### **Invitation to Quote (ITQ) - Shopping For Goods**

Project Title: Real Estate Management Project

Source of Funding: International Bank for Reconstruction and Development (IBRD

Loan)

Contract Ref: SRB-REMP-8486YF-Sh-G-16-065

Contract Title: Shopping of Off the Shelf Software for central DCM (viewer and lightweight

tool for maintenance of the central DCM)

Date: **February 10, 2017** 

To:

### Dear Supplier:

1. You are invited to submit your price quotation for the supply of the following items:

- Shopping of Off the Shelf Software for central DCM (viewer and lightweight tool for maintenance of the central DCM) - 1 pcs
- Application server 2 pc

Information on technical specifications and required quantities are attached.

- 2. You must quote for all the items and quantities under this Invitation. Price quotation will be evaluated for all the items together and Contract awarded to the firm satisfying minimal requested technical characteristics and offering the lowest evaluated total cost of all the items.
- 3. Your price quotation in the form attached may be submitted by hand, mail, facsimile or electronically at the following address:

REPUBLIC GEODETIC AUTHORITY Real Estate Management Project Project Implementation Unit 11000 Beograd, Srbija Bulevar vojvode Misica 39 Pisarnica

- 4. The deadline for receipt of your quotation (s) by the Purchaser at the addressed indicated in this paragraph: **February 24, 2017, 12AM.**
- 5. Your quotation in duplicate in English, should be accompanied by adequate technical documentation and catalogue(s) and other printed material or pertinent information for each item quoted, including names and addresses of firms providing service facilities in Republic of Serbia (these accompanying documents may be either in English or in Serbian).

Manufacturer's Authorizations for Information Technologies - except for those technologies which the Bidder itself manufactures - are required for the following types/categories: central DCM (viewer and lightweight tool for maintenance of the central DCM) and Application server.

- 6. Your quotation(s) should be submitted as per the following instructions and in accordance with the attached Contract. The attached Terms and Conditions of Supply is an integral part of the Contract.
  - (i) **PRICES:** The prices should be quoted in RSD (*Serbian dinar*), or in foreign currency for the Unit Price, Total Cost and VAT at final destination Belgrade, which includes customs, duties, inland transportation and insurance, loading and unloading.
  - (ii) **EVALUATION OF QUOTATIONS:** Offers determined to be substantially responsive to the technical specifications will be evaluated by comparison of the total price at final destination as per para. 2 above.

In evaluating the quotations, the Purchaser will determine for each bid the evaluated price by adjusting the price quotation by making any correction for any arithmetical errors as follows:

- (a) where there is a discrepancy between amounts in figures and in words, the amount in words will govern;
- (b) where is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern;
- (c) if a Supplier refuses to accept the correction, his quotation will be rejected.
- (iii) **AWARD OF PURCHASE ORDER:** The award will be made to the bidder offering the lowest evaluated price and that meets the required standards of technical and financial capabilities. The successful bidder will sign a Contract as per attached form of contract and terms and conditions of supply.
- (iv) <u>VALIDITY OF THE OFFER:</u> Your quotation(s) should be valid for a period of forty five (45) days from the deadline for receipt of quotation(s) indicated in Paragraph 5 of this Invitation to Quote.
- 7. Further information can be obtained from:

REPUBLIC GEODETIC AUTHORITY Real Estate Management Project Project Implementation Unit Bulevar vojvode Misica 39 11000 Beograd, Srbija

- 8. Inspections and Audits
- 8.1 The Supplier shall carry out all instructions of the Purchaser which comply with the applicable laws where the destination is located.
- 8.2 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 Clause 5 Fraud and Corruption of the Form of Contract, which provides, inter alia,

that acts intended to materially impede the exercise of the Bank's inspection and audit rights constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the Bank's prevailing sanctions procedures).

9. Please Confirm by e-mail the receipt of this invitation and whether or not you will submit the price quotation.

Sincerely,
Dragan Pavlović, PIU Director

### FORM OF CONTRACT

WHEREAS the Purchaser has invited quotation for
<ul> <li>Shopping of Off the Shelf Software for central DCM (viewer and lightweight tool for maintenance of the central DCM) - 1 pcs</li> </ul>
• Application server – 2 pc
to be supplied by Supplier, viz. Contract <b>SRB-REMP-8486YF-Sh-G-16-065</b> , (hereinafter called "Contract") and has accepted the Bid by the Supplier for the supply of goods under
Contract at the sum of
) hereinafter called "the Contract Price" ", plus VAT <sup>1</sup>
(Domestic bidder quoting in foreign currency shall clearly state: <u>Payment shall be made in RSD based on the selling exchange rate of the National Bank of Serbia on date of issuance of invoice.)</u>

#### NOW THIS AGREEMENT WITNESSETHES as follows:

- 1. The following documents shall be deemed to form and be read and construed as part of this agreement, viz:
  - a) Invitation to Quote; Term and Conditions of Supply, Technical Specification;
  - b) Addendum (if applicable);
- 2. Taking into account payments to be made by the Purchaser to the Supplier as hereinafter mentioned, the Supplier hereby concludes an Agreement with the Purchaser to execute and complete the supply of Contract and remedy any defects therein in conformity with the provisions of Contract.
- 3. The Purchaser hereby covenants to pay in consideration of the goods supply and acceptance of Contract and remedying of defects therein, the Contract Price in accordance with Payment Conditions prescribed by Contract.
- 4. Termination
  - 4.1 Termination for Default
    - (a) The Purchaser, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Supplier, may terminate the Contract in whole or in part:

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<sup>&</sup>lt;sup>1</sup> As per the Loan Agreement, expenditures related to goods, works and non-consulting services for the Project are financed 100 percent exclusive of taxes, while expenditures related to consulting services, training and operation costs are financed 100 percent inclusive of taxes. (The RS Official Gazette, No 13/15, Project Appraisal Document for the Real Estate Management Project, February 23, 2015)

- (i) if the Supplier fails to deliver any or all of the Goods within the period specified in the Contract, or within any extension thereof granted.
- (ii) if the Supplier fails to perform any other obligation under the Contract; or
- (iii) if the Supplier, in the judgment of the Purchaser has engaged in fraud and corruption, as defined in Clause 5 below, in competing for or in executing the Contract.
- (b) In the event the Purchaser terminates the Contract in whole or in part, the Purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods or Related Services similar to those undelivered or not performed and the Supplier shall be liable to the Purchaser for any additional costs for such similar Goods or Related Services. However, the Supplier shall continue performance of the Contract to the extent not terminated.

### 4.2 Termination for Insolvency.

(a) The Purchaser may at any time terminate the Contract by giving notice to the Supplier if the Supplier becomes bankrupt or otherwise insolvent. In such event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy that has accrued or will accrue thereafter to the Purchaser.

### 4.3 Termination for Convenience.

- (a) The Purchaser, by notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.
- (b) The Goods that are complete and ready for shipment within twenty-eight (28) days after the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the Contract terms and prices. For the remaining Goods, the Purchaser may elect:
  - (i) to have any portion completed and delivered at the Contract terms and prices; and/or
  - (ii) to cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and Related Services and for materials and parts previously procured by the Supplier

### **Fraud and Corruption**

5. 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 (as defined in the prevailing Bank's sanctions procedures), 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 Clause 4 shall apply as if such expulsion had been made under Sub-Clause 4.1.

### 6. Inspections and Audits

6.1 The Supplier shall carry out all instructions of the Purchaser which comply with the applicable laws where the destination is located

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 Clause 5 Fraud and Corruption, which provides, inter alia, that acts intended to materially impede the exercise of the Bank's inspection and audit rights constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the Bank's prevailing sanctions procedures).

<b>Signature and seal of the Purchaser:</b> FOR AND BEHALF OF	<b>Signature and seal of the Supplier:</b> FOR AND BEHALF OF
Name of Authorized Representative	Name of Authorized Representative

# FORM OF QUOTATION

(Date)			
To: REPUBLIC GEODETIC AUTHORITY Real Estate Management Project Project Implementation Unit Bulevar vojvode Misica 39 11000 Beograd, Srbija  We offer to execute the Shopping of Off the Shelf Software for central DCM (viewer and lightweight tool for maintenance of the central DCM),			
• Application server – 2 pc			
contract no. <b>SRB-REMP-8486YF-Sh-G-16-065</b> in accordance with the Conditions of Contract accompanying this Quotation for the Contract Price of (amount in			
words and numbers) () (name of currency)			
(Domestic bidder quoting in foreign currency shall clearly state: Payment shall be made in RSD based on the selling exchange rate of the National Bank of Serbia on date of issuance of invoice.)			
We propose to complete the delivery of Goods described in the Contract within a period of calendar days from the Date of Signing of the Contract.			
This Quotation and your written acceptance will constitute a binding Contract between us. We understand that you are not bound to accept the lowest or any Quotation you receive.			
We hereby confirm that this Quotation complies with the Validity of the Quotation required by the proposal documents.			
Authorized Signature:			
Name and Title of Signatory			
Name of Supplier:			
Address:			

SRB-REMP-8486YF-Sh-G-16-065

Phone Number

Fax Number

### **Terms and Conditions of Supply**

Project Title: Real Estate Management Project

Contract Ref: SRB-REMP-8486YF-Sh-G-16-065

Contract Title: Shopping of Off the Shelf Software for central DCM (viewer and

lightweight tool for maintenance of the central DCM)

### 1. <u>Prices and Schedules for Supply:</u>

Description of Goods	<b>Qty</b> pieces	Unit Price	Total Price at final destination ( ) (includes customs, duties, inland transportation and insurance)	Deliver y Date
1. Shopping of Off the Shelf Software for central DCM (viewer and lightweight tool for maintenance of the central DCM) - 1 pcs	1			
2. Application server	2			
		TOTAL:		
		VAT:		
		Total + VAT:		

Note: In case of discrepancy between unit price and total derived from unit price, the unit price shall prevail

- 2. <u>Fixed Price</u>: The prices indicated above are firm and fixed and not subject to any adjustment during contract performance.
- 3. <u>Delivery Schedule</u>: The delivery should be completed as per above schedule but not exceeding 30 calendar days from contract signature.
- 4. <u>Insurance</u>: The Goods supplied under the Contract shall be fully insured in a freely convertible currency against loss of damage incidental to manufacture or acquisition, transportation, storage and delivery. The insurance shall be in an amount equal to 110 percent of the total value of the Goods from «Warehouse» to «Warehouse» on «All risks» basis, including «War Risks». The Supplier shall arrange and pay for cargo insurance, naming the Purchaser as the beneficiary.
- 5. <u>Applicable Law</u>: The Contract shall be interpreted in accordance with the laws of the Purchaser's country.
- 6. <u>Resolution of Disputes</u>: The Purchaser and the Supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute between them under or in connection with the Contract. In the case of a dispute between the Purchaser and the Supplier, the dispute shall be settled in accordance with the country procedures.

- 7. <u>Delivery and Documents:</u> Upon shipment, the Supplier shall notify the Purchaser and the Insurance Company by cable of fax the full details of shipment, including purchase order number, description of goods, quantity, the vessel, the Shipping and Forwarding Receipt from freight Company showing full details, port of loading, date of shipment, port of discharge, etc. (if applicable). The Supplier shall mail the following documents to the Purchaser (if applicable), with a copy to the Insurance Company:
  - (i) copies of the Supplier's invoice showing goods' description, quantity, unit price, and total amount:
  - (ii) duplicate air/truck transport document and/or duplicate of railway transport document, and/or duplicate FCR (Forwarders Certificate of Receipt) in 1 Original and 2 Copies marked «freight prepaid»;
  - (iii) copies of the packing list identifying contents of each package;
  - (iv) manufacturer's or supplier's warranty certificate;
  - (v) certificate of origin;
  - (vi) certificate of quality.

The above documents shall be received by the Purchaser at least one week before arrival of the goods at the port of place of arrival and, if not received, the Supplier shall be responsible for any consequent expenses.

- 8. <u>Payment</u> for your invoice will be made 100% after delivery and issuance of Acceptance Certificate by the Purchaser, in 30 days at latest through bank account according to invoice payment instruction.
- 9. <u>Warranty</u>: Goods offered should be covered by manufacturer's warranty for at least 1 years from the date of issuance of Acceptance Certificate by the Purchaser. Please specify warranty period and terms in detail.
- 10. <u>Packaging and Marking Instructions</u>: The Supplier shall provide standard packing of the Goods as required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract.
- 11. <u>Defects</u>: All defects will be corrected by the Supplier without any cost to the Purchaser within 30 day from the date of notice by Purchaser. Name and address of firms providing service facilities in Republic of Serbia within the warranty period:

Address

12. <u>Force-Majeure</u>: The supplier shall not be liable for penalties or termination for default if and to the extent that it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force-Majeure.

For purposes of this clause, "Force-Majeure" means an events beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but not restricted to, act of Purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.

If a Force-Majeure situation arises, the Supplier shall promptly notify the purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by Force-Majeure event.

- 13. Required Technical Specifications:
  - (i) General Description
  - (ii) Specific details and technical standards
  - (iii) Performance Parameters

Supplier confirms compliance with above specifications.

14. <u>Failure to Perform</u>: The Purchaser may cancel the Agreement if the Supplier fails to deliver the Goods and Documents by *April 10, 2017*, in accordance with the above terms and conditions, without incurring any liability to the Supplier.

NAME OF SUPPLIER:	 
Authorized Signature:	
Place:	
Date:	

# **Technical Specifications (required and offered)**

1.0 Off the Shelf Software for central DCM (viewer and lightweight tool for maintenance of the central DCM) - GIS viewer for RGA internal users

Off the Shelf Software for central DCM (viewer and lightweight tool for maintenance of the central DCM)		
No.	Description Required minimum functionality	Description Offered functionality *
1.	Use internationally recognized software and database development methods, guidelines, standards and tools for implementation GIS viewer for RGA internal users	
	The provided solution (software application, GIS servers and database) must be implemented, taking into account nationally and internationally accepted development principles to ensure the highest quality of deliverables and updates thereof. These principles ensure that the software application offers sufficient flexibility with regard to changes in information and functionality and enable the software application and database to be maintained more easily and cost-effective, and to be used to satisfaction for a greater period of years. The standards and guidelines for application and database design and build must consider server side functionality and rules as opposed to functionality and rules on the application/client side, enabling a more robust database. Also flexibility in terms of using as less hard coded logic as possible in the software application and database is essential. Other issues like the structure of the programs and logic used and the documentation of these programs are part of standards and guidelines.	
	Software and database development organizations should comply with an accepted industry reference standard for quality management such as ISO 9001, or should be accessed at or above a certain level (e.g. level 2 - Repeatable) of the Software Engineering Institute Capability Maturity Model (SEI-CMMI), or should be able to demonstrate compliance with another well-defined development method (E.g. Oracle CDM). In addition, other tools, standards and guidelines, OpenGIS, ODBC/JDBC, UML, CASE tools should be used and implemented as much as possible.	
	The system and database must be developed based on renowned products, proven standards, and proven tools in their latest versions, offering the latest on geometric indexing, spatial data, system development and internet functionality, etc.	
	GIS viewer for RGA internal users based on modular system architecture and gradual system updates	
2.	The provided solution should be based on equipment, products and standards that allow for modular system architecture and gradual system updates. In a situation where a new system is introduced, or where old systems are replaced with the inclusion of new procedures/processes, it is essential that the system offers enough flexibility to deal with future changes.	

# Address flexibility in design and operation of GIS 3. viewer for RGA internal users The supplier must provide the right level of flexibility in the design of the application, therefore hard coded lists of domains, transactions and other system elements should be avoided as must as possible. Additionally, the proposed development methodology and tools should allow for regular updates of the production software applications and database. Integrated geometric and descriptive data model as a 4. basis for GIS viewer for RGA internal users All information, alphanumerical (descriptive/textual) and geometric (spatial) must be stored in one integrated objectoriented database, providing a relational and secure access to existing data sources, that are data backup of alphanumeric and geospatial databases. 5. Establish the specified GIS viewer for RGA internal GIS viewer for RGA internal users will be implemented to support RGA DCM data, resulting in a central internet application hosted on central application servers in RGA data canter. This system will be ready for the future in terms of architecture, functionality and data. Implement all required Data Sources into GIS viewer for RGA internal users The data model for the GIS viewer for RGA internal users' database will extend and improve current RGA data model for services on central level and contain at least the following information classes: Cadastral Municipalities borders, Parcels with parcel vertexes and borders, Buildings, Addresses (from existing RGA Address register): House numbers. Street names, Place names. 6. Cadastral Maps (DOF). Implemented model must allow read-only access for custom made and vendor oriented tools that are already used in RGA (for example.: ArcGIS Desktop, Mapsoft, QGIS). Data sources from RGA existing central database will be consistent and in a single coordinate system (single EPSG). Current state is that 70% of DCM data is maintained localy via customized/dedicated tools (MapSoft, ArcGIS Desktop). This data is periodically transferred from local databases using ETL methods (transformation from DXF/SHP and also from GK to ETRS) into current central RGA database. 30% of DCM data is digitalized and in process of official acceptance. Solution provider must establish replication from existing RGA DCM data sources into new database.

# 7. Implement main functionalities into GIS viewer for **RGA** internal users Main GIS viewer for RGA internal users' functionalities: Zoom in/out functionalities. OGC Support for Web Map Service (WMS), Web Map Tiling Service (WMTS), Web Map Service-Caching (WMS-C), Tiled Map Service (TMS), Web Feature Service (WFS) and load data from RGA DCM central database. Option to pull tiles from Google Maps, Bing Maps, OpenStreetMap, ArcGIS Server. Vector feature support for OGC WFS, KML, GeoJSON, GML. Support legend visualization via WMS requests. Enable search by Cadaster Municipality. + parcel, Cadaster Municipality + House Number, Place/Street + House Number and show results on a map. Custom Identify on map (spatial layer identifier + basic alphanumeric data and hyper link to alphanumeric application). GIS viewer for RGA internal users must be web based tool compatible with Java J2EE/SE (Oracle WebLogic) and must run from Firefox/Internet Explorer/Chrome (HTML 5 supported browsers). 8. Establish the GIS services – OGC Data services OGC Data services will provide standard web services for a certain data set that allow interoperability and data exchange with information systems. Provided GIS servers must support services based on OGC WFS 1.0 and 1.1 standards (http://www.opengeospatial.org/standards/wfs). Provided GIS servers must support services based on OGC WMS (1.1 and 1.3) and WCS (1.0 and 1.1) standard (http://www.opengeospatial.org/standards/wms, http://www.opengeospatial.org/standards/wcs). 9. **GIS** infrastructure GIS servers must enable advanced configuration for all elements (OGC services, layers, SLD styles, monitoring, etc) via web interface. GIS infrastructure extension for custom SOL queries 10. GIS infrastructure must be enable to execute and visualize custom SQL queries from different tables using RDBMS Views and on-the-fly SQL's. 11. GIS infrastructure - scalability GIS infrastructure must enable scalable deployment (deployed to multiple JVM instances and load balanced environment in DC and DRC).

12.	Hardware and off the shelf software prerequisites for	
	GIS viewer for RGA internal users:	
	Hardware and off the shelf software (minimal capacity):	
	- RDBMS Server	
	o 128GB mem	
	o 8 x 960GB SSD SFF (raid 10)	
	o 2 x processor E5-2670v3 (10-12 cores)	
	o VMWare Esxi 6	
	o -> VM1 (VCSA vCenter)	
	o -> VM2 (Oracle DB 12c)	
	- Application server Server	
	o 256GB mem	
	o 2 x 1TB SAS10k SFF (raid 1)	
	o 2 x processor E5-2670v3 (12-16 cores)	
	o VMWare Esxi 6	
	- Standard Software	
	o VMware vSphere Essentials Plus 6 (up to 3	
	hosts)	
	o Veeam Backup Essentials v9 (up to 6 CPU	
	sockets)	
	o Oracle DB 12c Standard Edition SEII (up to 2	
	CPU sockets)	
	<ul> <li>Oracle Ent Linux (za VM DB server)</li> </ul>	
	<ul> <li>Linux (Ubuntu or Oracle Ent Linux za App</li> </ul>	
	server)	
	- Archive	
	o Cloud or NFS with direct connection to Esxi	
	for DB/APP server (2-x TB data space for	
	Oracle exports per day, Veeam replication	
	VM1-VM4	
	Archive for Oracle archive logs and rman hot backup at	
	dedicated infrastructure (type lib or storage)	
13.	Technology stack for GIS viewer for RGA internal users:	
13.	Technology stack planned to be used for GIS viewer for RGA	
	internal users:	
	- Central database Oracle 12c SEII with geospatial and	
	locator services	
	- application (RGA DCM Viewer)	
	- GIS infrastructure for central RGA DCM Viewer	
	o Geoserver for WMS/WFS services (multi	
	instance)	
	o GeoWebCache for WMTS services (multi	
	instance)	
14.	Warranty period for Application server and GIS viewer	
17,	for RGA internal users:	
	1 (one year) from data of Final acceptance	

# 2.0 Application Server specification

No	Description Required minimum functionality	Description Offered functionality *
	Oracle WebLogic 12 SEII or similar According to 1.0 Description Required minimum functionality No. 8	

* Bidder shall specify the requested TS of equipment NAME OF SUPPLIER:			
Authorized Signature:			