

10.10 The Purchaser is responsible for performing and safely storing timely and regular backups of its data and Software in accordance with accepted data management principles, except where such responsibility is clearly assigned to the Supplier elsewhere in the Contract.

10.11 All costs and expenses involved in the performance of the obligations under this GCC Clause 10 shall be the responsibility of the Purchaser, save those to be incurred by the Supplier with respect to the performance of the Operational Acceptance Test(s), in accordance with GCC Clause 27.2.

10.12 Other Purchaser responsibilities, if any, are **as stated in the SCC.**

### C. PAYMENT

| 11. Contract Price | 11.1 | The Contract Price shall be as specified in Article 2 (Contract Price and Terms of Payment) of the Contract Agreement. |
|---|---|---|

11.2    The Contract Price shall be a firm lump sum not subject to any alteration, except:

      (a)    in the event of a Change in the System pursuant to GCC Clause 39 or to other clauses in the Contract;

      (b)    in accordance with the price adjustment formula (if any) **specified in the SCC.**

11.3    The Supplier shall be deemed to have satisfied itself as to the correctness and sufficiency of the Contract Price, which shall, except as otherwise provided for in the Contract, cover all its obligations under the Contract.

**12. Terms of Payment**

12.1    The Supplier's request for payment shall be made to the Purchaser in writing, accompanied by an invoice describing, as appropriate, the System or Subsystem(s), Delivered, Pre-commissioned, Installed, and Operationally Accepted, and by documents submitted pursuant to GCC Clause 22.5 and upon fulfillment of other obligations stipulated in the Contract.
The Contract Price shall be paid as **specified in the SCC.**

12.2    No payment made by the Purchaser herein shall be deemed to constitute acceptance by the Purchaser of the System or any Subsystem(s).

12.3    Payments shall be made promptly by the Purchaser, but in no case later than forty five (45) days after submission of a valid invoice by the Supplier. In the event that the Purchaser fails to make any payment by its respective due date or within the period set forth in the Contract, the Purchaser shall pay to the Supplier interest on the amount of such delayed payment at the rate(s) **specified in the SCC** for the period of delay until payment has been made in full, whether before or after judgment or arbitration award.

12.4    All payments shall be made in the currency(ies) specified in the Contract Agreement, pursuant to GCC Clause 11.  For Goods and Services supplied locally, payments shall be made in the currency of the Purchaser's Country, unless otherwise **specified in the SCC.**

12.5    Unless otherwise **specified in the SCC,** payment of the foreign currency portion of the Contract Price for Goods supplied from outside the Purchaser's Country shall be made to the Supplier through an irrevocable letter of credit opened by an authorized bank in the Supplier's Country and will be payable on presentation of the appropriate documents.  It is agreed that the letter of credit will be subject to Article 10 of the latest revision of Uniform Customs and Practice for Documentary Credits, published by the International Chamber of Commerce, Paris.

**13. Securities**

13.1    Issuance of Securities
The Supplier shall provide the securities specified below in favor of the Purchaser at the times and in the amount, manner, and form specified below.

13.2 Advance Payment Security

    13.2.1 As **specified in the SCC,** the Supplier shall provide a security equal in amount and currency to the advance payment, and valid until the System is Operationally Accepted.

    13.2.2 The security shall be in the form provided in the Bidding Documents or in another form acceptable to the Purchaser. The amount of the security shall be reduced in proportion to the value of the System executed by and paid to the Supplier from time to time and shall automatically become null and void when the full amount of the advance payment has been recovered by the Purchaser. The way the value of the security is deemed to become reduced and, eventually, voided is as **specified in the SCC.** The security shall be returned to the Supplier immediately after its expiration.

13.3 Performance Security

    13.3.1 The Supplier shall, within twenty-eight (28) days of the notification of Contract award, provide a security for the due performance of the Contract in the amount and currency **specified in the SCC.**

    13.3.2 The security shall be a bank guarantee in the form provided in the Sample Forms Section of the Bidding Documents, or it shall be in another form acceptable to the Purchaser.

    13.3.3 The security shall automatically become null and void once all the obligations of the Supplier under the Contract have been fulfilled, including, but not limited to, any obligations during the Warranty Period and any extensions to the period. The security shall be returned to the Supplier no later than twenty-eight (28) days after its expiration.

    13.3.4 Upon Operational Acceptance of the entire System, the security shall be reduced to the amount **specified in the SCC,** on the date of such Operational Acceptance, so that the reduced security would only cover the remaining warranty obligations of the Supplier.

**14. Taxes and Duties**

14.1 For Goods or Services supplied from outside the Purchaser's country, the Supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the Purchaser's country. Any duties, such as importation or customs duties, and taxes and other levies, payable in the Purchaser's country for the supply of Goods and Services from outside the Purchaser's country are the responsibility of the Purchaser unless these duties or taxes have been made part of the Contract Price in Article 2 of the Contract Agreement and the Price Schedule it refers to, in which case the duties and taxes will be the Supplier's responsibility.

14.2 For Goods or Services supplied locally, the Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted Goods or Services to the Purchaser. The only exception are taxes or duties, such as value-added or sales tax or stamp duty as apply to, or are clearly identifiable, on the invoices and provided they apply in the Purchaser's country, and only if these taxes, levies and/or duties

are also excluded from the Contract Price in Article 2 of the Contract Agreement and the Price Schedule it refers to.

14.3    If any tax exemptions, reductions, allowances, or privileges may be available to the Supplier in the Purchaser's Country, the Purchaser shall use its best efforts to enable the Supplier to benefit from any such tax savings to the maximum allowable extent.

14.4    For the purpose of the Contract, it is agreed that the Contract Price specified in Article 2 (Contract Price and Terms of Payment) of the Contract Agreement is based on the taxes, duties, levies, and charges prevailing at the date twenty-eight (28) days prior to the date of bid submission in the Purchaser's Country (also called "Tax" in this GCC Clause 14.4).  If any Tax rates are increased or decreased, a new Tax is introduced, an existing Tax is abolished, or any change in interpretation or application of any Tax occurs in the course of the performance of the Contract, which was or will be assessed on the Supplier, its Subcontractors, or their employees in connection with performance of the Contract, an equitable adjustment to the Contract Price shall be made to fully take into account any such change by addition to or reduction from the Contract Price, as the case may be.

## D.  INTELLECTUAL PROPERTY

**15. Copyright**

15.1    The Intellectual Property Rights in all Standard Software and Standard Materials shall remain vested in the owner of such rights.

15.2    The Purchaser agrees to restrict use, copying, or duplication of the Standard Software and Standard Materials in accordance with GCC Clause 16, except that additional copies of Standard Materials may be made by the Purchaser for use within the scope of the project of which the System is a part, in the event that the Supplier does not deliver copies within thirty (30) days from receipt of a request for such Standard Materials.

15.3    The Purchaser's contractual rights to use the Standard Software or elements of the Standard Software may not be assigned, licensed, or otherwise transferred voluntarily except in accordance with the relevant license agreement or as may be otherwise **specified in the SCC.**

15.4    As applicable, the Purchaser's and Supplier's rights and obligations with respect to Custom Software or elements of the Custom Software, including any license agreements, and with respect to Custom Materials or elements of the Custom Materials, are specified in the SCC.  **Subject to the SCC,** the Intellectual Property Rights in all Custom Software and Custom Materials specified in Appendices 4 and 5 of the Contract Agreement (if any) shall, at the date of this Contract or on creation of the rights (if later than the date of this Contract), vest in the Purchaser. The Supplier shall do and execute or arrange for the doing and executing of each necessary act, document, and thing that the Purchaser may consider necessary or desirable to perfect the right, title, and interest of the Purchaser in and to those rights.  In respect

of such Custom Software and Custom Materials, the Supplier shall ensure that the holder of a moral right in such an item does not assert it, and the Supplier shall, if requested to do so by the Purchaser and where permitted by applicable law, ensure that the holder of such a moral right waives it.

15.5   The parties shall enter into such (if any) escrow arrangements in relation to the Source Code to some or all of the Software as are **specified in the SCC** and in **accordance with the SCC.**

**16. Software License Agreements**

16.1   Except to the extent that the Intellectual Property Rights in the Software vest in the Purchaser, the Supplier hereby grants to the Purchaser license to access and use the Software, including all inventions, designs, and marks embodied in the Software.
Such license to access and use the Software shall:

(a)   be:
(i)    nonexclusive;
(ii)   fully paid up and irrevocable (except that it shall terminate if the Contract terminates under GCC Clauses 41.1 or 41.3);
(iii)  valid throughout the territory of the Purchaser's Country (or such other territory as **specified in the SCC);** and
(iv)   subject to additional restrictions (if any) as **specified in the SCC.**

(b)   permit the Software to be:
(i)    used or copied for use on or with the computer(s) for which it was acquired (if specified in the Technical Requirements and/or the Supplier's bid), plus a backup computer(s) of the same or similar capacity, if the primary is(are) inoperative, and during a reasonable transitional period when use is being transferred between primary and backup;
(ii)   as **specified in the SCC,** used or copied for use on or transferred to a replacement computer(s), (and use on the original and replacement computer(s) may be simultaneous during a reasonable transitional period) provided that, if the Technical Requirements and/or the Supplier's bid specifies a class of computer to which the license is restricted and unless the Supplier agrees otherwise in writing, the replacement computer(s) is(are) within that class;
(iii)  if the nature of the System is such as to permit such access, accessed from other computers connected to the primary and/or backup computer(s) by means of a local or wide-area network or similar arrangement, and used on or copied for use on those other computers to the extent necessary to that access;
(iv)   reproduced for safekeeping or backup purposes;
(v)    customized, adapted, or combined with other computer software for use by the Purchaser, provided that derivative software incorporating any substantial part of the delivered, restricted Software shall be subject to same restrictions as are set forth in this Contract;

(vi)     as **specified in the SCC,** disclosed to, and reproduced for use by, support service suppliers and their subcontractors, (and the Purchaser may sublicense such persons to use and copy for use the Software) to the extent reasonably necessary to the performance of their support service contracts, subject to the same restrictions as are set forth in this Contract; and

(vii)    disclosed to, and reproduced for use by, the Purchaser and by such other persons as are **specified in the SCC** (and the Purchaser may sublicense such persons to use and copy for use the Software), subject to the same restrictions as are set forth in this Contract.

16.2   The Standard Software may be subject to audit by the Supplier, in accordance with the terms **specified in the SCC,** to verify compliance with the above license agreements.

**17. Confidential Information**

17.1   Except if otherwise **specified in the SCC,** the "Receiving Party" (either the Purchaser or the Supplier) shall keep confidential and shall not, without the written consent of the other party to this Contract ("the Disclosing Party"), divulge to any third party any documents, data, or other information of a confidential nature ("Confidential Information") connected with this Contract, and furnished directly or indirectly by the Disclosing Party prior to or during performance, or following termination, of this Contract.

17.2   For the purposes of GCC Clause 17.1, the Supplier is also deemed to be the Receiving Party of Confidential Information generated by the Supplier itself in the course of the performance of its obligations under the Contract and relating to the businesses, finances, suppliers, employees, or other contacts of the Purchaser or the Purchaser's use of the System.

17.3   Notwithstanding GCC Clauses 17.1 and 17.2:
(a)     the Supplier may furnish to its Subcontractor Confidential Information of the Purchaser to the extent reasonably required for the Subcontractor to perform its work under the Contract; and
(b)     the Purchaser may furnish Confidential Information of the Supplier: (i) to its support service suppliers and their subcontractors to the extent reasonably required for them to perform their work under their support service contracts; and (ii) to its affiliates and subsidiaries,
in which event the Receiving Party shall ensure that the person to whom it furnishes Confidential Information of the Disclosing Party is aware of and abides by the Receiving Party's obligations under this GCC Clause 17 as if that person were party to the Contract in place of the Receiving Party.

17.4   The Purchaser shall not, without the Supplier's prior written consent, use any Confidential Information received from the Supplier for any purpose other than the operation, maintenance and further development of the System. Similarly, the Supplier shall not, without the Purchaser's prior written consent, use any Confidential Information received from the Purchaser for any

purpose other than those that are required for the performance of the Contract.

17.5 The obligation of a party under GCC Clauses 17.1 through 17.4 above, however, shall not apply to that information which:
   (a)   now or hereafter enters the public domain through no fault of the Receiving Party;
   (b)   can be proven to have been possessed by the Receiving Party at the time of disclosure and that was not previously obtained, directly or indirectly, from the Disclosing Party;
   (c)   otherwise lawfully becomes available to the Receiving Party from a third party that has no obligation of confidentiality.

17.6 The above provisions of this GCC Clause 17 shall not in any way modify any undertaking of confidentiality given by either of the parties to this Contract prior to the date of the Contract in respect of the System or any part thereof.

17.7 The provisions of this GCC Clause 17 shall survive the termination, for whatever reason, of the Contract for three (3) years or such longer period as may be **specified in the SCC.**

## E.  SUPPLY, INSTALLATION, TESTING, COMMISSIONING, AND ACCEPTANCE OF THE SYSTEM

| **18. Representatives** | 18.1 Project Manager<br>If the Project Manager is not named in the Contract, then within fourteen (14) days of the Effective Date, the Purchaser shall appoint and notify the Supplier in writing of the name of the Project Manager.  The Purchaser may from time to time appoint some other person as the Project Manager in place of the person previously so appointed and shall give a notice of the name of such other person to the Supplier without delay.  No such appointment shall be made at such a time or in such a manner as to impede the progress of work on the System.  Such appointment shall take effect only upon receipt of such notice by the Supplier.  Subject to the extensions and/or limitations **specified in the SCC** (if any), the Project Manager shall have the authority to represent the Purchaser on all day-to-day matters relating to the System or arising from the Contract, and shall normally be the person giving or receiving notices on behalf of the Purchaser pursuant to GCC Clause 4. |
| --- | --- |
| | 18.2 Supplier's Representative<br>18.2.1 If the Supplier's Representative is not named in the Contract, then within fourteen (14) days of the Effective Date, the Supplier shall appoint the Supplier's Representative and shall request the Purchaser in writing to approve the person so appointed.  The request must be accompanied by a detailed curriculum vitae for the nominee, as well as a description of any other System or non-System responsibilities the nominee would retain while performing the duties of the Supplier's Representative.  If the Purchaser does not object to the appointment within fourteen (14) days, the Supplier's Representative shall be deemed to have been approved.  If |

the Purchaser objects to the appointment within fourteen (14) days giving the reason therefor, then the Supplier shall appoint a replacement within fourteen (14) days of such objection in accordance with this GCC Clause 18.2.1.

18.2.2 Subject to the extensions and/or limitations **specified in the SCC** (if any), the Supplier's Representative shall have the authority to represent the Supplier on all day-to-day matters relating to the System or arising from the Contract, and shall normally be the person giving or receiving notices on behalf of the Supplier pursuant to GCC Clause 4.

18.2.3 The Supplier shall not revoke the appointment of the Supplier's Representative without the Purchaser's prior written consent, which shall not be unreasonably withheld. If the Purchaser consents to such an action, the Supplier shall appoint another person of equal or superior qualifications as the Supplier's Representative, pursuant to the procedure set out in GCC Clause 18.2.1.

18.2.4 The Supplier's Representative and staff are obliged to work closely with the Purchaser's Project Manager and staff, act within their own authority, and abide by directives issued by the Purchaser that are consistent with the terms of the Contract. The Supplier's Representative is responsible for managing the activities of its personnel and any subcontracted personnel.

18.2.5 The Supplier's Representative may, subject to the approval of the Purchaser (which shall not be unreasonably withheld), at any time delegate to any person any of the powers, functions, and authorities vested in him or her. Any such delegation may be revoked at any time. Any such delegation or revocation shall be subject to a prior notice signed by the Supplier's Representative and shall specify the powers, functions, and authorities thereby delegated or revoked. No such delegation or revocation shall take effect unless and until the notice of it has been delivered.

18.2.6 Any act or exercise by any person of powers, functions and authorities so delegated to him or her in accordance with GCC Clause 18.2.5 shall be deemed to be an act or exercise by the Supplier's Representative.

18.3   Objections and Removals

18.3.1 The Purchaser may by notice to the Supplier object to any representative or person employed by the Supplier in the execution of the Contract who, in the reasonable opinion of the Purchaser, may have behaved inappropriately, be incompetent, or be negligent. The Purchaser shall provide evidence of the same, whereupon the Supplier shall remove such person from work on the System.

18.3.2 If any representative or person employed by the Supplier is removed in accordance with GCC Clause 18.3.1, the Supplier shall, where required, promptly appoint a replacement.

**19. Project Plan**   19.1   In close cooperation with the Purchaser and based on the Preliminary Project Plan included in the Supplier's bid, the Supplier shall develop a Project Plan encompassing the activities specified in the Contract.  The contents of the Project Plan shall be as **specified in the SCC** and/or Technical Requirements.

19.2   The Supplier shall formally present to the Purchaser the Project Plan in accordance with the procedure specified in the SCC.

19.3 If required, the impact on the Implementation Schedule of modifications agreed during finalization of the Agreed and Finalized Project Plan shall be incorporated in the Contract by amendment, in accordance with GCC Clauses 39 and 40.

19.4   The Supplier shall undertake to supply, install, test, and commission the System in accordance with the Agreed and Finalized Project Plan and the Contract.

19.5   The Progress and other reports **specified in the SCC** shall be prepared by the Supplier and submitted to the Purchaser in the format and frequency specified in the Technical Requirements.

**20. Subcontracting**   20.1   Appendix 3 (List of Approved Subcontractors) to the Contract Agreement specifies critical items of supply or services and a list of Subcontractors for each item that are considered acceptable by the Purchaser.  If no Subcontractors are listed for an item, the Supplier shall prepare a list of Subcontractors it considers qualified and wishes to be added to the list for such items. The Supplier may from time to time propose additions to or deletions from any such list.  The Supplier shall submit any such list or any modification to the list to the Purchaser for its approval in sufficient time so as not to impede the progress of work on the System.  The Purchaser shall not withhold such approval unreasonably.  Such approval by the Purchaser of a Subcontractor(s) shall not relieve the Supplier from any of its obligations, duties, or responsibilities under the Contract.

20.2   The Supplier may, at its discretion, select and employ Subcontractors for such critical items from those Subcontractors listed pursuant to GCC Clause 20.1.  If the Supplier wishes to employ a Subcontractor not so listed, or subcontract an item not so listed, it must seek the Purchaser's prior approval under GCC Clause 20.3.

20.3   For items for which pre-approved Subcontractor lists have not been specified in Appendix 3 to the Contract Agreement, the Supplier may employ such Subcontractors as it may select, provided: (i) the Supplier notifies the Purchaser in writing at least twenty-eight (28) days prior to the proposed mobilization date for such Subcontractor; and (ii) by the end of this period either the Purchaser has granted its approval in writing or fails to respond. The Supplier shall not engage any Subcontractor to which the Purchaser has objected in writing prior to the end of the notice period.  The absence of a written objection by the Purchaser during the above specified period shall constitute formal

acceptance of the proposed Subcontractor.  Except to the extent that it permits the deemed approval of the Purchaser of Subcontractors not listed in the Contract Agreement, nothing in this Clause, however, shall limit the rights and obligations of either the Purchaser or Supplier as they are specified in GCC Clauses 20.1 and 20.2, in the SCC, or in Appendix 3 of the Contract Agreement.

**21. Design and Engineering**

21.1  Technical Specifications and Drawings

21.1.1  The Supplier shall execute the basic and detailed design and the implementation activities necessary for successful installation of the System in compliance with the provisions of the Contract or, where not so specified, in accordance with good industry practice.
The Supplier shall be responsible for any discrepancies, errors or omissions in the specifications, drawings, and other technical documents that it has prepared, whether such specifications, drawings, and other documents have been approved by the Project Manager or not, provided that such discrepancies, errors, or omissions are not because of inaccurate information furnished in writing to the Supplier by or on behalf of the Purchaser.

21.1.2  The Supplier shall be entitled to disclaim responsibility for any design, data, drawing, specification, or other document, or any modification of such design, drawings, specification, or other documents provided or designated by or on behalf of the Purchaser, by giving a notice of such disclaimer to the Project Manager.

21.2  Codes and Standards
Wherever references are made in the Contract to codes and standards in accordance with which the Contract shall be executed, the edition or the revised version of such codes and standards current at the date twenty-eight (28) days prior to date of bid submission shall apply unless otherwise **specified in the SCC.** During Contract execution, any changes in such codes and standards shall be applied after approval by the Purchaser and shall be treated in accordance with GCC Clause 39.3.

21.3  Approval/Review of Technical Documents by the Project Manager

21.3.1  The Supplier shall prepare and furnish to the Project Manager the documents as **specified in the SCC** for the Project Manager's approval or review.
Any part of the System covered by or related to the documents to be approved by the Project Manager shall be executed only after the Project Manager's approval of these documents.
GCC Clauses 21.3.2 through 21.3.7 shall apply to those documents requiring the Project Manager's approval, but not to those furnished to the Project Manager for its review only.

21.3.2  Within fourteen (14) days after receipt by the Project Manager of any document requiring the Project Manager's approval in accordance with GCC Clause 21.3.1, the Project Manager shall either return one copy of the

document to the Supplier with its approval endorsed on the document or shall notify the Supplier in writing of its disapproval of the document and the reasons for disapproval and the modifications that the Project Manager proposes. If the Project Manager fails to take such action within the fourteen (14) days, then the document shall be deemed to have been approved by the Project Manager.

21.3.3 The Project Manager shall not disapprove any document except on the grounds that the document does not comply with some specified provision of the Contract or that it is contrary to good industry practice.

21.3.4 If the Project Manager disapproves the document, the Supplier shall modify the document and resubmit it for the Project Manager's approval in accordance with GCC Clause 21.3.2. If the Project Manager approves the document subject to modification(s), the Supplier shall make the required modification(s), and the document shall then be deemed to have been approved, subject to GCC Clause 21.3.5. The procedure set out in GCC Clauses 21.3.2 through 21.3.4 shall be repeated, as appropriate, until the Project Manager approves such documents.

21.3.5 If any dispute occurs between the Purchaser and the Supplier in connection with or arising out of the disapproval by the Project Manager of any document and/or any modification(s) to a document that cannot be settled between the parties within a reasonable period, then, in case the Contract Agreement includes and names an Adjudicator, such dispute may be referred to the Adjudicator for determination in accordance with GCC Clause 6.1 (Adjudicator). If such dispute is referred to an Adjudicator, the Project Manager shall give instructions as to whether and if so, how, performance of the Contract is to proceed. The Supplier shall proceed with the Contract in accordance with the Project Manager's instructions, provided that if the Adjudicator upholds the Supplier's view on the dispute and if the Purchaser has not given notice under GCC Clause 6.1.2, then the Supplier shall be reimbursed by the Purchaser for any additional costs incurred by reason of such instructions and shall be relieved of such responsibility or liability in connection with the dispute and the execution of the instructions as the Adjudicator shall decide, and the Time for Achieving Operational Acceptance shall be extended accordingly.

21.3.6 The Project Manager's approval, with or without modification of the document furnished by the Supplier, shall not relieve the Supplier of any responsibility or liability imposed upon it by any provisions of the Contract except to the extent that any subsequent failure results from modifications required by the Project Manager or inaccurate information furnished in writing to the Supplier by or on behalf of the Purchaser.

21.3.7 The Supplier shall not depart from any approved document unless the Supplier has first submitted to the Project Manager an amended document and obtained the Project Manager's approval of the document, pursuant to the

provisions of this GCC Clause 21.3.  If the Project Manager requests any change in any already approved document and/or in any document based on such an approved document, the provisions of GCC Clause 39 (Changes to the System) shall apply to such request.

**22. Procurement, Delivery, and Transport**

22.1   Subject to related Purchaser's responsibilities pursuant to GCC Clauses 10 and 14, the Supplier shall manufacture or procure and transport all the Information Technologies, Materials, and other Goods in an expeditious and orderly manner to the Project Site.

22.2   Delivery of the Information Technologies, Materials, and other Goods shall be made by the Supplier in accordance with the Technical Requirements.

22.3   Early or partial deliveries require the explicit written consent of the Purchaser, which consent shall not be unreasonably withheld.

22.4   Transportation
22.4.1  The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during shipment.  The packing, marking, and documentation within and outside the packages shall comply strictly with the Purchaser's instructions to the Supplier.
22.4.2  The Supplier will bear responsibility for and cost of transport to the Project Sites in accordance with the terms and conditions used in the specification of prices in the Price Schedules, including the terms and conditions of the associated Incoterms.
22.4.3  Unless otherwise **specified in the SCC,** the Supplier shall be free to use transportation through carriers registered in any eligible country and to obtain insurance from any eligible source country.

22.5   Unless otherwise **specified in the SCC,** the Supplier will provide the Purchaser with shipping and other documents, as specified below:
22.5.1     For Goods supplied from outside the Purchaser's Country:
Upon shipment, the Supplier shall notify the Purchaser and the insurance company contracted by the Supplier to provide cargo insurance by telex, cable, facsimile, electronic mail, or EDI with the full details of the shipment.  The Supplier shall promptly send the following documents to the Purchaser by mail or courier, as appropriate, with a copy to the cargo insurance company:
(a)    two copies of the Supplier's invoice showing the description of the Goods, quantity, unit price, and total amount;
(b)    usual transportation documents;
(c)    insurance certificate;
(d)    certificate(s) of origin; and
(e)    estimated time and point of arrival in the Purchaser's Country and at the site.

22.5.2    For Goods supplied locally (i.e., from within the Purchaser's country):

Upon shipment, the Supplier shall notify the Purchaser by telex, cable, facsimile, electronic mail, or EDI with the full details of the shipment.  The Supplier shall promptly send the following documents to the Purchaser by mail or courier, as appropriate:

(a)    two copies of the Supplier's invoice showing the Goods' description, quantity, unit price, and total amount;

(b)    delivery note, railway receipt, or truck receipt;

(c)    certificate of insurance;

(d)    certificate(s) of origin; and

(e)    estimated time of arrival at the site.

22.6   Customs Clearance

(a)    The Purchaser will bear responsibility for, and cost of, customs clearance into the Purchaser's country in accordance the particular Incoterm(s) used for Goods supplied from outside the Purchaser's country in the Price Schedules referred to by Article 2 of the Contract Agreement.

(b)    At the request of the Purchaser, the Supplier will make available a representative or agent during the process of customs clearance in the Purchaser's country for goods supplied from outside the Purchaser's country.  In the event of delays in customs clearance that are not the fault of the Supplier:

(i)    the Supplier shall be entitled to an extension in the Time for Achieving Operational Acceptance, pursuant to GCC Clause 40;

(ii)    the Contract Price shall be adjusted to compensate the Supplier for any additional storage charges that the Supplier may incur as a result of the delay.

**23. Product Upgrades**    23.1   At any point during performance of the Contract, should technological advances be introduced by the Supplier for Information Technologies originally offered by the Supplier in its bid and still to be delivered, the Supplier shall be obligated to offer to the Purchaser the latest versions of the available Information Technologies having equal or better performance or functionality at the same or lesser unit prices, pursuant to GCC Clause 39 (Changes to the System).

23.2   At any point during performance of the Contract, for Information Technologies still to be delivered, the Supplier will also pass on to the Purchaser any cost reductions and additional and/or improved support and facilities that it offers to other clients of the Supplier in the Purchaser's Country, pursuant to GCC Clause 39 (Changes to the System).

23.3   During performance of the Contract, the Supplier shall offer to the Purchaser all new versions, releases, and updates of Standard Software, as well as related documentation and technical support services, within thirty (30) days of their availability from the

Supplier to other clients of the Supplier in the Purchaser's Country, and no later than twelve (12) months after they are released in the country of origin. In no case will the prices for these Software exceed those quoted by the Supplier in the Recurrent Costs tables in its bid.

23.4 During the Warranty Period, unless otherwise **specified in the SCC,** the Supplier will provide at no additional cost to the Purchaser all new versions, releases, and updates for all Standard Software that are used in the System, within thirty (30) days of their availability from the Supplier to other clients of the Supplier in the Purchaser's country, and no later than twelve (12) months after they are released in the country of origin of the Software.

23.5 The Purchaser shall introduce all new versions, releases or updates of the Software within eighteen (18) months of receipt of a production-ready copy of the new version, release, or update, provided that the new version, release, or update does not adversely affect System operation or performance or require extensive reworking of the System. In cases where the new version, release, or update adversely affects System operation or performance, or requires extensive reworking of the System, the Supplier shall continue to support and maintain the version or release previously in operation for as long as necessary to allow introduction of the new version, release, or update. In no case shall the Supplier stop supporting or maintaining a version or release of the Software less than twenty four (24) months after the Purchaser receives a production-ready copy of a subsequent version, release, or update. The Purchaser shall use all reasonable endeavors to implement any new version, release, or update as soon as practicable, subject to the twenty-four-month-long stop date.

**24. Implementation, Installation, and Other Services**

24.1 The Supplier shall provide all Services specified in the Contract and Agreed and Finalized Project Plan in accordance with the highest standards of professional competence and integrity.

24.2 Prices charged by the Supplier for Services, if not included in the Contract, shall be agreed upon in advance by the parties (including, but not restricted to, any prices submitted by the Supplier in the Recurrent Cost Schedules of its Bid) and shall not exceed the prevailing rates charged by the Supplier to other purchasers in the Purchaser's Country for similar services.

**25. Inspections and Tests**

25.1 The Purchaser or its representative shall have the right to inspect and/or test any components of the System, as specified in the Technical Requirements, to confirm their good working order and/or conformity to the Contract at the point of delivery and/or at the Project Site.

25.2 The Purchaser or its representative shall be entitled to attend any such inspections and/or tests of the components, provided that the Purchaser shall bear all costs and expenses incurred in connection with such attendance, including but not limited to all inspection agent fees, travel, and related expenses.

25.3 Should the inspected or tested components fail to conform to the Contract, the Purchaser may reject the component(s), and the Supplier shall either replace the rejected component(s), or make alterations as necessary so that it meets the Contract requirements free of cost to the Purchaser.

25.4 The Project Manager may require the Supplier to carry out any inspection and/or test not specified in the Contract, provided that the Supplier's reasonable costs and expenses incurred in the carrying out of such inspection and/or test shall be added to the Contract Price.  Further, if such inspection and/or test impedes the progress of work on the System and/or the Supplier's performance of its other obligations under the Contract, due allowance will be made in respect of the Time for Achieving Operational Acceptance and the other obligations so affected.

25.5 If any dispute shall arise between the parties in connection with or caused by an inspection and/or with regard to any component to be incorporated in the System that cannot be settled amicably between the parties within a reasonable period of time, either party may invoke the process pursuant to GCC Clause 6 (Settlement of Disputes), starting with referral of the matter to the Adjudicator in case an Adjudicator is included and named in the Contract Agreement.

**26. Installation of the System**

26.1 As soon as the System, or any Subsystem, has, in the opinion of the Supplier, been delivered, Pre-commissioned, and made ready for Commissioning and Operational Acceptance Testing in accordance with the Technical Requirements, the SCC and the Agreed and Finalized Project Plan, the Supplier shall so notify the Purchaser in writing.

26.2 The Project Manager shall, within fourteen (14) days after receipt of the Supplier's notice under GCC Clause 26.1, either issue an Installation Certificate in the form specified in the Sample Forms Section in the Bidding Documents, stating that the System, or major component or Subsystem (if Acceptance by major component or Subsystem is specified pursuant to the SCC for GCC Clause 27.2.1), has achieved Installation by the date of the Supplier's notice under GCC Clause 26.1, or notify the Supplier in writing of any defects and/or deficiencies, including, but not limited to, defects or deficiencies in the interoperability or integration of the various components and/or Subsystems making up the System.  The Supplier shall use all reasonable endeavors to promptly remedy any defect and/or deficiencies that the Project Manager has notified the Supplier of.  The Supplier shall then promptly carry out retesting of the System or Subsystem and, when in the Supplier's opinion the System or Subsystem is ready for Commissioning and Operational Acceptance Testing, notify the Purchaser in writing, in accordance with GCC Clause 26.1. The procedure set out in this GCC Clause 26.2 shall be repeated, as necessary, until an Installation Certificate is issued.

26.3 If the Project Manager fails to issue the Installation Certificate and fails to inform the Supplier of any defects and/or deficiencies

within fourteen (14) days after receipt of the Supplier's notice under GCC Clause 26.1, or if the Purchaser puts the System or a Subsystem into production operation, then the System (or Subsystem) shall be deemed to have achieved successful Installation as of the date of the Supplier's notice or repeated notice, or when the Purchaser put the System into production operation, as the case may be.

**27. Commissioning and Operational Acceptance**

27.1    Commissioning

27.1.1    Commissioning of the System (or Subsystem if specified pursuant to the SCC for GCC Clause 27.2.1) shall be commenced by the Supplier:

(a)    immediately after the Installation Certificate is issued by the Project Manager, pursuant to GCC Clause 26.2; or

(b)    as otherwise specified in the Technical Requirement or the Agreed and Finalized Project Plan; or

(c)    immediately after Installation is deemed to have occurred, under GCC Clause 26.3.

27.1.2    The Purchaser shall supply the operating and technical personnel and all materials and information reasonably required to enable the Supplier to carry out its obligations with respect to Commissioning.

Production use of the System or Subsystem(s) shall not commence prior to the start of formal Operational Acceptance Testing.

27.2    Operational Acceptance Tests

27.2.1    The Operational Acceptance  Tests (and repeats of such tests) shall be the primary responsibility of the Purchaser (in accordance with GCC Clause 10.9), but shall be conducted with the full cooperation of the Supplier during Commissioning of the System (or major components or Subsystem[s] if **specified in the SCC** and supported by the Technical Requirements), to ascertain whether the System (or major component or Subsystem[s]) conforms to the Technical Requirements and meets the standard of performance quoted in the Supplier's bid, including, but not restricted to, the functional and technical performance requirements.  The Operational Acceptance Tests during Commissioning will be conducted as **specified in the SCC,** the Technical Requirements and/or the Agreed and Finalized Project Plan.

At the Purchaser's discretion, Operational Acceptance Tests may also be performed on replacement Goods, upgrades and new version releases, and Goods that are added or field-modified after Operational Acceptance of the System.

27.2.2    If for reasons attributable to the Purchaser, the Operational Acceptance Test of the System (or Subsystem[s] or major components, pursuant to the SCC for GCC Clause 27.2.1) cannot be successfully completed within the period **specified in the SCC,** from the date of Installation or any other period agreed upon in writing by the Purchaser and the Supplier, the Supplier shall be deemed to have fulfilled

its obligations with respect to the technical and functional aspects of the Technical Specifications, SCC and/or the Agreed and Finalized Project Plan, and GCC Clause 28.2 and 28.3 shall not apply.

27.3    Operational Acceptance

27.3.1 Subject to GCC Clause 27.4 (Partial Acceptance) below, Operational Acceptance shall occur in respect of the System, when

(a)    the Operational Acceptance Tests, as specified in the Technical Requirements, and/or SCC and/or the Agreed and Finalized Project Plan have been successfully completed; or

(b)    the Operational Acceptance Tests have not been successfully completed or have not been carried out for reasons that are attributable to the Purchaser within the period from the date of Installation or any other agreed-upon period as specified in GCC Clause 27.2.2 above; or

(c)    the Purchaser has put the System into production or use for sixty (60) consecutive days. If the System is put into production or use in this manner, the Supplier shall notify the Purchaser and document such use.

27.3.2 At any time after any of the events set out in GCC Clause 27.3.1 have occurred, the Supplier may give a notice to the Project Manager requesting the issue of an Operational Acceptance Certificate.

27.3.3 After consultation with the Purchaser, and within fourteen (14) days after receipt of the Supplier's notice, the Project Manager shall:

(a)    issue an Operational Acceptance Certificate; or

(b)    notify the Supplier in writing of any defect or deficiencies or other reason for the failure of the Operational Acceptance Tests; or

(c)    issue the Operational Acceptance Certificate, if the situation covered by GCC Clause 27.3.1 (b) arises.

27.3.4 The Supplier shall use all reasonable endeavors to promptly remedy any defect and/or deficiencies and/or other reasons for the failure of the Operational Acceptance Test that the Project Manager has notified the Supplier of. Once such remedies have been made by the Supplier, the Supplier shall notify the Purchaser, and the Purchaser, with the full cooperation of the Supplier, shall use all reasonable endeavors to promptly carry out retesting of the System or Subsystem. Upon the successful conclusion of the Operational Acceptance Tests, the Supplier shall notify the Purchaser of its request for Operational Acceptance Certification, in accordance with GCC Clause 27.3.3. The Purchaser shall then issue to the Supplier the Operational Acceptance Certification in accordance with GCC Clause 27.3.3 (a), or shall notify the Supplier of further defects, deficiencies, or other reasons for the failure of the Operational Acceptance Test. The procedure set out in this GCC Clause 27.3.4 shall be repeated, as necessary, until an Operational Acceptance Certificate is issued.

27.3.5  If the System or Subsystem fails to pass the Operational Acceptance Test(s) in accordance with GCC Clause 27.2, then either:

(a)     the Purchaser may consider terminating the Contract, pursuant to GCC Clause 41.2.2; or

(b)     if the failure to achieve Operational Acceptance within the specified time period is a result of the failure of the Purchaser to fulfill its obligations under the Contract, then the Supplier shall be deemed to have fulfilled its obligations with respect to the relevant technical and functional aspects of the Contract, and GCC Clauses 30.3 and 30.4 shall not apply.

27.3.6  If within fourteen (14) days after receipt of the Supplier's notice the Project Manager fails to issue the Operational Acceptance Certificate or fails to inform the Supplier in writing of the justifiable reasons why the Project Manager has not issued the Operational Acceptance Certificate, the System or Subsystem shall be deemed to have been accepted as of the date of the Supplier's said notice.

27.4  Partial Acceptance

27.4.1  If so specified in the SCC for GCC Clause 27.2.1, Installation and Commissioning shall be carried out individually for each identified major component or Subsystem(s) of the System. In this event, the provisions in the Contract relating to Installation and Commissioning, including the Operational Acceptance Test, shall apply to each such major component or Subsystem individually, and Operational Acceptance Certificate(s) shall be issued accordingly for each such major component or Subsystem of the System, subject to the limitations contained in GCC Clause 27.4.2.

27.4.2  The issuance of Operational Acceptance Certificates for individual major components or Subsystems pursuant to GCC Clause 27.4.1 shall not relieve the Supplier of its obligation to obtain an Operational Acceptance Certificate for the System as an integrated whole (if so specified in the SCC for GCC Clauses 12.1 and 27.2.1) once all major components and Subsystems have been supplied, installed, tested, and commissioned.

27.4.3  In the case of minor components for the System that by their nature do not require Commissioning or an Operational Acceptance Test (e.g., minor fittings, furnishings or site works, etc.), the Project Manager shall issue an Operational Acceptance Certificate within fourteen (14) days after the fittings and/or furnishings have been delivered and/or installed or the site works have been completed.  The Supplier shall, however, use all reasonable endeavors to promptly remedy any defects or deficiencies in such minor components detected by the Purchaser or Supplier.

## F. GUARANTEES AND LIABILITIES

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| **28. Operational Acceptance Time Guarantee** | 28.1 The Supplier guarantees that it shall complete the supply, Installation, Commissioning, and achieve Operational Acceptance of the System (or Subsystems, pursuant to the SCC for GCC Clause 27.2.1) within the time periods specified in the Implementation Schedule in the Technical Requirements Section and/or the Agreed and Finalized Project Plan pursuant to GCC Clause 8.2, or within such extended time to which the Supplier shall be entitled under GCC Clause 40 (Extension of Time for Achieving Operational Acceptance). |
| | 28.2 If the Supplier fails to supply, install, commission, and achieve Operational Acceptance of the System (or Subsystems pursuant to the SCC for GCC Clause 27.2.1) within the time for achieving Operational Acceptance specified in the Implementation Schedule in the Technical Requirement or the Agreed and Finalized Project Plan, or any extension of the time for achieving Operational Acceptance previously granted under GCC Clause 40 (Extension of Time for Achieving Operational Acceptance), the Supplier shall pay to the Purchaser liquidated damages at the rate **specified in the SCC** as a percentage of the Contract Price, or the relevant part of the Contract Price if a Subsystem has not achieved Operational Acceptance. The aggregate amount of such liquidated damages shall in no event exceed the amount specified in the SCC ("the Maximum"). Once the Maximum is reached, the Purchaser may consider termination of the Contract, pursuant to GCC Clause 41.2.2. |
| | 28.3 Unless otherwise **specified in the SCC,** liquidated damages payable under GCC Clause 28.2 shall apply only to the failure to achieve Operational Acceptance of the System (and Subsystems) as specified in the Implementation Schedule in the Technical Requirements and/or Agreed and Finalized Project Plan. This Clause 28.3 shall not limit, however, any other rights or remedies the Purchaser may have under the Contract for other delays. |
| | 28.4 If liquidated damages are claimed by the Purchaser for the System (or Subsystem), the Supplier shall have no further liability whatsoever to the Purchaser in respect to the Operational Acceptance time guarantee for the System (or Subsystem). However, the payment of liquidated damages shall not in any way relieve the Supplier from any of its obligations to complete the System or from any other of its obligations and liabilities under the Contract. |
| **29. Defect Liability** | 29.1 The Supplier warrants that the System, including all Information Technologies, Materials, and other Goods supplied and Services provided, shall be free from defects in the design, engineering, Materials, and workmanship that prevent the System and/or any of its components from fulfilling the Technical Requirements or that limit in a material fashion the performance, reliability, or extensibility of the System and/or Subsystems. Exceptions and/or limitations, if any, to this warranty with respect to Software (or categories of Software), shall be as **specified in the SCC.** Commercial warranty provisions of products supplied under the Contract shall apply to the extent that they do not conflict with the |

provisions of this Contract.

29.2   The Supplier also warrants that the Information Technologies, Materials, and other Goods supplied under the Contract are new, unused, and incorporate all recent improvements in design that materially affect the System's or Subsystem's ability to fulfill the Technical Requirements.

29.3   In addition, the Supplier warrants that: (i) all Goods components to be incorporated into the System form part of the Supplier's and/or Subcontractor's current product lines, (ii) they have been previously released to the market, and (iii) those specific items **identified in the SCC** (if any) have been in the market for at least the minimum periods **specified in the SCC.**

29.4   The Warranty Period shall commence from the date of Operational Acceptance of the System (or of any major component or Subsystem for which separate Operational Acceptance is provided for in the Contract) and shall extend for the length of time **specified in the SCC.**

29.5   If during the Warranty Period any defect as described in GCC Clause 29.1 should be found in the design, engineering, Materials, and workmanship of the Information Technologies and other Goods supplied or of the Services provided by the Supplier, the Supplier shall promptly, in consultation and agreement with the Purchaser regarding appropriate remedying of the defects, and at its sole cost, repair, replace, or otherwise make good (as the Supplier shall, at its discretion, determine) such defect as well as any damage to the System caused by such defect. Any defective Information Technologies or other Goods that have been replaced by the Supplier shall remain the property of the Supplier.

29.6   The Supplier shall not be responsible for the repair, replacement, or making good of any defect or of any damage to the System arising out of or resulting from any of the following causes:
(a)   improper operation or maintenance of the System by the Purchaser;
(b)   normal wear and tear;
(c)   use of the System with items not supplied by the Supplier, unless otherwise identified in the Technical Requirements, or approved by the Supplier; or
(d)   modifications made to the System by the Purchaser, or a third party, not approved by the Supplier.

29.7   The Supplier's obligations under this GCC Clause 29 shall not apply to:
(a)   any materials that are normally consumed in operation or have a normal life shorter than the Warranty Period; or
(b)   any designs, specifications, or other data designed, supplied, or specified by or on behalf of the Purchaser or any matters for which the Supplier has disclaimed responsibility, in accordance with GCC Clause 21.1.2.

29.8 The Purchaser shall give the Supplier a notice promptly following the discovery of such defect, stating the nature of any such defect together with all available evidence. The Purchaser shall afford all reasonable opportunity for the Supplier to inspect any such defect. The Purchaser shall afford the Supplier all necessary access to the System and the site to enable the Supplier to perform its obligations under this GCC Clause 29.

29.9 The Supplier may, with the consent of the Purchaser, remove from the site any Information Technologies and other Goods that are defective, if the nature of the defect, and/or any damage to the System caused by the defect, is such that repairs cannot be expeditiously carried out at the site. If the repair, replacement, or making good is of such a character that it may affect the efficiency of the System, the Purchaser may give the Supplier notice requiring that tests of the defective part be made by the Supplier immediately upon completion of such remedial work, whereupon the Supplier shall carry out such tests.
If such part fails the tests, the Supplier shall carry out further repair, replacement, or making good (as the case may be) until that part of the System passes such tests. The tests shall be agreed upon by the Purchaser and the Supplier.

29.10 If the Supplier fails to commence the work necessary to remedy such defect or any damage to the System caused by such defect within the time period **specified in the SCC,** the Purchaser may, following notice to the Supplier, proceed to do such work or contract a third party (or parties) to do such work, and the reasonable costs incurred by the Purchaser in connection with such work shall be paid to the Purchaser by the Supplier or may be deducted by the Purchaser from any monies due the Supplier or claimed under the Performance Security.

29.11 If the System or Subsystem cannot be used by reason of such defect and/or making good of such defect, the Warranty Period for the System shall be extended by a period equal to the period during which the System or Subsystem could not be used by the Purchaser because of such defect and/or making good of such defect.

29.12 Items substituted for defective parts of the System during the Warranty Period shall be covered by the Defect Liability Warranty for the remainder of the Warranty Period applicable for the part replaced or three (3) months, whichever is greater.

29.13 At the request of the Purchaser and without prejudice to any other rights and remedies that the Purchaser may have against the Supplier under the Contract, the Supplier will offer all possible assistance to the Purchaser to seek warranty services or remedial action from any subcontracted third-party producers or licensor of Goods included in the System, including without limitation assignment or transfer in favor of the Purchaser of the benefit of any warranties given by such producers or licensors to the Supplier.

**30. Functional Guarantees**

30.1 The Supplier guarantees that, once the Operational Acceptance Certificate(s) has been issued, the System represents a complete, integrated solution to the Purchaser's requirements set forth in the Technical Requirements and it conforms to all other aspects of the Contract. The Supplier acknowledges that GCC Clause 27 regarding Commissioning and Operational Acceptance governs how technical conformance of the System to the Contract requirements will be determined.

30.2 If, for reasons attributable to the Supplier, the System does not conform to the Technical Requirements or does not conform to all other aspects of the Contract, the Supplier shall at its cost and expense make such changes, modifications, and/or additions to the System as may be necessary to conform to the Technical Requirements and meet all functional and performance standards. The Supplier shall notify the Purchaser upon completion of the necessary changes, modifications, and/or additions and shall request the Purchaser to repeat the Operational Acceptance Tests until the System achieves Operational Acceptance.

30.3 If the System (or Subsystem[s]) fails to achieve Operational Acceptance, the Purchaser may consider termination of the Contract, pursuant to GCC Clause 41.2.2, and forfeiture of the Supplier's Performance Security in accordance with GCC Clause 13.3 in compensation for the extra costs and delays likely to result from this failure.

**31. Intellectual Property Rights Warranty**

31.1 The Supplier hereby represents and warrants that:
   (a)    the System as supplied, installed, tested, and accepted;
   (b)    use of the System in accordance with the Contract; and
   (c)    copying of the Software and Materials provided to the Purchaser in accordance with the Contract

do not and will not infringe any Intellectual Property Rights held by any third party and that it has all necessary rights or at its sole expense shall have secured in writing all transfers of rights and other consents necessary to make the assignments, licenses, and other transfers of Intellectual Property Rights and the warranties set forth in the Contract, and for the Purchaser to own or exercise all Intellectual Property Rights as provided in the Contract. Without limitation, the Supplier shall secure all necessary written agreements, consents, and transfers of rights from its employees and other persons or entities whose services are used for development of the System.

**32. Intellectual Property Rights Indemnity**

32.1 The Supplier shall indemnify and hold harmless the Purchaser and its employees and officers from and against any and all losses, liabilities, and costs (including losses, liabilities, and costs incurred in defending a claim alleging such a liability), that the Purchaser or its employees or officers may suffer as a result of any infringement or alleged infringement of any Intellectual Property Rights by reason of:
   (a)    installation of the System by the Supplier or the use of the System, including the Materials, in the country where the site is located;

(b)     copying of the Software and Materials provided the Supplier in accordance with the Agreement; and

(c)     sale of the products produced by the System in any country, except to the extent that such losses, liabilities, and costs arise as a result of the Purchaser's breach of GCC Clause 32.2.

32.2    Such indemnity shall not cover any use of the System, including the Materials, other than for the purpose indicated by or to be reasonably inferred from the Contract, any infringement resulting from the use of the System, or any products of the System produced thereby in association or combination with any other goods or services not supplied by the Supplier, where the infringement arises because of such association or combination and not because of use of the System in its own right.

32.3    Such indemnities shall also not apply if any claim of infringement:
(a)     is asserted by a parent, subsidiary, or affiliate of the Purchaser's organization;

(b)     is a direct result of a design mandated by the Purchaser's Technical Requirements and the possibility of such infringement was duly noted in the Supplier's Bid; or

(c)     results from the alteration of the System, including the Materials, by the Purchaser or any persons other than the Supplier or a person authorized by the Supplier.

32.4    If any proceedings are brought or any claim is made against the Purchaser arising out of the matters referred to in GCC Clause 32.1, the Purchaser shall promptly give the Supplier notice of such proceedings or claims, and the Supplier may at its own expense and in the Purchaser's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim. If the Supplier fails to notify the Purchaser within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Purchaser shall be free to conduct the same on its own behalf.  Unless the Supplier has so failed to notify the Purchaser within the twenty-eight (28) days, the Purchaser shall make no admission that may be prejudicial to the defense of any such proceedings or claim.  The Purchaser shall, at the Supplier's request, afford all available assistance to the Supplier in conducting such proceedings or claim and shall be reimbursed by the Supplier for all reasonable expenses incurred in so doing.

32.5    The Purchaser shall indemnify and hold harmless the Supplier and its employees, officers, and Subcontractors from and against any and all losses, liabilities, and costs (including losses, liabilities, and costs incurred in defending a claim alleging such a liability) that the Supplier or its employees, officers, or Subcontractors may suffer as a result of any infringement or alleged infringement of any Intellectual Property Rights arising out of or in connection with any design, data, drawing, specification, or other documents or materials provided to the Supplier in connection with this Contract by the Purchaser or any persons (other than the Supplier) contracted by the Purchaser, except to the extent that such losses,

liabilities, and costs arise as a result of the Supplier's breach of GCC Clause 32.8.

32.6    Such indemnity shall not cover
(a)    any use of the design, data, drawing, specification, or other documents or materials, other than for the purpose indicated by or to be reasonably inferred from the Contract;
(b)    any infringement resulting from the use of the design, data, drawing, specification, or other documents or materials, or any products produced thereby, in association or combination with any other Goods or Services not provided by the Purchaser or any other person contracted by the Purchaser, where the infringement arises because of such association or combination and not because of the use of the design, data, drawing, specification, or other documents or materials in its own right.

32.7    Such indemnities shall also not apply:
(a)    if any claim of infringement is asserted by a parent, subsidiary, or affiliate of the Supplier's organization;
(b)    to the extent that any claim of infringement is caused by the alteration, by the Supplier, or any persons contracted by the Supplier, of the design, data, drawing, specification, or other documents or materials provided to the Supplier by the Purchaser or any persons contracted by the Purchaser.

32.8    If any proceedings are brought or any claim is made against the Supplier arising out of the matters referred to in GCC Clause 32.5, the Supplier shall promptly give the Purchaser notice of such proceedings or claims, and the Purchaser may at its own expense and in the Supplier's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.  If the Purchaser fails to notify the Supplier within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Supplier shall be free to conduct the same on its own behalf.  Unless the Purchaser has so failed to notify the Supplier within the twenty-eight (28) days, the Supplier shall make no admission that may be prejudicial to the defense of any such proceedings or claim.  The Supplier shall, at the Purchaser's request, afford all available assistance to the Purchaser in conducting such proceedings or claim and shall be reimbursed by the Purchaser for all reasonable expenses incurred in so doing.

**33. Limitation of Liability**

33.1    Provided the following does not exclude or limit any liabilities of either party in ways not permitted by applicable law:

(a)    the Supplier shall not be liable to the Purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Supplier to pay liquidated damages to the Purchaser; and

(c)    the aggregate liability of the Supplier to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price, provided that this limitation shall not apply to any obligation of the Supplier to indemnify the Purchaser with respect to intellectual property rights infringement.

## G. RISK DISTRIBUTION

| | | |
|---|---|---|
| **34. Transfer of Ownership** | 34.1 | With the exception of Software and Materials, the ownership of the Information Technologies and other Goods shall be transferred to the Purchaser at the time of Delivery or otherwise under terms that may be agreed upon and specified in the Contract Agreement. |
| | 34.2 | Ownership and the terms of usage of the Software and Materials supplied under the Contract shall be governed by GCC Clause 15 (Copyright) and any elaboration in the Technical Requirements. |
| | 34.3 | Ownership of the Supplier's Equipment used by the Supplier and its Subcontractors in connection with the Contract shall remain with the Supplier or its Subcontractors. |
| **35. Care of the System** | 35.1 | The Purchaser shall become responsible for the care and custody of the System or Subsystems upon their Delivery. The Purchaser shall make good at its own cost any loss or damage that may occur to the System or Subsystems from any cause from the date of Delivery until the date of Operational Acceptance of the System or Subsystems, pursuant to GCC Clause 27 (Commissioning and Operational Acceptance), excepting such loss or damage arising from acts or omissions of the Supplier, its employees, or subcontractors. |

35.2    If any loss or damage occurs to the System or any part of the System by reason of:

    (a)    (insofar as they relate to the country where the Project Site is located) nuclear reaction, nuclear radiation, radioactive contamination, a pressure wave caused by aircraft or other aerial objects, or any other occurrences that an experienced contractor could not reasonably foresee, or if reasonably foreseeable could not reasonably make provision for or insure against, insofar as such risks are not normally insurable on the insurance market and are mentioned in the general exclusions of the policy of insurance taken out under GCC Clause 37;

    (b)    any use not in accordance with the Contract, by the Purchaser or any third party;

    (c)    any use of or reliance upon any design, data, or specification provided or designated by or on behalf of the Purchaser, or any such matter for which the Supplier has disclaimed responsibility in accordance with GCC Clause 21.1.2,

the Purchaser shall pay to the Supplier all sums payable in respect of the System or Subsystems that have achieved Operational Acceptance, notwithstanding that the same be lost, destroyed, or damaged. If the Purchaser requests the Supplier in writing to

make good any loss or damage to the System thereby occasioned, the Supplier shall make good the same at the cost of the Purchaser in accordance with GCC Clause 39. If the Purchaser does not request the Supplier in writing to make good any loss or damage to the System thereby occasioned, the Purchaser shall either request a change in accordance with GCC Clause 39, excluding the performance of that part of the System thereby lost, destroyed, or damaged, or, where the loss or damage affects a substantial part of the System, the Purchaser shall terminate the Contract pursuant to GCC Clause 41.1.

35.3 The Purchaser shall be liable for any loss of or damage to any Supplier's Equipment which the Purchaser has authorized to locate within the Purchaser's premises for use in fulfillment of Supplier's obligations under the Contract, except where such loss or damage arises from acts or omissions of the Supplier, its employees, or subcontractors.

**36. Loss of or Damage to Property; Accident or Injury to Workers; Indemnification**

36.1 The Supplier and each and every Subcontractor shall abide by the job safety, insurance, customs, and immigration measures prevalent and laws in force in the Purchaser's Country.

36.2 Subject to GCC Clause 36.3, the Supplier shall indemnify and hold harmless the Purchaser and its employees and officers from and against any and all losses, liabilities and costs (including losses, liabilities, and costs incurred in defending a claim alleging such a liability) that the Purchaser or its employees or officers may suffer as a result of the death or injury of any person or loss of or damage to any property (other than the System, whether accepted or not) arising in connection with the supply, installation, testing, and Commissioning of the System and by reason of the negligence of the Supplier or its Subcontractors, or their employees, officers or agents, except any injury, death, or property damage caused by the negligence of the Purchaser, its contractors, employees, officers, or agents.

36.3 If any proceedings are brought or any claim is made against the Purchaser that might subject the Supplier to liability under GCC Clause 36.2, the Purchaser shall promptly give the Supplier notice of such proceedings or claims, and the Supplier may at its own expense and in the Purchaser's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim. If the Supplier fails to notify the Purchaser within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Purchaser shall be free to conduct the same on its own behalf. Unless the Supplier has so failed to notify the Purchaser within the twenty-eight (28) day period, the Purchaser shall make no admission that may be prejudicial to the defense of any such proceedings or claim. The Purchaser shall, at the Supplier's request, afford all available assistance to the Supplier in conducting such proceedings or claim and shall be reimbursed by the Supplier for all reasonable expenses incurred in so doing.

36.4 The Purchaser shall indemnify and hold harmless the Supplier and its employees, officers, and Subcontractors from any and all losses, liabilities, and costs (including losses, liabilities, and costs incurred in defending a claim alleging such a liability) that the Supplier or its employees, officers, or Subcontractors may suffer as a result of the death or personal injury of any person or loss of or damage to property of the Purchaser, other than the System not yet achieving Operational Acceptance, that is caused by fire, explosion, or any other perils, in excess of the amount recoverable from insurances procured under GCC Clause 37 (Insurances), provided that such fire, explosion, or other perils were not caused by any act or failure of the Supplier.

36.5 If any proceedings are brought or any claim is made against the Supplier that might subject the Purchaser to liability under GCC Clause 36.4, the Supplier shall promptly give the Purchaser notice of such proceedings or claims, and the Purchaser may at its own expense and in the Supplier's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim. If the Purchaser fails to notify the Supplier within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Supplier shall be free to conduct the same on its own behalf. Unless the Purchaser has so failed to notify the Supplier within the twenty-eight (28) days, the Supplier shall make no admission that may be prejudicial to the defense of any such proceedings or claim. The Supplier shall, at the Purchaser's request, afford all available assistance to the Purchaser in conducting such proceedings or claim and shall be reimbursed by the Purchaser for all reasonable expenses incurred in so doing.

36.6 The party entitled to the benefit of an indemnity under this GCC Clause 36 shall take all reasonable measures to mitigate any loss or damage that has occurred. If the party fails to take such measures, the other party's liabilities shall be correspondingly reduced.

**37. Insurances**

37.1 The Supplier shall at its expense take out and maintain in effect, or cause to be taken out and maintained in effect, during the performance of the Contract, the insurance set forth below. The identity of the insurers and the form of the policies shall be subject to the approval of the Purchaser, who should not unreasonably withhold such approval.

(a) Cargo Insurance During Transport
as applicable, 110 percent of the price of the Information Technologies and other Goods in a freely convertible currency, covering the Goods from physical loss or damage during shipment through receipt at the Project Site.

(b) Installation "All Risks" Insurance
as applicable, 110 percent of the price of the Information Technologies and other Goods covering the Goods at the site from all risks of physical loss or damage (excluding only perils commonly excluded under "all risks" insurance policies of this type by reputable insurers) occurring prior to Operational Acceptance of the System.

(c) Third-Party Liability Insurance
On terms as **specified in the SCC,** covering bodily injury or death suffered by third parties (including the Purchaser's personnel) and loss of or damage to property (including the Purchaser's property and any Subsystems that have been accepted by the Purchaser) occurring in connection with the supply and installation of the Information System.

(d) Automobile Liability Insurance
In accordance with the statutory requirements prevailing in the Purchaser's Country, covering use of all vehicles used by the Supplier or its Subcontractors (whether or not owned by them) in connection with the execution of the Contract.

(e) Other Insurance (if any), as **specified in the SCC.**

37.2 The Purchaser shall be named as co-insured under all insurance policies taken out by the Supplier pursuant to GCC Clause 37.1, except for the Third-Party Liability, and the Supplier's Subcontractors shall be named as co-insured under all insurance policies taken out by the Supplier pursuant to GCC Clause 37.1 except for Cargo Insurance During Transport. All insurer's rights of subrogation against such co-insured for losses or claims arising out of the performance of the Contract shall be waived under such policies.

37.3 The Supplier shall deliver to the Purchaser certificates of insurance (or copies of the insurance policies) as evidence that the required policies are in full force and effect.

37.4 The Supplier shall ensure that, where applicable, its Subcontractor(s) shall take out and maintain in effect adequate insurance policies for their personnel and vehicles and for work executed by them under the Contract, unless such Subcontractors are covered by the policies taken out by the Supplier.

37.5 If the Supplier fails to take out and/or maintain in effect the insurance referred to in GCC Clause 37.1, the Purchaser may take out and maintain in effect any such insurance and may from time to time deduct from any amount due the Supplier under the Contract any premium that the Purchaser shall have paid to the insurer or may otherwise recover such amount as a debt due from the Supplier.

37.6 Unless otherwise provided in the Contract, the Supplier shall prepare and conduct all and any claims made under the policies effected by it pursuant to this GCC Clause 37, and all monies payable by any insurers shall be paid to the Supplier. The Purchaser shall give to the Supplier all such reasonable assistance as may be required by the Supplier in connection with any claim under the relevant insurance policies. With respect to insurance claims in which the Purchaser's interest is involved, the Supplier shall not give any release or make any compromise with the insurer without the prior written consent of the Purchaser. With respect to insurance claims in which the Supplier's interest is involved, the Purchaser shall not give any release or make any compromise with the insurer without the prior written consent of the Supplier.

**38. Force Majeure**

38.1 "Force Majeure" shall mean any event beyond the reasonable control of the Purchaser or of the Supplier, as the case may be, and which is unavoidable notwithstanding the reasonable care of the party affected and shall include, without limitation, the following:

(a) war, hostilities, or warlike operations (whether a state of war be declared or not), invasion, act of foreign enemy, and civil war;

(b) rebellion, revolution, insurrection, mutiny, usurpation of civil or military government, conspiracy, riot, civil commotion, and terrorist acts;

(c) confiscation, nationalization, mobilization, commandeering or requisition by or under the order of any government or de jure or de facto authority or ruler, or any other act or failure to act of any local state or national government authority;

(d) strike, sabotage, lockout, embargo, import restriction, port congestion, lack of usual means of public transportation and communication, industrial dispute, shipwreck, shortage or restriction of power supply, epidemics, quarantine, and plague;

(e) earthquake, landslide, volcanic activity, fire, flood or inundation, tidal wave, typhoon or cyclone, hurricane, storm, lightning, or other inclement weather condition, nuclear and pressure waves, or other natural or physical disaster;

(f) failure, by the Supplier, to obtain the necessary export permit(s) from the governments of the Country(s) of Origin of the Information Technologies or other Goods, or Supplier's Equipment provided that the Supplier has made all reasonable efforts to obtain the required export permit(s), including the exercise of due diligence in determining the eligibility of the System and all of its components for receipt of the necessary export permits.

38.2 If either party is prevented, hindered, or delayed from or in performing any of its obligations under the Contract by an event of Force Majeure, then it shall notify the other in writing of the occurrence of such event and the circumstances of the event of Force Majeure within fourteen (14) days after the occurrence of such event.

38.3 The party who has given such notice shall be excused from the performance or punctual performance of its obligations under the Contract for so long as the relevant event of Force Majeure continues and to the extent that such party's performance is prevented, hindered, or delayed. The Time for Achieving Operational Acceptance shall be extended in accordance with GCC Clause 40 (Extension of Time for Achieving Operational Acceptance).

38.4 The party or parties affected by the event of Force Majeure shall use reasonable efforts to mitigate the effect of the event of Force Majeure upon its or their performance of the Contract and to fulfill its or their obligations under the Contract, but without prejudice to either party's right to terminate the Contract under GCC Clause 38.6.

38.5 No delay or nonperformance by either party to this Contract caused by the occurrence of any event of Force Majeure shall:
(a)     constitute a default or breach of the Contract;
(b)     (subject to GCC Clauses 35.2, 38.3, and 38.4) give rise to any claim for damages or additional cost or expense occasioned by the delay or nonperformance,
if, and to the extent that, such delay or nonperformance is caused by the occurrence of an event of Force Majeure.

38.6 If the performance of the Contract is substantially prevented, hindered, or delayed for a single period of more than sixty (60) days or an aggregate period of more than one hundred and twenty (120) days on account of one or more events of Force Majeure during the time period covered by the Contract, the parties will attempt to develop a mutually satisfactory solution, failing which, either party may terminate the Contract by giving a notice to the other.

38.7 In the event of termination pursuant to GCC Clause 38.6, the rights and obligations of the Purchaser and the Supplier shall be as specified in GCC Clauses 41.1.2 and 41.1.3.

38.8 Notwithstanding GCC Clause 38.5, Force Majeure shall not apply to any obligation of the Purchaser to make payments to the Supplier under this Contract.

## H. CHANGE IN CONTRACT ELEMENTS

**39. Changes to the System**

39.1 Introducing a Change
39.1.1     Subject to GCC Clauses 39.2.5 and 39.2.7, the Purchaser shall have the right to propose, and subsequently require, the Project Manager to order the Supplier from time to time during the performance of the Contract to make any change, modification, addition, or deletion to, in, or from the System (interchangeably called "Change"), provided that such Change falls within the general scope of the System, does not constitute unrelated work, and is technically practicable, taking into account both the state of advancement of the System and the technical compatibility of the Change envisaged with the nature of the System as originally specified in the Contract.
A Change may involve, but is not restricted to, the substitution of updated Information Technologies and related Services in accordance with GCC Clause 23 (Product Upgrades).

39.1.2     The Supplier may from time to time during its performance of the Contract propose to the Purchaser (with a copy to the Project Manager) any Change that the Supplier considers necessary or desirable to improve the quality or efficiency of the System. The Purchaser may at its discretion approve or reject any Change proposed by the Supplier.

39.1.3     Notwithstanding GCC Clauses 39.1.1 and 39.1.2, no change made necessary because of any default of the

Supplier in the performance of its obligations under the Contract shall be deemed to be a Change, and such change shall not result in any adjustment of the Contract Price or the Time for Achieving Operational Acceptance.

39.1.4   The procedure on how to proceed with and execute Changes is specified in GCC Clauses 39.2 and 39.3, and further details and sample forms are provided in the Sample Forms Section in the Bidding Documents.

39.1.5   Moreover, the Purchaser and Supplier will agree, during development of the Project Plan, to a date prior to the scheduled date for Operational Acceptance, after which the Technical Requirements for the System shall be "frozen." Any Change initiated after this time will be dealt with after Operational Acceptance.

39.2   Changes Originating from Purchaser

39.2.1   If the Purchaser proposes a Change pursuant to GCC Clauses 39.1.1, it shall send to the Supplier a "Request for Change Proposal," requiring the Supplier to prepare and furnish to the Project Manager as soon as reasonably practicable a "Change Proposal," which shall include the following:
(a) brief description of the Change;
(b) impact on the Time for Achieving Operational Acceptance;
(c) detailed estimated cost of the Change;
(d) effect on Functional Guarantees (if any);
(e) effect on any other provisions of the Contract.

39.2.2   Prior to preparing and submitting the "Change Proposal," the Supplier shall submit to the Project Manager an "Change Estimate Proposal," which shall be an estimate of the cost of preparing the Change Proposal, plus a first approximation of the suggested approach and cost for implementing the changes. Upon receipt of the Supplier's Change Estimate Proposal, the Purchaser shall do one of the following:
(a) accept the Supplier's estimate with instructions to the Supplier to proceed with the preparation of the Change Proposal;
(b) advise the Supplier of any part of its Change Estimate Proposal that is unacceptable and request the Supplier to review its estimate;
(c) advise the Supplier that the Purchaser does not intend to proceed with the Change.

39.2.3   Upon receipt of the Purchaser's instruction to proceed under GCC Clause 39.2.2 (a), the Supplier shall, with proper expedition, proceed with the preparation of the Change Proposal, in accordance with GCC Clause 39.2.1. The Supplier, at its discretion, may specify a validity period for the Change Proposal, after which if the Purchaser and Supplier has not reached agreement in accordance with GCC Clause 39.2.6, then GCC Clause 39.2.7 shall apply.

39.2.4   The pricing of any Change shall, as far as practicable, be calculated in accordance with the rates and prices

included in the Contract. If the nature of the Change is such that the Contract rates and prices are inequitable, the parties to the Contract shall agree on other specific rates to be used for valuing the Change.

39.2.5    If before or during the preparation of the Change Proposal it becomes apparent that the aggregate impact of compliance with the Request for Change Proposal and with all other Change Orders that have already become binding upon the Supplier under this GCC Clause 39 would be to increase or decrease the Contract Price as originally set forth in Article 2 (Contract Price) of the Contract Agreement by more than fifteen (15) percent, the Supplier may give a written notice of objection to this Request for Change Proposal prior to furnishing the Change Proposal. If the Purchaser accepts the Supplier's objection, the Purchaser shall withdraw the proposed Change and shall notify the Supplier in writing of its acceptance.

The Supplier's failure to so object to a Request for Change Proposal shall neither affect its right to object to any subsequent requested Changes or Change Orders, nor affect its right to take into account, when making such subsequent objection, the percentage increase or decrease in the Contract Price that any Change not objected to by the Supplier represents.

39.2.6    Upon receipt of the Change Proposal, the Purchaser and the Supplier shall mutually agree upon all matters contained in the Change Proposal. Within fourteen (14) days after such agreement, the Purchaser shall, if it intends to proceed with the Change, issue the Supplier a Change Order. If the Purchaser is unable to reach a decision within fourteen (14) days, it shall notify the Supplier with details of when the Supplier can expect a decision. If the Purchaser decides not to proceed with the Change for whatever reason, it shall, within the said period of fourteen (14) days, notify the Supplier accordingly. Under such circumstances, the Supplier shall be entitled to reimbursement of all costs reasonably incurred by it in the preparation of the Change Proposal, provided that these do not exceed the amount given by the Supplier in its Change Estimate Proposal submitted in accordance with GCC Clause 39.2.2.

39.2.7    If the Purchaser and the Supplier cannot reach agreement on the price for the Change, an equitable adjustment to the Time for Achieving Operational Acceptance, or any other matters identified in the Change Proposal, the Change will not be implemented. However, this provision does not limit the rights of either party under GCC Clause 6 (Settlement of Disputes).

39.3    Changes Originating from Supplier

If the Supplier proposes a Change pursuant to GCC Clause 39.1.2, the Supplier shall submit to the Project Manager a written "Application for Change Proposal," giving reasons for the proposed Change and including the information specified in GCC

Clause 39.2.1.  Upon receipt of the Application for Change Proposal, the parties shall follow the procedures outlined in GCC Clauses 39.2.6 and 39.2.7.  However, should the Purchaser choose not to proceed or the Purchaser and the Supplier cannot come to agreement on the change during any validity period that the Supplier may specify in its Application for Change Proposal, the Supplier shall not be entitled to recover the costs of preparing the Application for Change Proposal, unless subject to an agreement between the Purchaser and the Supplier to the contrary.

**40. Extension of Time for Achieving Operational Acceptance**

40.1   The time(s) for achieving Operational Acceptance specified in the Schedule of Implementation shall be extended if the Supplier is delayed or impeded in the performance of any of its obligations under the Contract by reason of any of the following:
(a)   any Change in the System as provided in GCC Clause 39 (Change in the Information System);
(b)   any occurrence of Force Majeure as provided in GCC Clause 38 (Force Majeure);
(c)   default of the Purchaser; or
(d)   any other matter specifically mentioned in the Contract;
by such period as shall be fair and reasonable in all the circumstances and as shall fairly reflect the delay or impediment sustained by the Supplier.

40.2   Except where otherwise specifically provided in the Contract, the Supplier shall submit to the Project Manager a notice of a claim for an extension of the time for achieving Operational Acceptance, together with particulars of the event or circumstance justifying such extension as soon as reasonably practicable after the commencement of such event or circumstance.  As soon as reasonably practicable after receipt of such notice and supporting particulars of the claim, the Purchaser and the Supplier shall agree upon the period of such extension.  In the event that the Supplier does not accept the Purchaser's estimate of a fair and reasonable time extension, the Supplier shall be entitled to refer the matter to the provisions for the Settlement of Disputes pursuant to GCC Clause 6.

40.3   The Supplier shall at all times use its reasonable efforts to minimize any delay in the performance of its obligations under the Contract.

**41. Termination**

41.1   Termination for Purchaser's Convenience
41.1.1   The Purchaser may at any time terminate the Contract for any reason by giving the Supplier a notice of termination that refers to this GCC Clause 41.1.
41.1.2   Upon receipt of the notice of termination under GCC Clause 41.1.1, the Supplier shall either as soon as reasonably practical or upon the date specified in the notice of termination
(a)   cease all further work, except for such work as the Purchaser may specify in the notice of termination for the sole purpose of protecting that part of the System already executed, or any work required to leave the site in a clean and safe condition;

      (b) terminate all subcontracts, except those to be assigned to the Purchaser pursuant to GCC Clause 41.1.2 (d) (ii) below;

      (c) remove all Supplier's Equipment from the site, repatriate the Supplier's and its Subcontractors' personnel from the site, remove from the site any wreckage, rubbish, and debris of any kind;

      (d) in addition, the Supplier, subject to the payment specified in GCC Clause 41.1.3, shall

          (i) deliver to the Purchaser the parts of the System executed by the Supplier up to the date of termination;

          (ii) to the extent legally possible, assign to the Purchaser all right, title, and benefit of the Supplier to the System, or Subsystem, as at the date of termination, and, as may be required by the Purchaser, in any subcontracts concluded between the Supplier and its Subcontractors;

          (iii) deliver to the Purchaser all nonproprietary drawings, specifications, and other documents prepared by the Supplier or its Subcontractors as of the date of termination in connection with the System.

41.1.3    In the event of termination of the Contract under GCC Clause 41.1.1, the Purchaser shall pay to the Supplier the following amounts:

      (a) the Contract Price, properly attributable to the parts of the System executed by the Supplier as of the date of termination;

      (b) the costs reasonably incurred by the Supplier in the removal of the Supplier's Equipment from the site and in the repatriation of the Supplier's and its Subcontractors' personnel;

      (c) any amount to be paid by the Supplier to its Subcontractors in connection with the termination of any subcontracts, including any cancellation charges;

      (d) costs incurred by the Supplier in protecting the System and leaving the site in a clean and safe condition pursuant to GCC Clause 41.1.2 (a); and

      (e) the cost of satisfying all other obligations, commitments, and claims that the Supplier may in good faith have undertaken with third parties in connection with the Contract and that are not covered by GCC Clauses 41.1.3 (a) through (d) above.

41.2   Termination for Supplier's Default

41.2.1    The Purchaser, without prejudice to any other rights or remedies it may possess, may terminate the Contract forthwith in the following circumstances by giving a notice of termination and its reasons therefore to the Supplier, referring to this GCC Clause 41.2:

      (a) if the Supplier becomes bankrupt or insolvent, has a receiving order issued against it, compounds with its creditors, or, if the Supplier is a corporation, a resolution is passed or order is made for its winding

up (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), a receiver is appointed over any part of its undertaking or assets, or if the Supplier takes or suffers any other analogous action in consequence of debt;

(b) if the Supplier assigns or transfers the Contract or any right or interest therein in violation of the provision of GCC Clause 42 (Assignment); or

(c) if the Supplier, in the judgment of the Purchaser, has engaged in corrupt, fraudulent, collusive, coercive or obstructive practices, in competing for or in executing the Contract, including but not limited to willful misrepresentation of facts concerning ownership of Intellectual Property Rights in, or proper authorization and/or licenses from the owner to offer, the hardware, software, or materials provided under this Contract.

For the purposes of this Clause:

(i) "corrupt practice"[1] is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;

(ii) "fraudulent practice"[2] is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;

(iii) "collusive practice"[3] is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;

(iv) "coercive practice"[4] is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;

(v) "obstructive practice" is

(aa) deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or

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[1] "Another party" refers to a public official acting in relation to the procurement process or contract execution]. In this context, "public official" includes World Bank staff and employees of other organizations taking or reviewing procurement decisions.

[2] A "party" refers to a public official; the terms "benefit" and "obligation" relate to the procurement process or contract execution; and the "act or omission" is intended to influence the procurement process or contract execution.

[3] "Parties" refers to participants in the procurement process (including public officials) attempting to establish bid prices at artificial, non competitive levels.

[4] A "party" refers to a participant in the procurement process or contract execution.

intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or

(bb)   acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under Sub-Clause 9.8.

41.2.2   If the Supplier:

(a)   has abandoned or repudiated the Contract;

(b)   has without valid reason failed to commence work on the System promptly;

(c)   persistently fails to execute the Contract in accordance with the Contract or persistently neglects to carry out its obligations under the Contract without just cause;

(d)   refuses or is unable to provide sufficient Materials, Services, or labor to execute and complete the System in the manner specified in the Agreed and Finalized Project Plan furnished under GCC Clause 19 at rates of progress that give reasonable assurance to the Purchaser that the Supplier can attain Operational Acceptance of the System by the Time for Achieving Operational Acceptance as extended;

then the Purchaser may, without prejudice to any other rights it may possess under the Contract, give a notice to the Supplier stating the nature of the default and requiring the Supplier to remedy the same.  If the Supplier fails to remedy or to take steps to remedy the same within fourteen (14) days of its receipt of such notice, then the Purchaser may terminate the Contract forthwith by giving a notice of termination to the Supplier that refers to this GCC Clause 41.2.

41.2.3   Upon receipt of the notice of termination under GCC Clauses 41.2.1 or 41.2.2, the Supplier shall, either immediately or upon such date as is specified in the notice of termination:

(a)   cease all further work, except for such work as the Purchaser may specify in the notice of termination for the sole purpose of protecting that part of the System already executed or any work required to leave the site in a clean and safe condition;

(b)   terminate all subcontracts, except those to be assigned to the Purchaser pursuant to GCC Clause 41.2.3 (d) below;

(c)   deliver to the Purchaser the parts of the System executed by the Supplier up to the date of termination;

(d)   to the extent legally possible, assign to the Purchaser all right, title and benefit of the Supplier to the System or Subsystems as at the date of termination, and, as may be required by the Purchaser, in any subcontracts concluded between the Supplier and its Subcontractors;

        (e) deliver to the Purchaser all drawings, specifications, and other documents prepared by the Supplier or its Subcontractors as at the date of termination in connection with the System.

41.2.4    The Purchaser may enter upon the site, expel the Supplier, and complete the System itself or by employing any third party. Upon completion of the System or at such earlier date as the Purchaser thinks appropriate, the Purchaser shall give notice to the Supplier that such Supplier's Equipment will be returned to the Supplier at or near the site and shall return such Supplier's Equipment to the Supplier in accordance with such notice. The Supplier shall thereafter without delay and at its cost remove or arrange removal of the same from the site.

41.2.5    Subject to GCC Clause 41.2.6, the Supplier shall be entitled to be paid the Contract Price attributable to the portion of the System executed as at the date of termination and the costs, if any, incurred in protecting the System and in leaving the site in a clean and safe condition pursuant to GCC Clause 41.2.3 (a). Any sums due the Purchaser from the Supplier accruing prior to the date of termination shall be deducted from the amount to be paid to the Supplier under this Contract.

41.2.6    If the Purchaser completes the System, the cost of completing the System by the Purchaser shall be determined. If the sum that the Supplier is entitled to be paid, pursuant to GCC Clause 41.2.5, plus the reasonable costs incurred by the Purchaser in completing the System, exceeds the Contract Price, the Supplier shall be liable for such excess. If such excess is greater than the sums due the Supplier under GCC Clause 41.2.5, the Supplier shall pay the balance to the Purchaser, and if such excess is less than the sums due the Supplier under GCC Clause 41.2.5, the Purchaser shall pay the balance to the Supplier. The Purchaser and the Supplier shall agree, in writing, on the computation described above and the manner in which any sums shall be paid.

41.3   Termination by Supplier

41.3.1    If:

        (a) the Purchaser has failed to pay the Supplier any sum due under the Contract within the specified period, has failed to approve any invoice or supporting documents without just cause **pursuant to the SCC,** or commits a substantial breach of the Contract, the Supplier may give a notice to the Purchaser that requires payment of such sum, with interest on this sum as stipulated in GCC Clause 12.3, requires approval of such invoice or supporting documents, or specifies the breach and requires the Purchaser to remedy the same, as the case may be. If the Purchaser fails to pay such sum together with such interest, fails to approve such invoice or supporting documents or give its reasons for withholding such

approval, fails to remedy the breach or take steps to remedy the breach within fourteen (14) days after receipt of the Supplier's notice; or

(b) the Supplier is unable to carry out any of its obligations under the Contract for any reason attributable to the Purchaser, including but not limited to the Purchaser's failure to provide possession of or access to the site or other areas or failure to obtain any governmental permit necessary for the execution and/or completion of the System;

then the Supplier may give a notice to the Purchaser of such events, and if the Purchaser has failed to pay the outstanding sum, to approve the invoice or supporting documents, to give its reasons for withholding such approval, or to remedy the breach within twenty-eight (28) days of such notice, or if the Supplier is still unable to carry out any of its obligations under the Contract for any reason attributable to the Purchaser within twenty-eight (28) days of the said notice, the Supplier may by a further notice to the Purchaser referring to this GCC Clause 41.3.1, forthwith terminate the Contract.

41.3.2   The Supplier may terminate the Contract immediately by giving a notice to the Purchaser to that effect, referring to this GCC Clause 41.3.2, if the Purchaser becomes bankrupt or insolvent, has a receiving order issued against it, compounds with its creditors, or, being a corporation, if a resolution is passed or order is made for its winding up (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), a receiver is appointed over any part of its undertaking or assets, or if the Purchaser takes or suffers any other analogous action in consequence of debt.

41.3.3   If the Contract is terminated under GCC Clauses 41.3.1 or 41.3.2, then the Supplier shall immediately:

(a) cease all further work, except for such work as may be necessary for the purpose of protecting that part of the System already executed, or any work required to leave the site in a clean and safe condition;

(b) terminate all subcontracts, except those to be assigned to the Purchaser pursuant to Clause 41.3.3 (d) (ii);

(c) remove all Supplier's Equipment from the site and repatriate the Supplier's and its Subcontractor's personnel from the site.

(d) In addition, the Supplier, subject to the payment specified in GCC Clause 41.3.4, shall:

(i) deliver to the Purchaser the parts of the System executed by the Supplier up to the date of termination;

(ii) to the extent legally possible, assign to the Purchaser all right, title, and benefit of the Supplier to the System, or Subsystems, as of the date of termination, and, as may be required by the Purchaser, in any subcontracts concluded between the Supplier and its Subcontractors;

        (iii)   to the extent legally possible, deliver to the Purchaser all drawings, specifications, and other documents prepared by the Supplier or its Subcontractors as of the date of termination in connection with the System.

    41.3.4   If the Contract is terminated under GCC Clauses 41.3.1 or 41.3.2, the Purchaser shall pay to the Supplier all payments specified in GCC Clause 41.1.3, and reasonable compensation for all loss, except for loss of profit, or damage sustained by the Supplier arising out of, in connection with, or in consequence of such termination.

    41.3.5   Termination by the Supplier pursuant to this GCC Clause 41.3 is without prejudice to any other rights or remedies of the Supplier that may be exercised in lieu of or in addition to rights conferred by GCC Clause 41.3.

41.4  In this GCC Clause 41, the expression "portion of the System executed" shall include all work executed, Services provided, and all Information Technologies, or other Goods acquired (or subject to a legally binding obligation to purchase) by the Supplier and used or intended to be used for the purpose of the System, up to and including the date of termination.

41.5  In this GCC Clause 41, in calculating any monies due from the Purchaser to the Supplier, account shall be taken of any sum previously paid by the Purchaser to the Supplier under the Contract, including any advance payment paid **pursuant to the SCC.**

**42. Assignment**     42.1  Neither the Purchaser nor the Supplier shall, without the express prior written consent of the other, assign to any third party the Contract or any part thereof, or any right, benefit, obligation, or interest therein or thereunder, except that the Supplier shall be entitled to assign either absolutely or by way of charge any monies due and payable to it or that may become due and payable to it under the Contract.

# C. Special Conditions of Contract

*The following Special Conditions of Contract (SCC) shall supplement or amend the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions of the SCC shall prevail over those in the General Conditions of Contract. For the purposes of clarity, any referenced GCC clause numbers are indicated in the left column of the SCC.*

## A. CONTRACT AND INTERPRETATION

### 1. Definitions (GCC Clause 1)

| | |
|---|---|
| GCC 1.1 (a) (ix) | The applicable edition of the Procurement Guidelines is specified in the World Bank's *Guidelines: Procurement of Goods, Works and Non-Consulting Services under IBRD Loans and IDA Credits, edition January 2011.* |
| GCC 1.1 (b) (i) | The Purchaser is: **Federal Ministry of Health** |
| GCC 1.1 (b) (ii) | The Project Manager is: **Will be determined after signing the Contract.** |
| GCC 1.1 (e) (i) | The Purchaser's Country is: **Bosnia and Herzegovina.** |
| GCC 1.1 (e) (iii) | The Project Sites are: **as specified in the attached Implementation Schedule.** |
| GCC 1.1 (e) (x) | The Contract shall continue in force until the Electronic Health Record Software and all the Services have been provided unless the Contract is terminated earlier in accordance with the terms set out in the Contract. |
| GCC 1.1. (e) (xii) | The Post-Warranty Services Period is **four (4) years** following the expiration of the Warranty period during which the Supplier may be obligated to provide maintenance and/or technical support services for the Software, and in accordance with any amendments to the legislation within the Post-Warranty Services Period the bidder must modify the software solutions as requested, under separate contract(s). |

### 2. Contract Documents (GCC Clause 2)

| | |
|---|---|
| GCC 2 | There are **no** Special Conditions of Contract applicable to GCC Clause 2. |

### 3. Interpretation (GCC Clause 3)

| | |
|---|---|
| GCC 3.1.1 | The Contract's governing language is **English.** |

### 4. Notices (GCC Clause 4)

| | |
|---|---|
| GCC 4.3 | Address of the Project Manager: **Will be determined after signing the Contract.** |

### 5. Governing Law (GCC Clause 5)

| | |
|---|---|
| GCC 5.1 | The Contract shall be interpreted in accordance with the laws of: **Bosnia and Herzegovina** |

### 6. Settlement of Disputes (GCC Clause 6)

| | |
|---|---|
| GCC 6.1.4 | The Appointing Authority for the Adjudicator is: **Rabija Idrizbegović.** |
| GCC 6.2.3 | If the Supplier is foreign (including a Joint Venture when at least one partner is foreign), the Contract shall contain the following provision: Arbitration proceedings shall be conducted in accordance with the rules of arbitration of [select one of the following: **UNCITRAL**. These rules, in the version in force at the time of the request for arbitration, will be deemed to form part of this Contract. If the Supplier is a national of the Purchaser's country, the Contract shall contain the following provision: Any dispute between the Purchaser and a Supplier arising in connection with the present Contract shall be referred to arbitration in accordance with the laws of the Purchaser's country. |

## B. SUBJECT MATTER OF CONTRACT

### 7. Scope of the System (GCC Clause 7)

| | |
|---|---|
| GCC 7.3 | The Supplier's obligations under the Contract will include the following recurrent cost items, as identified in the Recurrent Cost tables in the Supplier's Bid: **Not applicable** |

### 8. Time for Commencement and Operational Acceptance (GCC Clause 8)

| | |
|---|---|
| GCC 8.1 | The Supplier shall commence work on the System within: **ten (10)** of days from the Effective Date of the Contract. |
| GCC 8.2 | Operational Acceptance will occur on or before: Operational Acceptance date consistent with the Implementation Schedule in the Technical Requirements Section. |

### 9. Supplier's Responsibilities (GCC Clause 9)

| | |
|---|---|
| GCC 9.9 | The Supplier shall have the following additional responsibilities: **none**. |

### 10. Purchaser's Responsibilities (GCC Clause 10)

| | |
|---|---|
| GCC 10.12 | The Purchaser shall have the following additional responsibilities: **none**. |

## C. PAYMENT

### 11. Contract Price (GCC Clause 11)

| | |
|---|---|
| GCC 11.2 (b) | Adjustments to the Contract Price shall be as follows: **none**. |

### 12. Terms of Payment (GCC Clause 12)

| | |
|---|---|
| GCC 12.1 | Subject to the provisions of GCC Clause 12 (Terms of Payment), the Purchaser shall pay the Contract Price to the Supplier according to the categories and in the manner specified below.  Only the categories Advance Payment and Complete System Integration relate to the entire Contract Price.  In other payment categories, the term "total Contract Price" means the total cost of goods or services under the specific payment category.  Within each such category, the Contract Implementation Schedule may trigger pro-rata payments for the portion of the total Contract Price for the category corresponding to the goods or services actually Delivered, Installed, or Operationally Accepted, at unit prices and in the currencies specified in the Price Schedules of the Contract Agreement. <br> 1.    Advance Payment <br>    Ten percent (10%) of the entire Contract Price, exclusive of all Recurrent Costs, shall be paid against receipt of a claim accompanied by the Advance Payment Security specified in GCC Clause 13.2. <br> 2.    Twenty percent (20%) after finishing: <br>    (a) Infrastructure and LDAP prerequisite services; <br> 3.    Sixty percent (60%) after finishing: <br><br>    (b)  EHRS application server implementation, <br>    (c) Integration, <br>    (d) Training, <br> 4.    Ten percent (10%) after Conducting final tests and verification of the Inspection information system, operational acceptance the system as an integrated whole and delivery documentation ; <br><br> **Payments will be done based on the Purchaser's approval of presented reports related to the Contract implementation.** |

| GCC 12.3 | The Purchaser shall pay to the Supplier interest on the delayed payments at a rate of: **one half of one percent (0.1%) per week**. |
|----------|--------------------------------------------------------------------------------------------------------------------------------------|
| GCC 12.4 | For Goods and Services supplied locally, the Purchaser will pay the Supplier in in the currency stated in the Contract Agreement and the Price Schedules it refers to. |
| GCC 12.5 | Payment for Goods supplied from outside the Purchaser's Country shall be in the form of: **There is no special payment method for Goods supplied from outside the Purchaser's country.** |

### 13.    Securities (GCC Clause 13)

| GCC 13.2.1 | The Supplier shall provide within twenty-eight (28) days of the notification of Contract award an Advance Payment Security in the amount and currency of the Advance Payment specified in SCC for GCC Clause 12.1 above. |
|------------|--------------------------------------------------------------------------------------------------------------------------------------|
| GCC 13.2.2 | The reduction in value and expiration of the Advance Payment Security are calculated as follows: **P\*a/(100-a), where "P" is the sum of all payments effected so far to the Supplier (excluding the Advance Payment), and "a" is the Advance Payment expressed as a percentage of the Contract Price pursuant to the SCC for GCC 12.1.** |
| GCC 13.3.1 | The Performance Security shall be denominated in the currency of the Contract for an amount equal to **ten percent (10%)** of the Contract Price, excluding any Recurrent Costs. |
| GCC 13.3.4 | During the Warranty Period (i.e., after Operational Acceptance of the System), the Performance Security shall be reduced to **two and a half percent (2.5%)** percent of the Contract Price, excluding any Recurrent Costs. |

### 14.    Taxes and Duties (GCC Clause 14)

| GCC 14 | There are **no** Special Conditions of Contract applicable to GCC Clause 14. |
|--------|------------------------------------------------------------------------------|

## D.  INTELLECTUAL PROPERTY

### 15.    Copyright (GCC Clause 15)

| GCC 15.3 | The Purchaser may assign, license, or otherwise voluntarily transfer its contractual rights to use the Standard Software or elements of the Standard Software, without the Supplier's prior written consent, under the following circumstances: **none.** |
|----------|--------------------------------------------------------------------------------------------------------------------------------------|
| GCC 15.4 | **Not applicable.** |
| GCC 15.5 | **No software escrow contract** is required for the execution of the Contract;" However, in case of Contract termination, for whatever reason, the Source Code of the Custom Software and all related documentation **MUST** be delivered to the Purchaser. |

### 16.    Software License Agreements (GCC Clause 16)

| GCC 16.1 (a) (iii) | The Standard Software license shall be valid **throughout the territory of the Purchaser's Country.** |
|--------------------|--------------------------------------------------------------------------------------------------------|
| GCC 16.1 (a) (iv) | Use of the software shall be subject to the following additional restrictions: **none.** |
| GCC 16.1 (b) (ii) | The Software license shall permit the Software to be used or copied for use or transferred to a replacement computer **provided the replacement computer falls within approximately the same class of machine and maintains approximately the same number of users, if a multi-user machine.** |

| GCC 16.1 (b) (vi) | The Software license shall permit the Software to be disclosed to and reproduced for use (including a valid sublicense) by **support service suppliers or their subcontractors, exclusively for such suppliers or subcontractors in the performance of their support service contracts** subject to the same restrictions set forth in this Contract. |
|---|---|
| GCC 16.1 (b) (vii) | In addition to the persons specified in GCC Clause 16.1 (b) (vi), the Software may be disclosed to, and reproduced for use by: **not applicable.** |
| GCC 16.2 | *The Supplier's right to audit the Standard Software will be subject to the following terms: The Purchaser will make available to the Supplier within twenty-one (21) days of a written request accurate and up-to-date records of the number and location of copies, the number of authorized users, or any other relevant data required to demonstrate use of the Standard Software as per the license agreement.* |

## 17. Confidential Information (GCC Clause 17)

| GCC 17.1 | There are **no** modifications to the confidentiality terms expressed in GCC Clause 17.1. |
|---|---|
| GCC 17.7 | The provisions of this GCC Clause 17 shall survive the termination, for whatever reason, of the Contract for **the period specified in the GCC.** |

## E. SUPPLY, INSTALLATION, TESTING, COMMISSIONING, AND ACCEPTANCE OF THE SYSTEM

## 18. Representatives (GCC Clause 18)

| GCC 18.1 | The Purchaser's Project Manager shall have the following additional powers and / or limitations to his or her authority to represent the Purchaser in matters relating to the Contract: **no additional powers or limitations.** |
|---|---|
| GCC 18.2.2 | The Supplier's Representative shall have the following additional powers and / or limitations to his or her authority to represent the Supplier in matters relating to the Contract: **no additional powers or limitations.** |

## 19. Project Plan (GCC Clause 19)

| GCC 19.1 | Chapters in the Project Plan shall address the following subject**:** <br> (a) **Project Organization and Management Plan;** <br> (b) **Delivery and Installation Plan** <br> (c) **Training Plan** <br> (d) **Warranty Service Plan** <br> (e) **Post-Warranty Service Plan** <br> (f) **Technical Support Plan** |
|---|---|
| GCC 19.2 | Within **twenty one (21)** days from the Effective Date of the Contract, the Supplier shall present a Project Plan to the Purchaser. The Purchaser shall, within **seven (7)** of receipt of the Project Plan, notify the Supplier of any respects in which it considers that the Project Plan does not adequately ensure that the proposed program of work, proposed methods, and/or proposed Information Technologies will satisfy the Technical Requirements and/or the SCC (in this Clause 19.2 called "non-conformities" below). The Supplier shall, within **three (3) days** of receipt of such notification, correct the Project Plan and resubmit to the Purchaser. The Purchaser shall, within **three (3)** days of resubmission of the Project Plan, notify the Supplier of any remaining non-conformities. This procedure shall be repeated as necessary until the Project Plan is free from non-conformities. When the Project Plan is free from non-conformities, the Purchaser shall provide confirmation in writing to the Supplier. This approved Project Plan ("the Agreed and Finalized Project Plan") shall be contractually binding on the Purchaser and the Supplier. |
| GCC 19.5 | The Supplier shall submit to the Purchaser the following reports: |

| | (a)     Infrastructure and LDAP prerequisite services implementation Report Reports on implemented phases:<br>(b)     EHRS application server installation Report,<br>(c)     Reports on implemented Integration,<br>(d)     Reports on implemented Training,<br>(e)     Final written report (with Acceptance Tests and Documentations);<br>Monthly written progress reports summarizing results accomplished during the prior period, cumulative deviations to date from schedule of progress milestones, corrective actions to be taken to return to planned schedule of progress; proposed revisions to planned schedule, other issues and outstanding problems; proposed actions to be taken, resources that the Supplier expects to be provided by the Purchaser and/or actions to be taken by the Purchaser in the next reporting period, other issues or potential problems the Supplier foresees that could impact on project progress and/or effectiveness, etc |
|---|---|

## 20.   Subcontracting (GCC Clause 20)

| GCC 20 | There are **no** Special Conditions of Contract applicable to GCC Clause 20. |
|---|---|

## 21.   Design and Engineering (GCC Clause 21)

| GCC 21.2 | The Contract shall be executed in accordance with the edition or the revised version of all referenced codes and standards current at the date **as specified in the GCC.** |
|---|---|
| GCC 21.3.1 | The Supplier shall prepare and furnish to the Project Manager the following documents for which the Supplier must obtain the Project Manager's approval before proceeding with work on the System or any Subsystem covered by the documents:<br>(a)     All reports<br>(b)     All Acceptance Certificates. |

## 22.   Procurement, Delivery, and Transport (GCC Clause 22)

| GCC 22.4.3 | The Supplier **shall** be free to use transportation through carriers registered in any eligible country and **shall** obtain insurance from any eligible source country. |
|---|---|
| GCC 22.5 | The Supplier shall provide the Purchaser with shipping and other documents **as specified in the GCC.** |

## 23.   Product Upgrades (GCC Clause 23)

| GCC 23.4 | The Supplier shall provide the Purchaser: **with all new versions, releases, and updates to all Standard Software during the Warranty Period, for free, as specified in the GCC.**<br>In accordance with any amendments to the legislation within the Warranty Period, the Supplier must modify the software solutions as requested, free of charge. |
|---|---|

## 24.   Implementation, Installation, and Other Services (GCC Clause 24)

| GCC 24 | There are **no** Special Conditions of Contract applicable to GCC Clause 24. |
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## 25.   Inspections and Tests (GCC Clause 25)

| GCC 25 | There are **no** Special Conditions of Contract applicable to GCC Clause 25. |
|---|---|

## 26.   Installation of the System (GCC Clause 26)

| GCC 26 | There are **no** Special Conditions of Contract applicable to GCC Clause 26. |
|---|---|

## 27.   Commissioning and Operational Acceptance (GCC Clause 27)

| GCC 27.2.1 | Operational Acceptance Testing shall be conducted in accordance with |
|---|---|

| | Technical Requirements  (See: Technical Requirements, section 2.4.2) |
|---|---|
| GCC 27.2.2 | If the Operational Acceptance Test of the System, or Subsystem(s), cannot be successfully completed within thirty (30) days from the date of Installation or any other period agreed upon by the Purchaser and the Supplier, then GCC Clause 27.3.5 (a) or (b) shall apply, as the circumstances may dictate. |

## F.  GUARANTEES AND LIABILITIES

### 28.    Operational Acceptance Time Guarantee (GCC Clause 28)

| GCC 28.2 | Liquidated damages shall be assessed at **one half of a one percent (0.5%)** per week.  The maximum liquidated damages are **ten percent (10%)** of the Contract Price, or relevant part of the Contract Price. |
|---|---|
| GCC 28.3 | Liquidated damages shall be assessed **only with respect to achieving Operational Acceptance.** |

### 29.    Defect Liability (GCC Clause 29)

| GCC 29.1 | For Software, exceptions or limitations to the Supplier's warranty obligations shall be as follows: **None** |
|---|---|
| GCC 29.3 (iii) | The Supplier warrants that the following items have been released to the market for the following specific minimum time periods:  **No specific minimum time requirements are established for this Contract other than that the Information Technologies must have been previously released to the market.** |
| GCC 29.4 | The Warranty Period (N) for Inspection information system application software shall begin from the date of Operational Acceptance of the System or Subsystem and extend for **12 months.** |
| GCC 29.10 | During the Warranty Period, the Supplier must commence the work necessary to remedy defects or damage within **in emergencies not more than 4 hours, in others not more than 24 hours** of notification. |

### 30.    Functional Guarantees (GCC Clause 30)

| GCC 30 | There are **no** Special Conditions of Contract applicable to GCC Clause 30. |
|---|---|

### 31.    Intellectual Property Rights Warranty (GCC Clause 31)

| GCC 31 | There are **no** Special Conditions of Contract applicable to GCC Clause 31. |
|---|---|

### 32.    Intellectual Property Rights Indemnity (GCC Clause 32)

| GCC 32 | There are **no** Special Conditions of Contract applicable to GCC Clause 32. |
|---|---|

### 33.    Limitation of Liability (GCC Clause 33)

| GCC 33 | There are **no** Special Conditions of Contract applicable to GCC Clause 33. |
|---|---|

## G. RISK DISTRIBUTION

### 34.    Transfer of Ownership (GCC Clause 34)

| GCC 34 | There are **no** Special Conditions of Contract applicable to GCC Clause 34. |
|---|---|

### 35.    Care of the System (GCC Clause 35)

| GCC 35 | There are **no** Special Conditions of Contract applicable to GCC Clause 35. |
|---|---|

### 36.    Loss of or Damage to Property; Accident or Injury to Workers; Indemnification (GCC Clause 36)

| GCC 36 | There are **no** Special Conditions of Contract applicable to GCC Clause 36. |
|---|---|

**37.    Insurances (GCC Clause 37)**

| GCC 37.1 (c) | Not applicable. |
|---|---|
| GCC 37.1 (e) | Not applicable. |

**38.    Force Majeure (GCC Clause 38)**

| GCC 38 | There are **no** Special Conditions of Contract applicable to GCC Clause 38. |
|---|---|

## H.  CHANGE IN CONTRACT ELEMENTS

**39.    Changes to the System (GCC Clause 39)**

| GCC 39 | There are **no** Special Conditions of Contract applicable to GCC Clause 39. |
|---|---|

**40.    Extension of Time for Achieving Operational Acceptance (GCC Clause 40)**

| GCC 40 | There are **no** Special Conditions of Contract applicable to GCC Clause 40. |
|---|---|

**41.    Termination (GCC Clause 41)**

| GCC 41 | There are **no** Special Conditions of Contract applicable to GCC Clause 41. |
|---|---|

**42.    Assignment (GCC Clause 42)**

| GCC 42 | There are **no** Special Conditions of Contract applicable to GCC Clause 42. |
|---|---|

### *Annex to Special Conditions of Contract*

**Clause GCC 41.2.1**: The provisions in clause GCC 41.2.1 (c) of General Conditions of Contract are replaced with the following:

**Fraud and Corruption**

41.2.1 (c)     If the Purchaser determines that the Supplier and/or any of its personnel, or its agents, or its Subcontractors, consultants, service providers, suppliers and/or their employees has engaged in corrupt, fraudulent, collusive, coercive or obstructive practices, in competing for or in executing the Contract, then the Purchaser may, after giving 14 days notice to the Supplier, terminate the Supplier's employment under the Contract and cancel the contract, and the provisions of GCC Clause 41.1 shall apply as if such expulsion had been made under GCC Sub-Clause 41.1.2.

(a)     For the purposes of this Sub-Clause:

(i)     "corrupt practice" is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party[1];

(ii)     "fraudulent practice" is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation[2];

(iii)     "collusive practice" is an arrangement between two or more parties[3] designed to achieve an improper purpose, including to influence improperly the actions of another party;

(iv)     "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party[4];

(v)     "obstructive practice" is

(aa)     deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or

(bb)     acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under GCC Clause 9.8.

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[1] "Another party" refers to a public official acting in relation to the procurement process or contract execution. In this context, "public official" includes World Bank staff and employees of other organizations taking or reviewing procurement decisions.

[2] "Party" refers to a public official; the terms "benefit" and "obligation" relate to the procurement process or contract execution; and the "act or omission" is intended to influence the procurement process or contract execution.

[3] "Parties" refers to participants in the procurement process (including public officials) attempting to establish bid prices at artificial, non competitive levels.

[4] "Party" refers to a participant in the procurement process or contract execution.

Should any employee of the Supplier be determined to have engaged in corrupt, fraudulent, collusive, coercive, or obstructive practice during the purchase of the Goods, then that employee shall be removed.

**Clause GCC 9.8**: The provisions in clause GCC 9.8 of General Conditions of Contract are replaced with the following:

**9.8 Inspections and Audit by the Bank**

9.8    The Supplier shall permit, and shall cause its Subcontractors and consultants to permit, the Bank and/or persons appointed by the Bank to inspect the Supplier's offices and all accounts and records relating to the performance of the Contract and the submission of the bid, and to have such accounts and records audited by auditors appointed by the Bank if requested by the Bank. The Supplier's and its Subcontractors and consultants' attention is drawn to GCC Clause 41.2.1 (c), which provides, inter alia, that acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under this GCC Sub-Clause 9.8 constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the Bank's prevailing sanctions procedures).

# D. Technical Requirements

## 1. Background

### 1.1 The Purchaser

1.1.1 Overview

The Ministry of Health of Federation of Bosnia and Herzegovina (FMOH) seeks proposals to install a single record per patient primary health care information system through implementation of cantonal Electronic Health Record Software (EHRS) for cantonal Primary Health Care Centers. The intent of this EHRS is to improve individual patient care and capture data that will help cantonal institutions to improve management of PHC and the FMOH and to improve the overall effectiveness of the public health sector in FBIH.

The EHRS will provide ambulance information system AIS functionalities in primary health care centers in eight cantons:
1. Posavina Canton,
2. West Herzegovina Canton,
3. Bosnian Podrinje Canton,
4. Canton 10,
5. Middle Bosnia Canton,
6. Tuzla Canton,
7. Zenica-Doboj Canton,
8. Una-Sana Canton.

Sarajevo Canton has implemented EHRS and Herzegovina-Neretva Canton is already in process of implementation.

The EHRS will be central to effective support of reporting service within the Cantonal Institutes of Health Insurance and mandatory law-based reporting to Cantonal Institutes of Public Health and Federal Institute of Public Health.

Sustainability is a key consideration to the selection of the EHRS. The EHRS must employ a licensing scheme that minimizes recurrent licensing costs. The FMOH intends to support the EHRS operations primarily through capacitated internal resources and to empower cantonal Institutes of Health Insurance to continue further integration and development of this system.

1.1.2 Stakeholders

The key stakeholders of this project are Cantonal PHC s, the Federal Ministry of Health, Federal Institute of Public Health, Cantonal Ministries of Health, Cantonal Institutes of Health Insurance and Cantonal Institutes of Public Health. The World Bank is a secondary stakeholder providing funding for the project but will not have direct involvement in its implementation.

### 1.2 Business Objectives of the Purchaser

1.2.1 Business Objectives

The Ministry of Health FBIH (FMOH) is dedicated to the empowerment of the population of Federation of Bosnia and Herzegovina to pursue a health and wellness system that guarantees the equitable provision of quality health care, thus contributing fully to the continued economic, cultural, social and environmental development of BIH.

A distributed Health Information System (HIS) of FBIH is one of the tools that are key to the realization of this vision. One of fundamental components of HIS is Cantonal Electronic Health Record System (EHRS).

The Ministry of Health FBIH provides regulation, policy, plans and resources to the public health facilities throughout who in turn deliver accessible and quality health care to the residents and HIS will aid the execution of these activities by providing increased volume and increased accuracy of data to inform these activities. The EHRS must have the capability to provide data at all facilities for both clinical and reporting use. All subsystems will include the ability for the generation of comprehensive mandatory law-based reports to Cantonal Institutes of Health Insurance and Cantonal Institutes of Public Health, Federal Institute of Public Health and other relevant institutions. Top level managers of Primary Healtcare Centers (PHC) will be allowed to generate reports for informed management and decision making.

The Supplier of the EHRS must acknowledge that they retain no interest or ownership in system data, clinical or otherwise.

The Ministry of Health FBIH places paramount importance on sustainability and minimizing life-cycle costing. Proposals that support favorable software licensing models, minimize third-party software license fees, eliminate annual renewals and maximize EHRS autonomy at cantonal level and maximize cantonal capacity strengthening will be preferred.

The Ministry of Health FBIH will prefer Bidders who propose an implementation with significant cantonal institutions capacity strengthening. The FMOH intends to empower Cantonal Institutes of Health Insurance for system administration of the EHRS and end-user support with internal resources.

1.2.2    Expected Outcomes

The purpose of the EHRS is to ensure that the health sector is served by a patient/client focused computerized information system. In future this system will form distributed HIS of FBIH that will cover primary, secondary and tertiary care.

The financial implications for the development of an EHRS are significant. With the rising cost associated with health care delivery, allocation of resources is important for the day to day overall management of institutions. Management of human and financial resources is vital for the efficiency and effectiveness of health care delivery. A EHRS will allow for evidence based decision making thus providing the greatest benefit to the population. In addition, a EHRS will allow for the patient's care to be better managed as consolidated and complete medical records for each patient will be available wherever they decide to access health care. It will also allow family medicine doctors to better serve the population and address the changing disease profile, which is one of an ageing population with increasing chronic non-communicable diseases.

In support of improved patient care and the associated reduction of clinical errors, the proposed EHRS should eliminate document discontinuity in areas where care is provided across multiple sites within canton or FBIH.

Switching to electronic information operations in cantonal primary health care centers on open health standards platform – IHE, DICOM, HL7, EUROREC and similar - so that it meets health needs for optimum patient care.

With the information system, participants in the cantonal health care will collect information on-line and in that way have better access to the information. In some cases, paper documentation will be completely replaced with electronic documentation. In some cases it will be printed out

and stored, as legally required. Information system will enable data analysis and reporting required for making informed decisions about managing PHC. The PHC staff involved in data collecting, processing and reporting shall free some of their time to focus on patient care.

E-exchange of data between different health information systems, wards, and institutions across the canton and beyond where needed. This would include both sending analysis and diagnostic requests and received the results electronically.

of central cantonal health functions which will ensure smooth and transparent, yet safe access to health information of each individual patient. The information should be accesses through a health web portal and in accordance with the best European Union practices.

1.2.3   Expected Benefits

In general the long and medium term benefits associated with the implementation of an Information and Communication Technology (ICT) solution outweigh the initial expenditure. The Ministry of Health expects the following general financial and administrative benefits:

    a) improved monitoring of targets and performance indicators;
    b) enhanced decision making through the provision of timely, accurate, appropriate and well presented information;
    c) reduced expenditure for information collection required for management purposes, and increased confidence in its reliability and timeliness;
    d) minimal expenditure for system administration and end-user support by using Supplier-trained cantonal internal resources;
    e) improved performance through analysis and use of information;
    f) availability of information relevant for patient treatment right away and from any location;
    g) improved quality of service through law-based monitoring, review and redistribution of resources;
    h) optimization of work processes and costs in health institutions through redesigned business processes by introducing clear policies and procedures for individual business processes and efficiently organized medical care;
    i) create e-knowledge and skills bases and transfer it to young colleagues;
    j) issue e-test results and e-prescriptions to patients - they can be distributed in different electronic ways.

## 1.3   Related Information Technology Issues and Initiatives

During the project development local conditions and preferences, as well as further refinement of the system may create discrepancies. This should be documented, controlled and coordinated with the future information system development.

IT Standards Rulebook (Rulebook on Definition of Primary Health Care Health Informatics System Architecture, Federation of BiH Official Gazette, #82/13) on more detailed contents of technological and functional requirements for the establishing the integrated health information system (IT Standards Rulebook) was  adopted in 2013. The requirements referred to in this IT Standards Rulebook shall be fulfilled by the software solutions already operating in health institutions or software solutions whose inclusion in the integrated health information system has been envisaged.

Current IT Standards Rulebook includes business and functional requirements for the processes taking place in primary health care centers and only certified solutions that are in compliance to these requirements can be implemented.

In 2014, the Ministry of Health of FBIH certified 3 software solutions for primary health care and one software solutions for LIS that are in compliance with IT Standards Rulebook.

The EuroRec Institute (European Institute for Health Research - http://www.eurorec.org), as the European certification body, defined "EuroRec Seal Level 1/2" as a quality label for e-Health software products. EuroRec is organized as a permanent network of National ProRec centers and provides services to industry (developers and vendors), healthcare providers (buyers), policy makers and patients. The FMOH IT Standards Rulebook contains a set of functional and technological software requirements fully aligned with all EuroRec Seal Level 1 requirements.

TC CEN251 (Technical Committee for Standardization in Medical Informatics) recommended HISA standard for Information System Architecture for health care institutions.

HL7 (Health Level Seven) communication standards define messages, services and document format for communication of clinical patient care information across and between health care institutions for the delivery and evaluation of healthcare services.

FMOH HSEP project supplied all PHC institutions with IT equipment (servers, workstations, printers, bar code readers), full LAN networks and enabled WAN network to connect all ambulances with the central buildings, and to connect all to cantonal institute for healthcare insurance.

All Cantonal Healthcare Insurance Institutes in FBIH are supplied with electronic identification card printing equipment, and will be equipped with servers and required application hardware.

Community Health Care Centers in Visoko and Gračanica already operate with fully operational EHRS (vendor AGFA Healthcare) and this needs to be taken into consideration as current state of affairs. Bidders competing in cantons where these two community health care centers are shall perform integration and ensure interoperability and data exchange between the proposed and the existing systems.

## 1.4 Acronyms Used in These Technical Requirements

| | |
|---|---|
| CEN | European Committee for Standardization (Centre Européen de Normalisation - CEN) |
| CEN/TC 251 | European Committee for Standardization / Technical Committee for Health Informatics |
| KIS | Cantonal Information Services |
| DEM1 | Statistics live birth application form (relevant registrar's office in the local community) |
| DEM2 | Statistics death application form (relevant registrar's office in the local community) |
| EU | European Union |
| EZD | Electronic Health Records |
| EZK | Electronic Patient Health Records |
| HIS | Hospital Information System |
| HISA | HISA - Health Informatics Service Architecture (CEN TC/251 pre-standard, formally known as Healthcare Information System Architecture |
| ICD10 | International Classification of Diseases (see MKB) |
| IHIS | Integrated Health Information System (see IZIS) |
| ZJZ | Public Health Institute |
| ISO | International Organization for Standardization |

| IZIS | Integrated Health Information System |
|---|---|
| JKL/ATC | Anatomical Therapeutic Chemical - classification of medicines |
| JMBG | Personal ID number of Citizen |
| MKB | International Classification of Diseases |
| PZZ | Primary Health Care |
| ZZO | Health Insurance Institute |
| FZZS | Federation of BiH Statistics Office |
| SOA | Service-oriented (system)architecture (Web services) |
| TLS | Transport Layer Security - a set of protocols for safe data transfer through computer networks |
| AIS | Ambulance Information System |
| BIS | Hospital Information System |
| SW | Software |
| SZO | World Health Organization (WHO) |
| UML | UML - Unified Modeling Language - In software engineering consolidated modeling language effectively represents a standard language for visual presentation of object model. |
| VPN | Virtual Private Network - It allows users on remote locations to simply maintain secured communication through public networks such as the Internet. |
| WONCA | World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians (World Organization of Family Doctors) |
| XML | Extensible Markup Language or metalanguage for markup of textual documents. Primary purpose of XML is to facilitate exchange of data through different information systems, in particular through systems connected on the Internet. |
| LAN | Local Area Network |
| WAN | Wide Area Network |

## 2    Business and Functional Requirements

### 2.1    Business Requirements to Be Met by the System

The objective of the purchaser is to implement (EHRS) Electronic Health Record System through implementation of Ambulance Information System (AIS) in all Primary Health Care Centers (PHC) in 8 cantons as follows:
1. Posavina Canton,
2. West Herzegovina Canton,
3. Bosnian Podrinje Canton,
4. Canton 10,
5. Middle Bosnia Canton,
6. Tuzla Canton,
7. Zenica-Doboj Canton,
8. Una-Sana Canton.

This will be done through implementation of EHRS software solutions that are certified by Ministry of Healt of Federation of BiH. Intention is that every canton may have different certified software solution, but all PHC s within a canton must be covered with same (one) certified software solution.

EHRS will be installed on servers that are/will be physically located in Cantonal Institute of Healthcare Insurance. EHRS will be connected/integrated with insuree databases to ensure online communication and data exchange. This will be done through web services data exchange.

Implemented EHRS must be autonomous and independent from external factors (FBIH institutions, other cantons, etc.) and fully functional and managed (user identity management and full system management, administration and support) within a cantonal institutions and personnel.

This project will introduce, implement and integrate new Electronic Health Care Identification Card (EHCIC) in way that must support transition period using both present and new health care identification documents. Cards printing technology and initial set of cards are provided by HSEP project and delivered to all cantonal institutes of healthcare insurance.

Finally this system will provide regular law-based reports to Cantonal Institutes of Healthcare Insurance, Cantonal Institutes of Public Health and regular law-based reports to Federal Institute of Public Health and other relevant institutions. Top level managers of PHC's will be allowed to generate reports.

Primary aspect of Electronic Health Record System (EHRS) project involves introduction of so called Electronic Health Record (EHR). EHR is basically a record of medical details of patient in electronic form. Details included in EHR consist of images (or links to images) and reports collected over time, or rather during the patient's treatment. It also includes actual results of tests, clinical information, and remainder to prevent creation of unnecessary duplication of diagnostic tests. Purpose of introducing EHR at the cantonal level it to simply integrate all patient information into a single system operated at the cantonal level. Details included in EHR are:

- Demographics (age, sex, address of residence, JMBG, occupation, etc).
- Type of insurance (Personal ID number of insure, etc).
- History of diseases (anamneses and status, test results and opinion of attending physicians, course of treatment, discharge summary, etc).
- Results of laboratory tests.
- Links to or diagnostics imaging (X-ray, CT, MRI, Ultrasound, etc).
- Links to or reports from carpological devices (ECG, ergometer, etc).
- Details on allergies.
- Details on therapies, procedures underwent, use of medications, etc.

Major purpose of the patient's Electronic Health Record system is to allow set up, collection, and exchange of clinically relevant details with the view of providing health care across the health care network and also to allow improved decision making. All this includes:

- Overview of historical details on the disease in question and the test patient underwent at Family Medicine Physician (FMP) or any other primarily health care physician;
- Need to make a good decision on therapy that would provide the best improvement of their health conditions or in case of medical emergency provide better care to patients.
- Decision making on emergency wards on efficient and safe measures for patients in coma or vegetative patients.
- Pharmacists consider available information on medications in order to weigh possible potentially hazardous reactions to prescribed medication.
- Instructors and individuals involved in development of plans for use of health resources make decision on best way to tailor the education system to meet the needs for desired types of health professions and necessary number of health professionals and on development of a curriculum that would meet both existing and future needs in the best possible way;

## 2.2 Business Processes to be covered

In building the EHRS the buyer has the following priorities:
- Collect and manage patient medical data,
- Support business processes in family medicine team operations,
- Make easier mandatory law-based reporting and data exchange with the health system stakeholders.

Main areas that will be supported by the EHRS information system are defined in IT Standards Rulebook (Rulebook on Definition of Primary Health Care Health Informatics System Architecture, Federation of BiH Official Gazette, #82/13).

Scope of this project are Family Medicine (FM) teams (their fails, Family Medicine physicians and nurses) and business processes related to their operations and activities. EHR software solution shall completely cover operations of Family Medicine teams.

Special functional requirements:
- Scheduling and visit management: Create work and visit schedule
- Patient reception: Patient identification, online verification of insurance status, recording demands for health care, recoding health nuisances, symptoms, and requests made by patients.
- Patient registration: Management of patient information in accordance with proscribed Set of Important Information (Attachment 3, Rulebook on Definition of Primary Health Care Health Informatics System Architecture, Federation of BiH Official Gazette, #82/13).
- Selection of FM team: Management of selected FM team information, establishing registration connections in accordance with payment principles.
- Contact:
  a. Provision of health care: Contact data entry in accordance with proscribed basic set of important information, Maintaining list of reasons for visit to selected physician (ICPC-2); - alternatively (optional), Maintain list of health issues, Maintain list of prescribed medications, Health activity data entry and maintenance, Clinical information data entry and maintenance (diagnosis, intervention, prescribed medications, diagnostics test results, findings, etc), Create different documents related to health status.
  b. administration: Entry of data related to closing of contact, Print related documentation, prescriptions, referrals, findings/summaries, reports, schedule future planed contacts and activities
- Therapies: Patient level medication therapy management
- Promotion and prevention activity planning: Prevention activity management.

## 2.3 Software requirements specification

### 2.3.1 Technology requirements and system architecture

Minimum requirements for EHRS program architecture is the 3-tier architecture compliant to CEN prEN 12967 standard, also known as HISA (Healthcare Information Systems Architecture). Thus defined program architecture shall allow for:
- Interoperability - ability to exchange information using open standards (HL7, DICOM, XML, etc);
- Modularity - simple upgrade with new components;
- Migration - replacement of old with new components;
- Efficient management and maintenance;

- Cost-effectiveness - use of the latest technologies;

Reference program information system architecture for Primary Health Care (compliant with HISA class1) shall be divided into three tiers:
- Application tier – all user applications included in the overall information system of Primary Health Care, applications in use by cantonal health care provider, applications for collection of data from middle tier of the information system of Primary Health Care, application for data administration on the health care portal and similar applications.
- Middleware - middle tier of the system which uses a standardized interface to provide to applications a full range of shared services, including messaging integration. The messaging management system effectively allows integration of heterogeneous, autonomous and distributed user applications by message exchange in HL7 standard. This middle tier also includes EHR records which can be only accesses by authorized users based on precisely defined roles and responsibilities. These records include health electronic records with history of disease/condition for all patients registered with the system – from the first time patient was registered until the expiry of desired period following the death of the patient.  It also includes all registers which contain information on personal and demographic details of patients, registers on resources in health and similar registers.
- Communicational tier – allows communicational infrastructure for information exchange between all users included in the of Primary Health Care's information system. It used Virtual Private Network (VPN) which links all users included in the system in a secure way.

EHRS architecture and technologies to be applied shall enable scalable implementation of solution irrespective of load and distribution of processing.

Implemented in this way, the program architecture shall allow effective integration of information systems and applications in use by different users in health care sector through VPN network and it shall effectively resolve issues concerning security and quality of services including:
- Confidentiality (identification, verification of credibility and authorization).
- Integrity (authorized modification of information); and
- High level of availability (system components to be available 24 hrs a day, 365 days a year).

The community health care center information system shall support Service-oriented architectures (SOA) through use of Web service, and also implementation of XML. Through a SOA-supported architecture, all services will be able to exchange information with each other, and such communication can be restricted only to transfer of data or coordination of activities of two or more system services.

Both hardware and software required for operations of the system shall be centralized - there must not be any system hardware on the side of individual health departments or remote locations of health care providers.

Hardware servers will be provided by FMOH to Cantonal Health Insurance Institutes, one datacenter rack per at the actual location. On these physical servers is needed to install virtualization software and proposed server operating system(s), application server(s) and database server(s).

System solution shall include implemented web based interfaces and  modules that will ensure access by authorized health care provider (physician, nurse) from remote location using a secured connection.

Software solution shall be implemented under a relational database management system (RDBMS) for storing of data that are integral part of the business process. Please list relational databases under which the software solution can be implemented. All database licenses must be provided with solution.

Software solution shall allow user access from remote locations (from both primary health care centers and remote FM Ambulantas) using a single central database accessed by users from remote locations using permanent LAN or WAN connections.

System architecture and architecture of technology used should allow flexible implementation of new modules to support work of specialist service. Software solution shall be based on web-oriented architecture and it shall involve 3-tier architecture as minimum requirement and with business logic implemented in the middle tier.

Software solution shall not require additional requirements for installation on user side, i.e. users shall be zero footprint.

Software solution shall include robust security model across all levels, with independent *Single Sign - On* (SSO) capability and expandability towards advanced security technologies (smart cards, electric signature, etc).

Central server installation shall be able to serve operations of all concurrent users across one canton (on average more than 3,000 users per canton with 15% concurrency factor). On the other hand, details on number of Family Medicine teams to be implemented in this project are provided in the specification of sites.

Software solution should entail implemented international and European standards for medical informatics (HISA, HL7, DICOM, CEN/TC251, ASTM, and similar standards). Please indicate version and portion of standard proposed to be used and indicated which technology or functional requirements its use refers to.

Software solution shall have modules that would ensure data exchange using HL7 standard min. ver. 2.x.

Software solution shall allow simple integration with laboratory diagnostics devices or laboratory information system (please indicate LIS name and manufacturer) and data exchange using HL7 standard, (please indicate protocol version eg. 2.x).

2.3.2    Functional requirements

- System shall provide to all users standardized data dictionaries as support to structured and coded registration of health care information.
- Software solution should allow initialization and synchronization with data dictionaries, coding system provided by cantonal health insurance institutes and the Federation of BiH Health Insurance Institute. Please indicated the way used to update, import, and export coding systems and data dictionaries.
- System shall allow initialization of internal data dictionaries (organizational structure, personnel records, etc).
- System shall allow users to be assigned with different access rights (read only, data entry, etc) taking into consideration level of confidentiality.
- System shall consider access rights when allowing access to health care information based on different roles of health care providers in relation to patients in question.
- System shall allow users to mark individual health care information as confidential.

- Each user shall have a unique and consistent identification.
- Each version of health care information shall have a unique and consistent identification.
- Each version of health care information shall record date and time of entry.
- Each version of health care information shall record users and computer identification responsible for identification of data entry.
- Each update of health care information shall result in a new version of health information; however, the previous versions should also be retained.
- Each version of health care information shall include activity status (for example, active or ongoing, inactive, history or obsolete, complete, canceled, archived).
- Deleting health care information shall result in creation of new version of health information whose status should be "Deleted.".
- System shall not show deleted health care information, except audit records.
- System shall not include deleted health care information in clinic documentation or exported information, except for audit needs.
- Each version of health care information shall record a person who is responsible for content of specific version. Person responsible for the content can be a user or a third party.
- There shall be a possibility to view complete history of health care information versions.
- Each patient and their electronic health record shall be uniquely and consistently identified within the system.
- Each health care information shall be uniquely and consistently assigned to a single identified patient.
- Each patient information shall be accessed from their patient electronic health record.
- Importance of data accuracy compels strict control of data entered into the database. Strategy shall include prevention of users to enter incorrect (or otherwise wrong information) data.
- Obligation to register, correctness of values and format of individual information shall be validated at the presentation tier and business rules-based validation outcomes shall be propagated.
- Each version of health care information shall include date of validation.
- Restrictions built into the actual database, such as, for example, referential integrity, shall be the final element of validation.
- Competition control and control of user transactions shall prevent loss of data and erroneous data entry that may be caused by concurrent operations of a large number of users.
- Monitoring tools shall be implemented to ensure continuity and quality of health institution's bussing system performance through monitoring of quality and quantity parameters used to gauge performance of system participants (monitoring operations of organizational units and individual users).
- The system shall be able to automatically assign a unique medical record number, information on each patient should be accessible in all wards in accordance with business rules of operation.
- The system shall entail proven protection mechanisms that prevent any duplication of patient information or association of wrong patient information.
- The system shall allow storing of demographic information as data connected to treatment and provide to health institution ability to create and maintain logical medical charts for each patient.
- Minimum demographic information the system shall include are first name, last name of patient and other names if any, father's name, mother's name and maiden name, Personal ID number of Citizen (or other numbers assigned by the Ministry of Health and ID card number), address of residence including street, city, and country of

residence, both land line and mobile telephone number, e-mail address, date of birth, born sex, current sex, marital status, full legal employer name, TIN of employer, contact person in case of emergency including their address and telephone number. Also, the system shall be able to associate relatives such as mother-child, spouses, brother-sister, etc.

2.3.3    Integration requirements

Full integration and synchronization of patient data/information between different systems will be required. Such integration shall include full synchronization of system data through use of HL7 health standard (both offered and existing systems), and it shall allow two-way communication between the systems (sending query requests from Family Medicine system to laboratory information system and radiology information system and Internal medicine stations system and ECG devices (cardio diagnostic support system). It is also expected that Family Medicine system will receive and demonstrate completed results from these systems (EHR – display of test results, diagnostics imaging and physician's reports, including portions of patient electronic health record).

Implemented data classes and their attributes shall comply with basic set of Important data set (Attachment 3, Rulebook on Definition of Primary Health Care Health Informatics System Architecture, Federation of BiH Official Gazette, #82/13)

Horizontal integration - data exchange between health institution at the same level (reports of consultations and diagnostics examination) or exchange of data generated by different software solutions used by organizational units of a single institution (for example, where a different software is used for hospital pharmacy, laboratory, or certain specialist departments).

Vertical integration - data exchange between institutions at different levels, e.g. canton and/or the Federation of BIH, (referrals and specialist examination reports) in accordance with statutory law-based reporting requirements.

Integration with health institutions at the Federation of BiH level - automatic download of codes and automatic sending of statutory law-based electronic reports.

Beyond this, LDAP integration at the level of health care provider must be ensured; Each staff member whose job description demands access to the information system shall be assigned with a single authorization code to access the system.

Integrate EHRS with cantonal institute of healthcare insurance databases and ensure online communication and data exchange. EHRS will be installed on servers that are/will be physically located in cantonal institute of healthcare insurance, one datacenter rack per at the actual location. On these physical servers virtualization software and proposed server oprating system(s), application server(s) and database server(s) will be installed.

Introduce, implement and integrate new Electronic Health Care Identification Card (EHCI card) and must support transition period with present health care identification documents (Cards printing technology and initial set of card are provided by HSEP project).

Implement cantonal user and identity management and system administration and empower users in Cantonal Institutes of Healthcare Insurance for further administration. Introduction of this management and administration function shall:
- be sufficiently flexible to allow assignment of user access rights based on the user's roles and functions and the facility(ies) where that user is employed or consults. Each

> user account must be linked to an individual identified by the role(s) and function(s) they possess and the facility(ies) where they fulfill that role.
> - Provide data warehouse on network resources, such as applications, files, printers, users, etc;
> - The service shall be a central point for authorization which handles identities and manage connections between the shared resources thus allowing their simulations operations;
> - Follow integrity of procedures that are sent to user operational system and it shall be firmly linked to management and safety mechanisms of user operational systems in order to ensure integrity and protection of network;
> - It shall take the role in definition of and it shall enable system administration and control over all users of information system;

Community Health Care Centers in Visoko and Gračanica already operate fully operational EHRS manufactured by Agfa and this needs to be taken into consideration as current state of affairs. Bidders competing in cantons where these two community health care centers are shall perform integration and ensure interoperability and data exchange between the proposed and the existing systems.

2.3.4    User interface requirements

All systems/user applications and print out physician's reports and discharge summaries shall be in one of the official languages in use in the Bosnia and Herzegovina in Latin script. Supporting user documentation shall also be localized into one of the official languages in use in Bosnia and Herzegovina.

Shortcuts should be included for each of the frequently used actions and customized to reflect user roles and rights.

Initial entry of administrative data or patient identification shall be performed by reading barcode or any other electric record included on health care booklet or electronic smart card.

In order to reduce data entry and processing time when working in the application, each time known information is being used, the system should offer adequate values but user should be able to reserve right to modify such information. Also, for data defined to be used and appear in different locations, the system should automatically transfer data by entry from a single location.

The application must be intuitive and consistent on the basis of computer use best practices and concepts and norms, as well as idioms and terms typical for health institution's operations that users have normally used in their previous work. User interface development shall follow guidelines and/or best practice standards. For example those described at:
- http://ergo.human.cornell.edu/ahtutorials/interface.html
Or other set of guidelines that the supplier proposes and the purchaser agrees to.

2.3.5    Concurrent users
System shall be able to support work of at least 15% of total users within one canton as number of concurrent users.

2.3.6    Reporting requirements

The system shall provide a tool for collection of all information and data required for statutory law-based reporting system (which can be modified from time to time).

Ability of individual reporting in relation to provision of health care including filtration by:
- Health care user (age, sex, urbanization, social group, etc);
- Health care provider;
- Health issue (health care episode), reason for visit;
- Health activities (services);
- Clinical information;
- Medications, and
- Other elements defined under basic set of important information.

The system shall ensure smooth and fast reporting for all types of consolidated law-based reports routinely provided to cantonal ministries of health, health insurance institutes, public health institutes, management of institutions or used for purposes of organizational units or for law-based reports sent to Federation of BiH authorities. Look, forms, formats, and information contained on consolidated reports are different and readily changeable over time but they can be classified as the following basic types of reports:
- Reports based on EHR and protocol of outpatients by different grounds and different criteria;
- Reports based on invoiced medical services provided and supplies used on different grounds and different criteria;
- Reports on medical services provided by organizational units and on different grounds and different criteria
- Reports on supplies used by organizational units and on different grounds and different criteria;
- Other statistics reports on different grounds and different criteria.

2.3.7    System availability

Described systems should be available 365 days a year, 7 days a week, 24 hrs a day. Required level of total availability of the system is minimum 98.5%. Availability of minimum 98.5% is translated in 1.5% in 365 days = 5.5 days of total inactivity. Total inactivity time includes time planned for system maintenance and contingency inactivity due to unforeseen system failures caused by errors in the system. System failures caused by *force majeure* (power blackouts and similar events) or user errors will not be counted against total inactively time.

The system shall operate through available ADSL/XDSL connections provided by local telecom providers. The bidders shall consider this when preparing their bids.

2.3.8    System Management, Administration, and Security Specifications

Centralized user administration:
- Single log-in for all domain resources and applications
- Single function/module for user administration for all of the application components

Setup and maintenance:
- The system will have clearly defined maintenance functions, grouped together for easier orientation that feature at least:
  a. definition of the system parameters – users will have option to customize the system by defining/changing system parameters. Documentation and user-interface will be provided
  b. building dictionaries, grouped in logical groups. Manual creation of data dictionary items shall be supported, as well as automatic updates from the official sources of the data dictionary.

Backup and recovery
- The system shall feature the backup and recovery functions, so the hot backups can be planned and logged
- Recovery function shall provide restoration of the system based on chosen performed and recorded backup

Backup environment
- There will be developed backup environment and backup procedures, so if the main database server fails and cannot be restored in the reasonable time, the backup server shall take over the database server function in less than 4 hours

## 2.3.9    Training specification

### 2.3.9.1  Training of IT professionals

Training for the two IT professionals in the KZZO who will maintain the system shall be minimum as follows:
- basic database administration
- in-depth maintenance procedures for the developed system
- user administration
- data dictionary-maintenance

Training and maintenance documentation shall be submitted for acceptance.

### 2.3.9.2  User training

Training for EHRS users:
- PHC IT staff shall be trained for maintenance, system administration and training tasks,
- Users involved in the implementation shall be trained to use the application.
- The user training will involve all users that are in contact with covered business processes.
- The training shall be held in the PHC and/or workstations that are already installed for the implementation

## 2.3.10    Documentation Requirements

### 2.3.10.1  Technical documentation

For each phase of development and implementation, the technical documentation shall be updated and re-submitted. Documentation shall be submitted in four electronic copies and four paper copies, in local language

### 2.3.10.2  Database structure documentation

Database structure shall be documented as:
- entity-relationship diagrams,
- report on entities, attributes and relationships
- script that creates all needed data structure in the database, including database triggers and database procedures

2.3.10.3 Application documentation

Application shall be documented with:
- description of the application architecture
- minimal hardware/software requirements
- any other documentation needed for the application deployment and maintenance

2.3.10.4 Maintenance documentation

List or of the initial set of system parameters,

List of the initial set of data dictionary items,

Description of the maintenance procedures including changing system parameters, changing configuration, making backups, downtime procedures

2.3.10.5 Training documentation

Training documentation shall be submitted in local language, if not otherwise specified. Exception may be materials for the IT staff training. All documentation shall be submitted in four electronic copies and four paper copies as specified.
- IT professionals training materials: Other than technical documentation IT professionals training shall be accompanied with all standard software documentation in English or local language.
- Training plan shall contain list of trainees and training schedule, to ensure that all users are covered with training.
- Training handouts that accompany training shall be provided in paper form for each trainee prior to training
- Training report with the data of actual fulfillment of training plan shall be submitted. Its purpose is to decide when the implementation phase can safely begin.

2.3.10.6 User manuals

User manuals shall be done with unique style and methodology, following guidelines, for example those described at:
- http://www.klariti.com/technical-writing/User-Guides-Tutorial.shtml
- or other set of guidelines that the supplier proposes and the purchaser agrees to.
- For each phase of development and implementation, the user manuals shall be updated and re-submitted.

## 2.4    Testing and Quality Assurance Requirements

2.4.1    Inspections

Inspections upon delivery:

A committee, consisting of representatives from FMOH, will inspect the deliveries to ensure the deliveries are according to the given specifications, quality standards and are functionally correct. The committee will issue an 'Acceptance Certificate' to the Supplier if the delivery is satisfactory to the committee.

Inspections following delivery:

The same committee will do an inspection in the production server as and when required following delivery of those deliveries. The purpose of such inspections is to ensure that the deliveries are working perfectly and there are no discrepancies.

### 2.4.2    Configuration Tests

In addition to the Supplier's standard check-out and set-up tests, the Supplier (with the assistance of the Purchaser) will perform the following on the System and its Subsystems before Configuration will be deemed to have occurred and the Purchaser will issue and acceptance certificate for subsystem configuration.

Prior to commencement of configuration Tests, Supplier should provide a comprehensive Test Plan addressing, at a minimum, the following areas. Supplier may include any other areas in addition to what is stated below.
- Composition of the testing team.
- Scope of testing.
- Schedule.
- Test Deliverables.
- Release criteria.
- Risks and Contingencies.

Configuration Tests need to ensure the correctness, completeness, security and the quality of the solution provided by the Supplier. Configuration tests, at a minimum, need to include the following test levels and such testing need to be conducted on the System and all its Subsystems.
- Unit testing.
- Functional testing.
- Integration testing.
- Volume testing.
- Performance testing.

Supplier needs to provide the Purchaser the Test Cases used for above testing and have them approved by the Purchaser prior to conducting the above mentioned tests.

Supplier needs to provide a document on Test Results of all tests and inspections performed on the System and its Subsystems prior to the issue of the Installation Certificate.

Supplier needs to provide the minimum requirements of the data center environment including hardware, Internet connectivity and user environment to achieve the Performance Requirements for the Operational Acceptance Test.

### 2.4.3    Operational Acceptance Tests

The Purchaser (with the assistance of the Supplier) will perform the following tests on the System and its Subsystems following Installation to determine whether the System and the Subsystems meet all the requirements mandated for Operational Acceptance.

Unit testing, validate that each individual module of the EHRS is working properly.

Functional testing, validate that mandatory functional requirements of the System supplied work properly. It is necessary to conform that the System supplied conforms to the specification.
Integration testing, validate that combined parts or modules of the EHRS are working properly.

Volume testing, validate that any values that may become large over time (such as accumulated counts, logs, and data files) of the System can be accommodated by the program and will not cause the System to stop working or degrade its operation in any manner.

Performance testing, validate that the System is in compliance with the Performance Requirements which will be established by the committee of representatives.

## 3    Implementation Schedule

Implementation of overall solution shall allow operations in full effect from the very start of the live production. Any possible amends and fine tuning of the system shall be complete within the deadline planned for implementation of the system that is December 1st of 2014.

### 3.1    Preliminary Project Plan

The Bidder MUST include in its bid a Preliminary Project Plan describing, among other things, the methods and human and material resources that the Bidder proposes to employ in the design, management, coordination, and execution of all its responsibilities if awarded the Contract, as well as the estimated duration and completion date for each major activity.

The Preliminary Project Plan MUST include a detailed description of the Bidder's staff (i.e. the "Team") that would perform the configuration, testing and deployment of the System. Such description MUST include the Team's organization chart and the CVs of each of the Team members.

If the Bidder plans to utilize one or more subcontractors, the bid MUST also include the CVs of the subcontractor's staff that would be part of the above Team and/or would provide the Technical Support service after the System's acceptance by the Purchasers.

The Preliminary Project Plan MUST also state the Bidder's assessment of the major responsibilities of the Purchasers and any other involved third parties in System supply and installation, as well as the Bidder's proposed means for coordinating activities by each of the involved parties to avoid delays or interference.

### 3.2    Implementation Schedule Table

It shall be noted that the selected Bidder is required to include in its scope of work, the project plan for all subsequent subsystems. The Project Plan must include, but is not necessarily limited to the recommended project schedule, base specifications for planned modules, and preliminary budget costing for all requested subsystems operating at all designated facilities. The proposal and scope of work must specifically include, but will not necessarily be limited to, base specification for: any remaining modules, infrastructure requirements, human resource and training requirements.

## 4    Required Services

Implementation of overall solution shall allow operations in full effect from the very start of the live production (any possible amends and fine tuning of the system shall be complete within the deadline planned for implementation of the system). To achieve that supplier must accomplish following services:

### 4.1    Infrastructure and LDAP prerequisite services

- Installation of  Windows 2013 srv operating systems on servers provided by FMOH (one per PHC) (See section E. Implementation schedule, Site table, column Domain server)
- Implementation of active directory domain service on servers provided by FMOH (one per PHC) (See section E. Implementation schedule, Site table, column Domain server)
- Installation of end user computers (workstations and laptops) at FM team offices, connecting within active directory domains (See section E. Implementation schedule, Site table, column PC / Laptop)
- Installation of printers at FM team offices (See section E. Implementation schedule, Site table, column Printer)
- Creation of active directory user accounts for all members of FM teams (See section E. Implementation schedule, Site table, column FM Team)

### 4.2    EHRS application server implementation services

Installation of server operational systems, other system software and databases required by EHRS on hardware servers provided by FMOH to Cantonal Health Insurance Institutes, one datacenter rack per at the actual location.

On these physical servers is needed to install virtualization software and proposed server operating system(s), application server(s) and database server(s).

Standard database software will be installed and configured. Two environments shall be built. One test environment that (on the database server) shall become live environment after the testing phase of the system implementation and one development environment (on the backup server) that shall become development/test environment after the system implementation. All software components shall be installed/configured:

- database
- development software
- other, if necessary

Delivery and installation of all software components of EHRS application server and EHRS supporting software components on cantonal Health Insurance Institutes' hardware, at the actual location;

(See section E. Implementation schedule, Site table, column Application server)

### 4.3    Integration services

Integration of EHRS server systems with existing insuree database operated by cantonal Health Insurance Institutes, at the actual location; (See section E. Implementation schedule, Site table, column Application server)

Integration of electronic card printing system with existing insuree database operated by cantonal Health Insurance Institutes, at the actual location, and printing basic set of cards; (See section E. Implementation schedule, Site table, column Application server)

System tuning, configuration, and testing;

## 4.4    Training services

User education and training in subgroups and/or individually in accordance with needs of individual system segments (physicians and nurses (See section E. Implementation schedule, Site table, column FM Teams), other staff members by application and systems, system administrators). Duration of training at the actual location needed to for system to be fully operational must be indicated.

## 4.5    Documentation services

Create and deliver system and user documentation.

## 4.6    Support services

Service support for software, support at the actual location, support to remote access. Please indicate duration of support at the actual location once the system is fully operational.

Supplier shall also include a detailed proposal of maintenance and servicing contract that will be in effect after the actual implementation of the system. The required contract shall include 24 hrs a day /7 days a week maintenance for the software. As a minimum, proposed servicing contract shall include:

- Support for system hardware/software;
- Remote access;
- Proactive monitoring 24/7;
- System management;
- Repair at the location (if needed);
- Removal of deficiencies in operations;
- Toll-free phone number available 24/7;
- Response time (shall be under 30 minutes for remote locations and 4 hours for repair at the location);

Monthly cost of maintenance. (NB: In bid evaluation process, Total Cost of Ownership (TOC) accounting for initial and long-term system costs for period of 5 years will be used.

Supplier shall also quote cost per hour for any additional implementation in case of need for expansion or additional modifications (Post-Warranty Price List).

## 4.7    Warranty and Post-Warranty period

4.7.1    Warranty Period

Prolonged warranty/technical support for the software:
- Warranty Period is one year. For minimum one year,  after final acceptance in PHC, the supplier shall provide support for the information systems, including:
  a. removal of the discovered bugs in the code
  b. help with the maintenance procedures (database administration, backup and recovery etc)
  c. advice on system setup and customization
  d. there should be established a hot line for reporting problems
  e. reported problems, resolutions and the timing shall be recorded and submitted monthly to the IT staff in the PHC
  f. upgrade in accordance to changes in legislative.

The time for troubleshooting must be in accordance with the contents as follows:

- Type of problem Description of the problem Time of response
  a. Critical Loss of key functionalities necessary for the performance of regular daily activities; errors causing restart of a computer; errors causing the data loss and damage; system malfunctioning that seriously influences a user's work; lack of apparent alternative user solution for overcoming the recognized error in the software.  Four hours
  b. Serious Software is usable but with great limitations; the function does not operate as documented; a breakdown that seriously influences functioning of the system; lack of apparent and/or simple and alternative user solution for overcoming the recognized error in the software; problems related to documentation referring to the functionality and software limitations.  48 hours
  c. Noticeable  Software is operable, there are no functional deficiencies, but there are serious limitations in flexibility; the software is operable but there are deficiencies with known and/or simple solutions; bad diagnostics of error messages  Five days
  d. Secondary Software is operable with certain inconveniences in use; the text relating to the error message misses; cosmetic deficiencies in software; there is no loss of functionality or the problems may be characterized as smaller losses in terms of functionality; necessary change of software documentation Two months.

4.7.2    Post-Warranty Period

Post-warranty period, during 4 years after the Warranty period, is obligation of the Supplier. Supplier shall provide support, as minimum, the same services as in Warranty period. The supplier is obliged to provide services in Post-Warranty period in according to prices that cannot exceed 15% per annum of the contracted price for the software implementation.

The Post-Warranty services will be provided in separate contract(s). The contract(s) will be signed, if agreed, between KZZO(s) and Supplier, during the Final Acceptance for each PHC.

# IMPLEMENTATION SCHEDULE

## Implementation Schedule Table

| Line Item No. | Subsystem / Item | Configuration Table No. | Site / Site Code | Delivery (Bidder to specify in the Preliminary Project Plan) | Installation (weeks from Effective Date) | Acceptance (weeks from Effective Date) | Liquidated Damages Milestone |
|---|---|---|---|---|---|---|---|
| 0 | Develop and complete Inception Report and Project Plan. | - - | - - | | - - | W3 | no |
| **1** | **Infrastructure and LDAP implementation** | | | | | | |
| 1.1 | Installation of Windows 2013 srv operating systems on servers provided by FMOH (one per PHC) | | PHC HQ | | **W3** | **W5** | no |
| 1.2 | Implementation of active directory domain service on servers provided by FMOH (one per PHC) | | PHC HQ | | **W4** | **W5** | no |
| 1.3 | Installation of end user computers (workstations and laptops) at FM team offices, connecting within active directory domains | | PHC and all dislocated FM ambulances | | **W6** | **W7** | no |
| 1.4 | Installation of printers at FM team offices | | PHC and all dislocated FM ambulances | | **W6** | **W7** | no |
| 1.3 | Creation of active directory user accounts for all members of FM teams | | PHC HQ | | **W5** | **W7** | no |
| **2** | **EHRS application server implementation** | | | | | | |
| 2.1 | Installation of required server operational systems, other system software and databases on servers provided by FMOH (one set per Cantonal Health Insurance Institute) | | KZZO | | **W3** | **W4** | no |
| 2.2 | Delivery, installation and configuration of the EHRS core subsystems on servers provided by FMOH (one set per Cantonal Health Insurance Institute) | - - | KZZO | | W6 | W7 | no |

| Line Item No. | Subsystem / Item | Configuration Table No. | Site / Site Code | Delivery (Bidder to specify in the Preliminary Project Plan) | Installation (weeks from Effective Date) | Acceptance (weeks from Effective Date) | Liquidated Damages Milestone |
|---|---|---|---|---|---|---|---|
| **3** | **Integration** | | | | | | |
| 3.1 | Integration of server systems with existing insuree database operated by cantonal Health Insurance Institutes | | KZZO | | W8 | W15 | no |
| 3.2 | Integration of card printing system with existing insuree database operated by cantonal Health Insurance Institutes, at the actual location; | - - | KZZO | | W8 | W15 | no |
| 3.3 | System tuning, configuration, and testing; | - - | KZZO, PHC HQ and all dislocated FM ambulances | | -- | W15 | no |
| **4** | **Training** | | | | | | |
| 4.1 | User education and training in subgroups and/or individually in accordance with needs of individual system segments (physicians, nurses, other staff members by application and systems, system administrators). | - - | KZZO, PHC HQ | | W8 | W15 | no |
| **5** | **Documentation** | | | | | | |
| 5.1 | Completion and delivery of the technical documentation | -- | -- | | -- | W17 | no |
| **6** | **Testing and QA** | | | | | | |
| 6.1 | Preparing the final User Acceptance Tests | -- | -- | | -- | W15 | no |
| 6.2 | Conducting final tests and verification of the system and operational acceptance the system as an integrated whole | -- | KZZO, PHC HQ | | -- | W17 | yes |

**Site Table**

| Site Code | Site | City / Town / Region | Primary Street Address | App. server | Domain server | PC / Laptop | Printer | FM Team |
|---|---|---|---|---|---|---|---|---|
| | Health Insurance Institute | Zenica | Dr. Aska Borića 28b | 1 | - | - | - | - |
| | DZ Zenica | Zenica | Fra Ivana Jukica 2 | - | 1 | 67 | 24 | 45 |
| | FMA "Arnauti" | Zenica | Arnauti bb | - | - | 3 | 1 | 1 |
| | FMA "Seoci" | Zenica | Seoci bb | - | - | 3 | 1 | 1 |
| | FMA "Babino" | Zenica | Babino bb | - | - | 3 | 1 | 1 |
| | FMA "Orahovica" | Zenica | Orahovica 1 | - | - | 3 | 1 | 1 |
| | FMA "Nemila" | Zenica | Patriotske lige 46d | - | - | 15 | 12 | 2 |
| | FMA "Stranjani" | Zenica | Stranjani do br. 64 | - | - | 3 | 1 | 1 |
| | FMA "Perin Han" | Zenica | Bistau Nuovo br.189 | - | - | 3 | 1 | 1 |
| | FMA "Gracanica" | Zenica | Vranducka bb | - | - | 3 | 1 | 1 |
| | FMA "Pehare" | Zenica | Kanal 1 | - | - | 3 | 1 | 1 |
| | FMA "Tetovo" | Zenica | Tetovska bb | - | - | 3 | 1 | 1 |
| | FMA "Gradišce" | Zenica | Saliha Skomorca bb | - | - | 3 | 1 | 1 |
| | FMA "Lokvine" | Zenica | Luke bb | - | - | 3 | 1 | 1 |
| | FMA "Janjici" | Zenica | Sarajevska 337 | - | - | 3 | 0 | 1 |
| | FMA "Mošcanica" | Zenica | Mošcanica bb | - | - | 3 | 1 | 1 |
| | FMA "Klopce" | Zenica | Hadžimazica bb | - | - | 3 | 1 | 1 |
| | FMA "Centar" | Zenica | Fra Ivana Jukica 4 | - | - | 3 | 1 | 4 |
| | DZ Vareš | Vareš | Zvijezda 18 | - | 1 | 9 | 5 | 8 |
| | FMA "Ravne" | Vareš | Ravne bb | - | - | 1 | 1 | 1 |
| | FMA "Majdan" | Vareš | Ćamilov potok bb | - | - | 2 | 1 | 1 |
| | FMA "Dabravine" | Vareš | Dabravine bb | - | - | 2 | 1 | 1 |
| | FMA "Budoželje" | Vareš | Budoželje bb | - | - | 1 | 1 | 1 |
| | FMA "Striježevo" | Vareš | Striježevo bb | - | - | 1 | 1 | 1 |
| | FMA "Pržići" | Vareš | Pržići bb | - | - | 1 | 1 | 1 |
| | FMA "Ligatići" | Vareš | Dabravine bb | - | - | 1 | 1 | 1 |
| | FMA "Vijaka" | Vareš | Budoželje bb | - | - | 1 | 1 | 1 |

| | FMA "Borovica" | Vareš | Striježevo bb | - | - | 1 | 1 | 1 |
|---|---|---|---|---|---|---|---|---|
| | FMA "Dragovići" | Vareš | Pržići bb | - | - | 1 | 1 | 1 |
| | DZ Visoko | Visoko | Branilaca 22 | - | 1 | 8 | 5 | 18 |
| | FMA "Buci" | Visoko | Buci bB | - | - | 2 | 0 | 2 |
| | FMA "Gračanica" | Visoko | Veliko Čajno bb | - | - | 2 | 0 | 2 |
| | FMA "Porječani" | Visoko | Porječani bb | - | - | 2 | 1 | 1 |
| | FMA "Moštre" | Visoko | Moštre bb | - | - | 0 | 0 | 5 |
| | DZ Usora | Usora | Srednja Omanska bb | - | 1 | 7 | 4 | 2 |
| | FMA "Alibegovci" | Usora | Alibegovci bb | - | - | 2 | 1 | 1 |
| | FMA "Ularice" | Usora | Ularice bb | - | - | 2 | 1 | 1 |
| | FMA "Omanjska" | Usora | Omanjska bb | - | - | 2 | 1 | 1 |
| | FMA "Žabljak" | Usora | Žabljak bb | - | - | 2 | 1 | 1 |
| | DZ Breza | Breza | Šehidska 12 | - | 1 | 7 | 3 | 6 |
| | FMA "Gornja Breza" | Breza | Gornja Breza bb | - | - | 2 | 1 | 1 |
| | FMA "Župća" | Breza | Župća bb | - | - | 2 | 1 | 1 |
| | FMA "Slivno" | Breza | Slivno bb | - | - | 2 | 1 | 1 |
| | FMA "Gornja Breza-Kahve" | Breza | Gornja Breza bb | - | - | 2 | 1 | 1 |
| | DZ Doboj Jug Matuzići | Doboj Jug Matuzići | Trg 21. mart 11 | - | 1 | 6 | 3 | 2 |
| | FMA "Mraviči" | Doboj Jug Matuzići | Mraviči bb | - | - | 2 | 1 | 1 |
| | DZ Žepče | Žepče | Ulica 37 | - | 1 | 12 | 6 | 2 |
| | FMA Stacionar | Žepče | Ulica I 1 | - | - | 5 | 2 | 1 |
| | FMA "Begov Han" | Žepče | Begov Han bb | - | - | 2 | 1 | 1 |
| | FMA "Željezno polje" | Žepče | Željezno polje bb | - | - | 2 | 1 | 1 |
| | FMA "Ozimica Donja" | Žepče | Ozimica Donja bb | - | - | 2 | 1 | 1 |
| | DZ Zavidovići | Zavidovići | Gazihusrefbegova 25 | - | 1 | 12 | 6 | 13 |
| | FMA "Dolina" | Zavidovići | Dolina bb | - | - | 2 | 1 | 1 |
| | FMA "Rujnica" | Zavidovići | Rujnica bb | - | - | 2 | 1 | 1 |
| | FMA "Hajdarevići" | Zavidovići | Hajdarevići bb | - | - | 2 | 1 | 1 |
| | FMA "Vozuća" | Zavidovići | Vozuća bb | - | - | 2 | 1 | 1 |
| | FMA "Krivaja" | Zavidovići | Krivaja bb | - | - | 2 | 1 | 1 |
| | FMA "Gostovići" | Zavidovići | Gostovići bb | - | - | 2 | 1 | 1 |
| | FMA "Gaj" | Zavidovići | Gaj bb | - | - | 2 | 1 | 1 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | FMA "Kovači" | Zavidovići | Kovači bb | - | - | 2 | 1 | 1 |
| | Specijalističko-konsultativna služba | Zavidovići | Dobrovoljnih davalaca krvi 5 | - | - | 2 | 1 | 1 |
| | FMA "Mečevići" | Zavidovići | Mečevići bb | - | - | 2 | 1 | 1 |
| | FMA "Maoča" | Zavidovići | Maoča bb | - | - | 2 | 1 | 1 |
| | DZ Maglaj | Maglaj | Ilijasa Smajlagića bb | - | 1 | 7 | 4 | 6 |
| | FMA "Liješnica" | Maglaj | Liješnica bb | - | - | 2 | 1 | 1 |
| | FMA "Donji Ulišnjak" | Maglaj | Donji Ulišnjak bb | - | - | 2 | 1 | 1 |
| | FMA "Novi Šeher" | Maglaj | Novi Šeher bb | - | - | 2 | 1 | 1 |
| | FMA "Spahići" | Maglaj | Spahići bb | - | - | 2 | 1 | 1 |
| | DZ Olovo | Olovo | Ulica Branilaca Olova bb | - | 1 | 10 | 4 | 4 |
| | FMA "Careva Ćuprija" | Olovo | Careva Ćuprija bb | - | - | 2 | 1 | 1 |
| | FMA "Solun" | Olovo | Solun bb | - | - | 2 | 1 | 1 |
| | DZ Tešanj | Tešanj | O. Pobrića bb | - | 1 | 11 | 5 | 20 |
| | FMA "Šije" | Tešanj | Šije bb | - | - | 2 | 1 | 1 |
| | FMA "Jelah" | Tešanj | Jelah bb | - | - | 2 | 1 | 2 |
| | FMA "Kaloševići" | Tešanj | Kaloševići bb | - | - | 2 | 1 | 1 |
| | FMA "Piljužići" | Tešanj | Piljužići bb | - | - | 2 | 1 | 1 |
| | FMA "Tešanjka" | Tešanj | Tešanjka bb | - | - | 2 | 1 | 1 |
| | FMA "Trepče" | Tešanj | Trepče bb | - | - | 2 | 1 | 1 |
| | FMA "Miljanovci Novi" | Tešanj | Miljanovci bb | - | - | 2 | 1 | 1 |
| | FMA "Miljanovci Lončari" | Tešanj | Miljanovci bb | - | - | 2 | 1 | 1 |
| | FMA "Kardaglije" | Tešanj | Kardaglije bb | - | - | 2 | 1 | 1 |
| | DZ Kakanj | Kakanj | Zeničko-partizanskog odreda broj 50 | - | 1 | 26 | 13 | 17 |
| | FMA "Stara Jama" | Kakanj | Stara Jama bb | - | - | 3 | 1 | 1 |
| | FMA "Vukanovici" | Kakanj | Vukanovici bb | - | - | 3 | 1 | 1 |
| | FMA "Papratnica" | Kakanj | Papratnica bb | - | - | 3 | 1 | 1 |
| | FMA "Catici" | Kakanj | Catici bb | - | - | 3 | 1 | 1 |
| | FMA "Kraljeva Sutjeska" | Kakanj | Kraljeva Sutjeska bb | - | - | 3 | 1 | 1 |
| | FMA "Tršce" | Kakanj | Tršce bb | - | - | 3 | 1 | 1 |
| | FMA "Donji Kakanj" | Kakanj | Donji Kakanj bb | - | - | 3 | 1 | 1 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| FMA "Brnjic I i II" | Kakanj | Brnjic bb | - | - | 5 | 1 | 1 |
| FMA "Haljinici I" | Kakanj | Haljinici bb | - | - | 5 | 1 | 1 |
| FMA "Haljinici II" | Kakanj | Haljinici bb | - | - | 3 | 1 | 1 |
| FMA "Doboj" | Kakanj | Doboj bb | - | - | 3 | 1 | 1 |
| FMA "Bilješevo" | Kakanj | Bilješevo bb | - | - | 3 | 1 | 1 |
| | | **Total** | **1** | **12** | **381** | **171** | **235** |

# E. The Supplier's Bid and original Price Schedules

**medIT**

Medit d.o.o. • Hamdije Čemerlića 2/14 • 71 000 Sarajevo, BiH • T +387 33 721 910 • F +387 33 664 579 • info@medit.ba

SGS
Certifikat CH 10/1426

## BID SUBMISSION FORM (SINGLE-STAGE BIDDING)

| | |
|---|---|
| Date: | *16.09.2014.* |
| Loan/Credit No.: | *IDA 49120 BA* |
| IFB: | *BA/FB&H/HSEP/AF/G/ICB-44/14* |
| Contract: | *Procurement of Electronic Health Record Software for Primary Health Care Centres in Federation of Bosnia and Herzegovina* |

To: *Federal Ministry of Health, Titova 9, 71000 Sarajevo, Bosnia and Herzegovina*

Dear Sir or Madam:

Having examined the Bidding Documents, the receipt of which is hereby acknowledged, we, the undersigned, offer to supply, install, achieve Operational Acceptance of, and support the Information System under the above-named Contract in full conformity with the said Bidding Documents for the sum of:

| *Three million five hundred thirty one thousand and one hundred seventy-seven BAM* | | |
|---|---|---|
| | LOT 1 | 124.699,00 BAM |
| | LOT 3 | 124.699,00 BAM |
| | LOT 5 | 653.598,00 BAM |
| | LOT 6 | 1.337.555,00 BAM |
| | LOT 7 | 919.085,00 BAM |
| | LOT 8 | 371.541,00 BAM |
| | Total | 3.531.177,00 BAM |

or such other sums as may be determined in accordance with the terms and conditions of the Contract. The above amounts are in accordance with the Price Schedules attached herewith and made part of this bid.

We undertake, if our bid is accepted, to commence work on the Information System and to achieve Installation and Operational Acceptance within the respective times stated in the Bidding Documents.

If our bid is accepted, and if these Bidding Documents so require, we undertake to provide an advance payment security and a performance security in the form, in the amounts, and within the times specified in the Bidding Documents.

"We accept the appointment of **Rabija Idrizović** as the Adjudicator."

We hereby certify that the Software offered in this bid and to be supplied under the Contract (i) either is owned by us, or (ii) if not owned by us, is covered by a valid license from the proprietor of the Software.

We agree to abide by this bid, which, in accordance with ITB Clauses 13 and 16, consists of this letter (Bid Submission Form) and the enclosures listed below, for a period of 120 days from the date fixed for submission of bids as stipulated in the Bidding Documents, and it shall remain binding upon us and may be accepted by you at any time before the expiration of that period.

··T··Systems·    ··T··Systems·    ··T··Systems·    ··T··Systems·    ··T··Systems·    ··T··Systems·

**medIT**

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Commissions or gratuities, if any, paid or to be paid by us to agents relating to this Bid, and to Contract execution if we are awarded the Contract, are listed below:

| Name and Address of Agent | Amount and Currency | Purpose of Commission or Gratuity |
|---|---|---|
| *None* | | |

Until the formal final Contract is prepared and executed between us, this bid, together with your written acceptance of the bid and your notification of award, shall constitute a binding contract between us. We understand that you are not bound to accept the lowest or any bid you may receive.
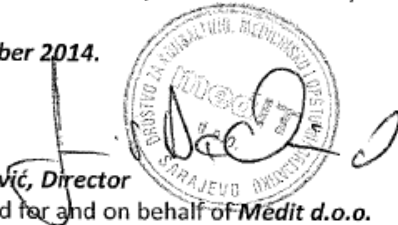
Dated this **16.** day of **September 2014.**

Signed:
Date: 16.09.2014.
In the capacity of **Samir Dedović, Director**
Duly authorized to sign this bid for and on behalf of **Medit d.o.o.**

2

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## Grand Summary Cost Table (LOT 7)

| | | BAM Price | Price | Price | Price |
|---|---|---|---|---|---|
| 1. | EHRS application server and user access licences | ~~596.904,00~~ 596.900,00 | - | - | - |
| 2. | Integration services | 46.060,00 | - | - | - |
| 3. | Infrastructure and LDAP services | 46.060,00 | - | - | - |
| 4. | Training services For technical staff and system administration | 27.730,00 | - | - | - |
| 5. | Training services for EHRS users | 89.535,00 | - | - | - |
| 6. | Documentation | 2.350,00 | - | - | - |
| 7. | 1 year support service (Warranty period) | 110.450,00 | - | - | - |
| | Grand Totals (to Bid Submission Form) | ~~919.085,00~~ 919.089,00 | - | - | - |

| Name of Bidder: | | Medit d.o.o. |
|---|---|---|
| Authorized Signature of Bidder: | | |

·· T··Systems·    ·· T··Systems·    ·· T··Systems·    ·· T··Systems·    ·· T··Systems·    ·· T··Systems·

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**Lot 7 – Procurement of Electronic Health Record Software for Zenica Doboj Canton Primary Health Care Centres**

Costs reflect prices and rates quoted in accordance with ITB Clauses 14 and 15.

| Compo-nent No. | Component Description | Country of Origin Code | Quantity | Unit Prices / Rates | | | | | Total Prices | | | | |
| | | | | Supplied Locally | Supplied from outside the Purchaser's Country | | | | Supplied Locally | Supplied from outside the Purchaser's Country | | | |
| | | | | BAM | Local Currency | Foreign currency A | Foreign currency B | Foreign currency C | BAM | Local Currency | Foreign currency A | Foreign currency B | Foreign currency C |
| 1. | EHRS application server user access licences (235 FM Team) | HU | 12 Health Centers | 49.742,00 | - | - | - | - | 596.904,00 596.900,00 | - | - | - | - |
| 2. | Integration services | BiH | 1 set | 46.060,00 | - | - | - | - | 46.060,00 | - | - | - | - |
| 3. | Infrastructure and LDAP services | BiH | 1 set | 46.060,00 | - | - | - | - | 46.060,00 | - | - | - | - |
| 4. | Training services For technical staff and system administration | BiH | 1 set | 27.730,00 | - | - | - | - | 27.730,00 | - | - | - | - |
| 5.1 | Training services for EHRS users DZ Zenica | BiH | 65 FM Team | 381,00 | - | - | - | - | 24.765,00 | - | - | - | - |
| 5.2 | Training services for EHRS users DZ Vareš | BiH | 18 FM Team | 381,00 | - | - | - | - | 6.858,00 | - | - | - | - |
| 5.3 | Training services for EHRS users DZ Visoko | BiH | 28 FM Team | 381,00 | - | - | - | - | 10.668,00 | - | - | - | - |
| 5.4 | Training services for EHRS users DZ Usora | BiH | 6 FM Team | 381,00 | - | - | - | - | 2.286,00 | - | - | - | - |
| 5.5. | Training services for EHRS users DZ Breza | BiH | 10 FM Team | 381,00 | - | - | - | - | 3.810,00 | - | - | - | - |

·· T··Systems·    ·· T··Systems·    ·· T··Systems·    ·· T··Systems·    ·· T··Systems·    ·· T··Systems·

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| Compo-nent No. | Component Description | Country of Origin Code | Quantity | Unit Prices / Rates | | | | | Total Prices | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Supplied Locally | Supplied from outside the Purchaser's Country | | | | Supplied Locally | Supplied from outside the Purchaser's Country | | | |
| | | | | BAM | Local Currency | Foreign currency A | Foreign currency B | Foreign currency C | BAM | Local Currency | Foreign currency A | Foreign currency B | Foreign currency C |
| 5.6 | Training services for EHRS users DZ Doboj Jug Matuzići | BiH | 3 FM Team | 381,00 | - | - | - | - | 1.143,00 | - | - | - | - |
| 5.7 | Training services for EHRS users DZ Žepče | BiH | 6 FM Team | 381,00 | - | - | - | - | 2.286,00 | - | - | - | - |
| 5.8 | Training services for EHRS users DZ Zavidovići | BiH | 24 FM Team | 381,00 | - | - | - | - | 9.144,00 | - | - | - | - |
| 5.9 | Training services for EHRS users DZ Maglaj | BiH | 10 FM Team | 381,00 | - | - | - | - | 3.810,00 | - | - | - | - |
| 5.10 | Training services for EHRS users DZ Olovo | BiH | 6 FM Team | 381,00 | - | - | - | - | 2.286,00 | - | - | - | - |
| 5.11 | Training services for EHRS users DZ Tešanj | BiH | 30 FM Team | 381,00 | - | - | - | - | 11.430,00 | - | - | - | - |
| 5.12 | Training services for EHRS users DZ Kakanj | BiH | 29 FM Team | 381,00 | - | - | - | - | 11.049,00 | - | - | - | - |
| 6. | Documentation | BiH | 1 set | 2.350,00 | - | - | - | - | 2.350,00 | - | - | - | - |
| 7. | 1 year support service (Warranty period) | BiH | 1 set | 110.450,00 | - | - | - | - | 110.450,00 | - | - | - | - |
| | TOTAL | | | | | | | | 919.085,00 919.089,00 | | | | |

**Note:** - - indicates not applicable.

| | |
|---|---|
| Name of Bidder: | Medit d.o.o. |
| Authorized Signature of Bidder: | |

# F. The Purchaser's Notification of Award

| | |
|---|---|
| BOSNA I HERCEGOVINA<br>FEDERACIJA BOSNE I HERCEGOVINE<br>FEDERALNO MINISTARSTVO ZDRAVSTVA | BOSNIA AND HERZEGOVINA<br>FEDERATION OF BOSNIA AND HERZEGOVINA<br>FEDERAL MINISTRY OF HEALTH |

No. 08-37-6538/14
Date: 08.10.2014.


MEDIT d.o.o.
Hamdije Čemerlića 2/14
71000 Sarajevo


Fax: 033 664 579


Subject: Notification of Award Contract No: BA/FB&H/HSEP/AF/G/ICB-44g/14


This is to notify you that your Bid dated September 16, 2014 for execution of the „Procurement of Electronic Health Record Software for Zenica-Doboj Canton Primary Health Care Centers"; Ref. No. BA/FB&H/HSEP/AF/G/ICB-44g/14 for the Accepted Contract Amount of BAM 1,075,334.13 (VAT included) – (one million seventy five thousand three hundred thirty four and 13/100 BAM), as corrected and modified in accordance with the Instructions to Bidders is hereby accepted by our Agency.

You are requested to furnish the Performance Security within 28 days in accordance with the Conditions of Contract, using for that purpose the of the Performance Security Form included in Section VII, Contract Forms, of the Bidding Document.


Yours sincerely,



Federal Ministry of Health
Health Sector Enhancement Project – HSEP AF

Vildana Doder, Assistant Minister

# G. Security Forms

## Advance Payment Security

_____

*[insert: Bank's Name, and Address of Issuing Branch or Office]*

**Beneficiary:**  *[insert: **Name and Address of Purchaser**]*

**Date:**  *[insert: **date**]*

**ADVANCE PAYMENT GUARANTEE No.:**  *[insert: **Advance Payment Guarantee Number**]*

We have been informed that on *[insert: **date of award**]* you awarded Contract No. *[insert: **Contract number**]* for *[insert: **title and/or brief description of the Contract**]* (hereinafter called "the Contract") to *[insert: **complete name of Supplier**]* (hereinafter called "the Supplier").  Furthermore, we understand that, according to the conditions of the Contract, an advance payment in the sum of *[insert: **amount in numbers and words, for each currency of the advance payment**]* is to be made to the Supplier against an advance payment guarantee.

At the request of the Supplier, we hereby irrevocably undertake to pay you any sum or sums not exceeding in total the amount of the advance payment referred to above, upon receipt by us of your first demand in writing declaring that the Supplier is in breach of its obligations under the Contract because the Supplier used the advance payment for purposes other than toward the proper execution of the Contract.

It is a condition for any claim and payment to be made under this guarantee that the advance payment referred to above must have been received by the Supplier on its account *[insert: **number and domicile of the account**]*.

For each payment after the advance payment, which you will make to the Supplier under this Contract, the maximum amount of this guarantee shall be reduced by the ninth part of such payment.[9] At the time at which the amount guaranteed becomes nil, this guarantee shall become null and void, whether the original is returned to us or not.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 458.

_____

*[Signature(s)]*

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[9]     *This sample formulation assumes an Advance Payment of 10% of the Contract Price excluding Recurrent Costs, and implementation of the main option proposed by this SBD in the SCC for GCC Clause 13.2.2 for gradually reducing the value of the Advance Payment Security.  If the Advance Payment is other than 10%, or if the reduction in amount of the security follows a different approach, this paragraph would need to be adjusted and edited accordingly.*

# Performance Security

_____
*[insert: **Bank's Name, and Address of Issuing Branch or Office**]*

**Beneficiary:** *[insert: **Name and Address of Purchaser**]*

**Date:** *[insert: **date**]*

**PERFORMANCE GUARANTEE No.:** *[insert: **Performance Guarantee Number**]*

We have been informed that on *[insert: **date of award**]* you awarded Contract No. *[insert: **Contract number**]* for *[insert: **title and/or brief description of the Contract**]* (hereinafter called "the Contract") to *[insert: **complete name of Supplier**]* (hereinafter called "the Supplier").  Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

At the request of the Supplier, we hereby irrevocably undertake to pay you any sum(s) not exceeding *[insert: **amount(s)**[10] **in figures and words**]* upon receipt by us of your first demand in writing declaring the Supplier to be in default under the Contract, without cavil or argument, or your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

On the date of your issuing, to the Supplier, the Operational Acceptance Certificate for the System, the value of this guarantee will be reduced to any sum(s) not exceeding *[insert: **amount(s)**[10] **in figures and words**]*.  This remaining guarantee shall expire no later than *[insert: **number** and select: **of months/of years** (of the Warranty Period that needs to be covered by the remaining guarantee)]* from the date of the Operational Acceptance Certificate for the System,[11] and any demand for payment under it must be received by us at this office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 458, except that subparagraph (ii) of Sub-article 20 (a) is hereby excluded.

_____
*[Signature(s)]*

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[10]    *The bank shall insert the amount(s) specified and denominated in the SCC for GCC Clauses 13.3.1 and 13.3.4 respectively, either in the currency(ies) of the Contract or a freely convertible currency acceptable to the Purchaser.*

[11]    *In this sample form, the formulation of this paragraph reflects the usual SCC provisions for GCC Clause 13.3.  However, if the SCC for GCC Clauses 13.3.1 and 13.3.4 varies from the usual provisions, the paragraph, and possibly the previous paragraph, need to be adjusted to precisely reflect the provisions specified in the SCC.*