OSCE Organization for Security and
Co-operation in Europe
Special Monitoring Mission to Ukraine

Date: 08 February 2019

Clarification Note No. 3

RFP/SMM/08/2019: Provision of Consultancy services for Software Development, Integration, and Maintenance for the OSCE Special Monitoring Mission to Ukraine.

B3Q1   1) What kind of documents should be provided as a proof of following requirements (from Annex D):

- In-house capacity with PostGreSQL database management system
- In-house capacity with at least two relevant programming languages/frameworks (Java, PHP).
- In-house capacity with GIS and mapping technologies (preferably with ESRI) or plan to outsource/contract related development tasks.
- In-house capacity to the integration of software components.
- Usage of an online tracking tool to handle bugs and change requests.

Answer: Description, reports or summaries of the projects where the corresponding technology was used. URL or screencaps of projects are a plus. As for "Usage of an online tracking tool to handle bugs and change requests" description of the corresponding tool that is normally used by the bidder is expected.

B3Q2   How company should prove 5 years of experience in software development?

Answer: Company registration document shall be provided as well as description, reports or summaries and references to the corresponding projects during the last 5 years.

B3Q3   Should all of the developers from "core engagement team" be in an official labor relations with tender contractor company?

Answer: The successful bidder should have substantial in-house personnel and expertise and may allow outside subcontractors or partners to provide assistance for certain topics/areas where the required experts are not available internally. In the case of outsourced/contract related development tasks, the plan or proposal must detail the relationship between the bidder and outsourced resources.

B3Q4   Can you please advise whether Front end for the Web Application was developed as a Single Page Application using JavaScript framework (Vue/React/Angular) or is it Multi Page application that could be developed applying Blade Templates. We would need to get an understanding on the architecture structure and tack stack for us to provide you with proper estimate.

Answer: SOVA web application was developed based on Laravel (PHP framework) as mentioned in the ToR, which uses Blade.

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B3Q5 Administrative console. In terms of the new functionality requested to add groups and roles can you please let us know was such functionality considered in the architecture and embed into the current code implementation or it's a new requirement that should be implemented from scratch?

Answer: The current back-end functionally as described in the ToR (and below) is part of the current code implementation, however the front-end functionalities require implementation utilizing this current code implementation. As it is stated in the ToR: "The existing functionalities are:

- Adding users;
- Browsing, deleting, updating;

In addition to the existing functionalities the AC should allow:

- to add groups and roles;
- to browse, create, delete and update users/groups/roles;
- to assign/remove user to/from role(s)/group(s)
- to terminate a session;
- the following types of activities, but not limited to, should be logged:
  - creating a user;
  - creating a role;
  - removing a user;
  - removing a role;
  - assignment or removal of a user from a group;
  - changing user password;
  - changes to security roles assigned to users or groups;
  - changes to user and group permissions on a project and the associated project-level security roles that are assigned;
  - user login;
  - user logout;
  - session termination;
  - session timeout;
    changes to audit logging configuration settings."

B3Q6 Initial Systems Transfer. Can you please advise if version control was applied for SOVA application development. If so, was it GitHub, GitLab, TFS, SVN etc.?

Answer: This information will be provided to the successful bidder during the initial systems transfer.

B3Q7 In initial paragraphs of Annexure C it is mentioned that SOVA is a desktop and mobile application. However in core components later in same document there is no mention of desktop app. Please elaborate on desktop app component.

Answer: There is WEB UI for SOVA and mobile application.

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B3Q8   Web application talks about below two points. Please elaborate on these.
- Integration of the new forms with mobile devices.
- Synchronization of mobiles with the web application

Answer: New forms could be created only via Web UI. Mobile devices are focused as data collection devices, and not management devices, and such should be provisioned with new data, e.g. new forms after creation on the Web UI. Synchronization means the process of sending data (e.g. actual reports) from mobile device *to* SOVA server for final editing, verification and approval via Web UI.

B3Q9   Mobile application includes Input of data. Which format is supported here for input of data?

Answer: Here 'Input data' means input of data into predefined report templates (input of report) with mostly standard field inputs (text, radio, drop-down, etc.) as well as a mapping input UI.

B3Q10   Mobile application. Reports and forms are organization specific or generic for all?

Answer: Organization specific.

B3Q11   Are there any system documents like Functional Requirements Specification, Requirement Traceability Matrix, Architecture Diagrams, Detailed Design document for the system, Bug Report etc. which can be used in initial knowledge transfer?

Answer: User Workflows and general Architecture Diagrams will be provided by the OSCE SMM to the successful bidder during initial systems transfer.

B3Q12   2b. Users authentication/login: Is AD already set up or Setting up AD and migrating user data is also part of the RFP scope?

Answer: Organization-wide corporate AD is already set up. There is no need in migrating users' data. The aim is to enable LDAP (Active Directory) authentication in SOVA.

B3Q13   Support: Is there any specific no. of resources requirement for support.

Answer: The human resources required to cover the needs outlined in the ToR should be described in detail. The IT resources should be described in detail to explain how they cover the needs outlined in the ToR.

B3Q14   Does OSCE SMM have Enterprise GIS platform solution or bidder shall advise on planning and design of such?

Answer: Yes, the OSCE SMM has ESRI Enterprise GIS platform.

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B3Q15 Profiles of the required experts. GIS analyst/ GIS Engineer profiles are not listed among detailed descriptions of the specialists' profiles, is OSCE SMM is looking for GIS specialists capacity among bidders. Please specify GIS specialists profiles and nature of tasks if required.

Answer: A developer with understanding of spatial data formats and integrating a mapping UI is required (or can be outsourced). The need for a specialist to the level of GIS engineer is not required, nor will the project require GIS analysis and a corresponding analyst.

B3Q16 "In-house capacity with GIS and mapping technologies (preferably with ESRI) or plan to outsource/contract related development tasks." Does OSCE expects bidder to have actually licensed ESRI products or OSCE will provide access to ESRI licensed products?

Answer: The OSCE SMM will provide access to ESRI licensed products installed on OSCE premise.

B3Q17 Please Specify GIS Head Count OSCE SMM would like to contract.

Answer: A developer with understanding of spatial data format and integrating a mapping UI is required (or can be outsourced).

B3Q18 We assume that XML/maXML will be the primary data exchange file format, is that correct?

Answer: It is correct.

B3Q19 Language support for 24/7 on-call support – what languages should be supported?

Answer: English.

B3Q20 We assume that the Android App is developed on Java. Do you have (or can you provide) LINT code quality statistics of the current Android app?

Answer: No. We don't have any LINT code quality statistics of the current Android app.

B3Q21 Does Android App have unit tests written? Do we have to write them for new features?

Answer: There are no unit tests written for the current android app. Yes, new developer company has to write them for new features.

B3Q22 Does Android App use any of following libraries/DB: RxJava, Retrofit, Room, SQLite, Realm?

Answer: This information will be provided to the successful bidder during initial knowledge transfer.

B3Q23 Are there any UML diagrams of Android App components or code architecture that you can share with us?

Answer: This information will be provided to the successful bidder during initial knowledge transfer.

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B3Q24 What tools are you using for Web and Mobile application monitoring (e.g., Nagios, Zenoss, Zabbix, AppDynamics, Dynatrace, New Relic, Datadog, ELK Stack (logs))? What are the expected system components/parameters to be monitored?

Answer: This information will be provided to the successful bidder during initial knowledge transfer. It is expected that DB in-stances and Web servers are to be monitored.

B3Q25 What form-factors and Android versions are supported? What is the strategy and requirements for Android OS version support?

Answer: The OSCE SMM will provide the successful bidder with a finalized plan and requirements to implement.

B3Q26 What is expected load on infrastructure?

Answer: This is still being finalized within the project and needs testing and quantification will be finalized at a later date.

B3Q27 Are zero downtime deployments required?

Answer: No. However we are going to establish non business hours' time frames for deployments.

B3Q28 Will we have an Enterprise GIS system available in the staging environment?

Answer: Yes. It is currently on staging environment.

B3Q29 Who is expected to administrate PostgreSQL server on Staging and Prod? Who is expected to be responsible for instance maintenance?

Answer: It will be bidder's responsibility to administer PostgreSQL, instance maintenance and knowledge transfer to the OSCE SMM.

B3Q30 Do we need to perform security testing and/or update program stack in case of vulnerabilities?

Answer: Yes.

B3Q31 Do you have (can you provide) UI design, mock-ups or other graphical examples?

Answer: This information will be provided to the successful bidder during initial knowledge transfer.

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B3Q32 What is the relation between Project and Teams? Can the team contain many projects?

Answer: Project in the ToR is utilized in two ways. The whole SOVA development effort is a project. Within SOVA application, a project is an organizational entity with a common purpose, which houses common forms and reports. Teams as referenced in the ToR is the personnel dedicated to the SOVA project as a whole (first definition of project).

B3Q33 Can you please provide more information about "Exporting." Do you have any requirements for export?

Answer: Currently, there is export functionality to Word and PDF from submitted reports via a structured markup template. As the Enterprise GIS develops in parallel, the focus of SOVA will be transferring data to a GIS database outside the SOVA project, therefore reducing the need for Export functionality.

B3Q34 Can you please provide more information about synchronization between web and mobile. Do you have any business logic for conflicts between data from the mobile app and web?

Answer: This information will be provided to the successful bidder during initial knowledge transfer.

B3Q35 Can you please provide available fields for Forms, Templates?

Answer: We can provide the types of field in that can be put in the system (i.e. text, number, location, radio, etc.) and some example of each to the OSCE SMM context but cannot provide entire forms.

B3Q36 What are the requirements for browser support?

Answer: MS IE 11 and higher, MS EDGE, Google Chrome.

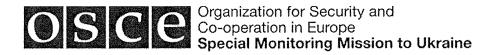**B3Q37 What reports do you currently use?**

Answer: The OSCE SMM has a wide range of reports that collect a wide range of information to deliver our mandate. These are focused on the patrol reports of our monitors.

B3Q38 What existing reports need to be modified?

Answer: Modification (and creation) of reports will be handled internally by the OSCE SMM members on the SOVA team.

B3Q39 Which reports are currently generated but are not in use?

Answer: Many reports forms are generated for future use, but as the system has not been rolled out, none are currently in active use.

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B3Q40 Can you describe any departmental, organizational, or government standards to which reports must conform, such as to provide a consistent look and feel or to comply with regulation? What are formats of the reports: dashboard, scorecard, spreadsheet, textual?

Answer: The data collected by SOVA itself must basically conform to the needs of the Enterprise GIS database project that will be the main consumer of the data. Dashboard, scorecards, spreadsheets, textual needs will be defined in that project. The current export functionality of the reports to Word or PDF will be defined in the markup language as set by the OSCE SMM staff members to conform to organization standards. The need of the export functionality will be reduced as the Enterprise GIS comes online.

B3Q41 What report data relevance is expected: instant (online), report for a different period (huge report, data mind). Could you please provide more details regarding reports' data relevance and period?

Answer: The data's relevance period depends on the event recorded and the user needs. Some have daily relevance to produce daily report, while some are relevant over longer terms to see trends. There is less need for instant data, but more need to be a structured depository of our observations and the main record of the situation.

B3Q42 What is the meaning of "setup data"?

Answer: Data setup means the creation of templates and forms and the backend field setup in a way to best capture the data collected.

B3Q43 Is an API for data export expected to be implemented?

Answer: Yes.

B3Q44 Should it be possible to add field data via Web Application?

Answer: That's been already implemented. Basically, all report data is stored in JSON, in one field in the DB.

B3Q45 Do you have a list of business and system entities and described possible relationships between them?

Answer: This information will be provided to the successful bidder during initial knowledge transfer.

B3Q46 Can you please provide details of the number of documents to be analyzed during Task1 subtask? Can you please provide details about the content of assessment reports for task 1 subtasks completion?
Answer: User Workflows and general Architecture Diagrams will be provided in addition to source code. The successful bidder will generate reports as outlined in the ToR, with the content and main topics they proposed in the bid.

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B3Q47 Task2: should we consider implementing GDPR compliance?

Answer: This information will be provided to the successful bidder during initial knowledge transfer.

B3Q48 Which version of PostgreSQL is used?

Answer: "PostgreSQL 9.5.10.

B3Q49 Are you using PostGIS to store GIS data directly in database?

Answer: We are currently utilizing PostGIS SDK in mobile application, but not for this purpose.

B3Q50 Do we need to have 2 instances for PostgreSQL (master, standby) in case for failover?

Answer: This information will be provided to the successful bidder during initial knowledge transfer.

B3Q51 Is the use of contemporary front-end frameworks and tools (i.e. Bootstrap, React, Vue, gulp.js, SASS etc.) limited in any way?

Answer: No limitation. Please take into consideration that the WEB UI is currently developed based on Laravel PHP framework.

B3Q52 Which is the oldest version of Internet Explorer the Web and Mobile Application need to fully support?

Answer: Internet Explorer 11.

B3Q53 Are there any accessibility standards which need to be implemented as part of the work on the Web and Mobile Application (i.e. ISO/IEC 40500:2012)?

Answer: There are no specific standards. Just need to be mentioned the following (already implemented):
- Report data collected on the Android devices as well as that stored in the server's Postgres database is encrypted.
    * On the Postgres database side report data is encrypted for all SOVA environments using OpenSSL and the AES-256-CBC cipher. All encrypted values are signed with a message authentication code (MAC) to detect any modifications to the encrypted string.
    * On the Android device this is accomplished using the built in device encryption
- DATA TRANSFER SECURITY
    * All application communication (Device API and browser) is performed only over HTTPS using 256 bit SSL provided by Let's Encrypt.

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B3Q54 Are there any specific requirements in terms of GIS and mapping services?

Answer: The basic requirements are to record locations of observations as points and linking spatial information of points with form-entered data. The entry of location data through a basic mapping interface (dropping points, detecting current location) should be provided within app via core code or plugin. Export of submitted form data should include spatial information gathered.

B3Q55 Are there any information architecture standards which need to be implemented as part of the work on the Web and Mobile Application?

Answer: There are no specific standards.
- WEB APPLICATION DETAILS
The web application runs on the Laravel PHP framework version 5.4 and takes advantage of common PHP and front end libraries, including the following.
• https://github.com/spatie/array-to-xml
• https://github.com/Zizaco/entrust
• http://getbootstrap.com/
• https://github.com/owen-it/laravel-auditing
• https://github.com/ramsey/uuid
- The Android application is written in Java using the Android SDK and ESRI ArcGIS SDK 10.2.9