



Republic Geodetic Authority

REQUEST FOR EXPRESSIONS OF INTEREST CONSULTANCY SERVICES

Republic of Serbia
Real Estate Management Project (REMP)
IBRD Credit No.84860

Assignment Title: Supervision, monitoring and quality assurance of the successful implementation of all proposed components of the Software development ISREC PHASE II and Phase III
Reference No. SRB-REMP-8486YF-CQS-CS-18-109

The Republic of Serbia / Republic Geodetic Authority has received financing from the World Bank toward the cost of the Real Estate Management Project, and intends to apply part of the proceeds for consulting services.

The main objective of this Quality Assurance/Quality Control activity is to ensure that the software developed under the “Real Estate Management Project” (Information System for Real Estate Cadaster – ISREC) meets the functional requirements as outlined within Technical Specification.

The QA firm (hereinafter: Consultant) will serve as a support to the IT Department of the RGA during development and implementation of ISREC.

Development and implementation of the ISREC is divided into three phases:

- **Phase I** – implementation of the Workflow, DMS, UMS and Coding System. *This phase was completed* under the separate contract before start of the Phase II and Phase III;
- **Phase II** is related to creation of the major registry (address registry and registry of the administrative units);
- **Phase III** is related to the core cadaster functionalities (REC alphanumerical and graphical data modules, Persons, Data migration, Integration with other systems).

Consultant will develop plan for QA/QC, acceptable for RGA, based on previously adopted plans for the development and implementation of the Phase II and Phase III.

The Consultant must assess and reach conclusions about the quality of the ISREC by looking at the software tools, software layer architecture and the overall quality, as well as performing source code artefacts analysis (i.e. Statistical Analysis).

Consultant will perform following tasks:

1. Support RGA in contract management;
2. Review of Database design (DB for Address registry module, Administrative unit module, REC alphanumerical and graphical data modules, Persons) and its compliance with the overall ISREC Data model;
3. Write, revise, and verify quality standards and test procedures for ISREC code design and ISREC code evaluation;
4. Review newly developed or updated ISREC code; including documentation, diagram, and flowchart, to determine if code will perform according to user request and conform to guidelines;
5. Recommend ISREC code improvements or corrections to the supplier and RGA;
6. Review computer-operating log to identify ISREC processing errors;
7. Test ISREC for validity of results, accuracy, reliability, and conformance to established standards;
8. Identify differences between standards and user applications and suggests modifications to conform to standards;
9. Identify and report about potential risks;

10. Conducts compatibility tests between all phases of the ISREC;
11. Monitor ISREC performance after rollout to prevent reoccurrence of code operating problems and ensure efficiency of operation;
12. Review training documentation and user manuals for all consultants for implementation before beginning of the rollout.

Consultant will be responsible to deliver the following reports for each phase:

- **Work plan** - within the first weeks of the Contract start date. Work plan is subject to approval of RGA officials;
- **Inception report**;
- **Ad Hoc reports** – when urgent issues must be addressed (if problem arise, or when risk for implementation is visible)
- **Monthly reports**:
 - i. Summarizing progress of work under this project outlining key challenges and recommendations for their outcome in the implementation;
 - ii. Reports how the team is complying the Project plan;
 - iii. Written document that contains recommendations and methodology for Training;
 - iv. Reports to RGA staff about the progress of the testing;
 - v. Technical Progress report to the Steering committee;
 - vi. Risk Management plan for the ISREC project.
 - vii. Change requests;
- **Audit report will include**:
 - i. Report to RGA in technical quality audit of the source code, software architecture and technical documentation of the ISREC system.
 - ii. Report regarding Database design and its compliance with the ISREC Data model (already implemented under Phase I);
 - iii. Certificate of testing which is a written document that contains Consultant confirmation that the delivered IT system is in accordance with the prescribed technical specification and fulfils all necessary functions for smooth operation of the of ISREC system;
 - iv. Written document that contains procedure for the final Phase II and Phase III acceptance
- **Final report**

Assignment duration is 115 weeks (covers contract duration of both Phases of the ISREC contract for a total of 110 working/consultant days for the whole team). The duration of the assignment may be extended, depending on duration of implementation of the ISREC Software.

The Project Implementation Unit (PIU) of the Republic Geodetic Authority now invites eligible consulting firms (“Consultants”) to indicate their interest in providing the Services. Interested Consultants should provide information demonstrating that they have the required qualifications and relevant experience to perform the Services:

- experience and description of similar assignments
- availability of skilled staff
- CVs of key personnel and key experts.

The shortlisting criteria are following:

- I. 10 years of international experience (proved by company references) in ICT consulting services in carrying out technical quality audits on multi-agency information systems including:
 - › ISO20000 or equivalent certification
 - › System analysis using automated tools
 - › Software architecture analysis
 - › Application performance testing

The Consultant should demonstrate proven experience in quality control, performed during the last 3 years, where the system has similar complexity and size.

The consultant should have strong and relevant track record concerning the ICT projects with public sector institutions, entailing contract management, oversight of implementation of software solutions, staff training, handover and acceptance of the products.

In addition to the ICT project management skills, Consultant should have experience with international cooperation projects, with emphasize on the understanding of the quality standards, monitoring and reporting.

Previous experience with QA/QC of Cadaster and property registration systems as an advantage.

II. Experts to be provided:

Senior Software Quality Audit Expert

Mandatory Qualifications and skill:

- Minimum 10 years of IT background with proven record of accomplishment and experience in software development/implementation
- Solid experience with quality control of web software IT architecture projects
- Good knowledge of systems engineering concepts
- Solid experience in the technical quality audits of multi-agency information systems
- In-depth understanding of the software development lifecycle and be able to communicate on project status, issues, and resolutions

Desirable:

- Written and verbal communication, with documented track record of technical reporting skills in line with best standards of international cooperation projects
- Comprehensive knowledge of web application/service related hardware and software configuration

Senior Software Test Expert

Mandatory Qualifications and skill:

- Solid experience with testing modern IT and web software IT architecture projects, preferably in a Java development environment
- Experience in the testing of software in both ‘black box’ (code unseen) and ‘white box’ (code available) environments
- Comprehensive knowledge of web application/service related hardware and software configuration

Senior IT Infrastructure Specialist

Mandatory Qualifications and skill:

- Solid experience of auditing and testing networks designed to support web applications and services
- Comprehensive knowledge of IT Architecture elements related to performance, security, authorisation and authentication
- Experience of network configuration, database tuning and load balancing in a multi-agency environment with large numbers of remote workstations running both ‘thick’ and ‘thin’ clients
- Experience of testing the functionality, performance and resilience of networked systems

The Consultant shall submit only one proposal, either individually or as a joint venture partner in another proposal. If a Consultant, including a joint venture partner, submits or participates in more than one proposal, all such proposals shall be disqualified. This does not, however, preclude a consulting firm to participate as a sub-consultant, or an individual to participate as a team member, in more than one proposal.

The following selection criteria with corresponding points will be used for the above three positions in the evaluation procedure:

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| – Specific experience relevant to the assignment | 50 pts |
| – Qualifications for the assignment | 30 pts |
| – Competence for the assignment | 20 pts |

The attention of interested Consultants is drawn to paragraph 1.9 of the World Bank’s “*Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by World Bank Borrowers*”, published by the World Bank in January 2011 (“Consultant Guidelines”), setting forth the World Bank’s policy on conflict of interest.

A Consultant will be selected in accordance with the CQS procedure set out in the “*Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by World Bank Borrowers*”, published by the World Bank in January 2011, revised in July 2014.

Further information can be obtained at the address below during office hours 09:00 to 15:00 hours.

Expressions of interest must be delivered in a written form to the address below or via e-mail by **November 5, 2018, 12:00 AM**.

When submitting Expressions of interest please indicate assignment and reference number for which you are applying.

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