
State of Israel
Ministry of Communications



Request for Information:
Coverage and User Experience
Measurement System,
based on mobile application

1. INTRODUCTION

- 1.1. The Ministry of Communications of the State of Israel (MOC) is the regulator of the Telecom sector in Israel.
- 1.2. Among other things, MOC is in charge of ensuring that mobile operators adhere to the terms of their licenses.
- 1.3. Among the obligations included in the licenses, are standards for coverage, quality of service and quality of experience for voice calls and data transmission.
- 1.4. The Ministry's current monitoring tools require running field-tests by specialized personnel and equipment or relying on operators' data and reports.
- 1.5. Currently, the operators provide MOC with simulations of their coverage throughout the country and basic quality parameters, by frequencies and by cellular technology such as 2G, 3G and 4G.
- 1.6. These simulations do not necessarily reflect the actual coverage nor the quality of experience of the users.
- 1.7. Therefore, MOC is seeking to strengthen its supervision & monitoring capabilities, in particular by introducing an application that can be installed on end users' cellular handsets/end devices, and collect more reliable information regarding the quality of the service and the coverage provided while keeping the user's privacy.
- 1.8. It will also include management tools to operate and control the whole process of downloading the application and collecting data. Data analytics & reporting are required.
- 1.9. This Request for Information (RFI) is an invitation to provide information for a commercial off-the-shelf performance measurement tool for cellular coverage and user experience information based on a cellular application which will be installed on users' smartphones/handheld devices upon receiving their consent.

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- 1.10. The provided information should include Hardware and Operational/maintenance requirements, annual maintenance & support costs, and Total ownership –TOC costs.
 - 1.11. The intent of this RFI is to obtain information regarding the capabilities of the System and the supplier's capabilities to adapt it to best meet the needs of MOC, and to maintain and upgrade it for long term use.
 - 1.12. The RFI reply may include additional information regarding other capabilities of the proposed performance System, such as: supervision of the quality of service in fixed networks, drive test, reporting tools or integration with mapping & geographical tools like GIS.
 - 1.13. This RFI document is not a referral order for offering suggestions and not part of tender procedures, Therefore, does not constitute any commitment towards the RFI respondents. The document is intended for information only, and the MOC office would consider further actions in accordance with professional and substantive considerations.
 - 1.14. The MOC office reserves the right to use the information received following this appeal to potential suppliers and everything at its sole discretion.
 - 1.15. If the tender procedure will be held in the future, the MOC office reserves the right to change or add terms and requirements, all according to professional discretion and depending on the needs.
 - 1.16. The MOC office reserves the right to appeal as necessary to all respondents to this RFI document to request for complementary information and clarifications, to view presentations and demonstrations, request for a pilot, visit customer sites and visiting suppliers.
 - 1.17. The MOC office may make use of the information given in response to this RFI and there will be no claim for copyright.
 - 1.18. Please notify any information in your response which is trade secret.
 - 1.19. A response to this RFI shall not constitute a threshold requirement for any future tender procedure that might follow.
 - 1.20. A response to this RFI shall not provide any future advantage in a tender procedure that might follow, and the responder will not be obligated to include it in a future tender proposal or any other commitment.

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- 1.21. If a company, which responds to this RFI, wins a future tender based on information from this RFI, the information will be accessible for review by the other bidders except parts which the Ministry of Communications determines a professional or trade secret.
 - 1.22. The supplier shall respond to the technical requirements with “Fully Compliant” [FC], “Partially Compliant” [PC], and “Non Compliant” [NC]. In addition, the supplier shall provide comments and explanations to support his compliance replies inside the technical response where applicable.
 - 1.23. The supplier shall respond to the technical requirements with “include” [I] if it is part of the offered solution and pricing or “Optional” [O] if it is not part of the offered solution and price it as well in the price proposal’ where applicable.
 - 1.24. The proposal's format and size shall comply with the following requirements/constraints:
 - 1.24.1. Font type – Times New Roman.
 - 1.24.2. Font size - 14
 - 1.24.3. Font color – Blue.
 - 1.25. Please follow each paragraph in the RFI with your answer. Forwarding the reader to a paragraph in the product description without detailed explanations is unacceptable.
 - 1.26. All questions and inquiries regarding this RFI should be directed to:

Eti Shmueli
Head of Communication Engineering Division
State of Israel, Ministry of Communications
Email: ShmueliE@moc.gov.il

Please submit your response to the above Email address until August 27, 2020.

2. BASIC REQUIREMENTS OF RESPONSES

MOC will consider the responses to this RFI to assess the vendor's ability to:

- 2.1. Meet the functional and technical requirements described in this RFI as evidenced by the RFI response.
- 2.2. Meet the requirements for customer service and technical support as described in the SLA shown in this RFI document.
- 2.3. Provide a cost-effective solution that meets the financial goals of the customer.

3. VENDOR PROFILE

- 3.1. This section is primarily intended at providing a brief overview of the vendor's business profile and a primary contact person for this RFI document.
- 3.2. Please refer to the questions listed below and reply after each line accordingly:
 - 3.2.1. List the company name, address, city, state, zip code, phone number and website address.
 - 3.2.2. State the name, title, address, phone number, and e-mail address of the primary contact person for this RFI document.
 - 3.2.3. Please provide a brief overview of your company including number of years in business, number of employees, nature of business, and description of clients.
 - 3.2.4. Please provide a brief description of the evolution of the cellular application for coverage and user experience, major developments which were made, e.g. new versions, new modules, specific features, roadmap.
 - 3.2.5. List any industry awards or recognition that you have received, the awarding party, and the date received.
 - 3.2.6. Indicate the total number of applications which were installed worldwide, and specifically in Israel.
 - 3.2.7. Indicate any regulators/ operators who use the product as part of a commercial understanding vis-à-vis your company.

4. TECHNICAL DESCRIPTION OF THE PRODUCT

Please provide a description of the product/s relevant to our requirements including:

- 4.1. High level description of the product
- 4.2. Explanation about the size of the application and size of the data collected Mb and its capabilities and features.
- 4.3. The way the application is installed on the smartphone (by the end user, embedded in other applications)
- 4.4. The connectivity of the application to your servers (how often is it connected – once a day, several times a day, which information is included, is it done via Wi-Fi/cellular).
- 4.5. Which information can the end user get from the application?
- 4.6. The output to the MOC (general reports, tailored reports, connectivity to GIS in MOC premises...).
- 4.7. Does the application include a mechanism for notifying in advance the end-users and get their permission regarding the information that is gathered by the application?
- 4.8. The connectivity needed in MOC premises and the hardware and software needed to access, analyze and protect the data collected (such as VPN interconnect, Database, GIS system, report tools etc).
- 4.9. Describe the specific services that you provide, based on packages (such as coverage, performance etc.) and the frequency of reports (weekly, monthly, unlimited...)
- 4.10. Elaborate about the security and privacy of the system, that prevents the collection of any private information from the end-user. Please provide which standards are being used to prevent the unauthorized release of private information regarding the end-user.
- 4.11. Elaborate if the product has been subject to any legal proceedings or examinations, including those concerning its privacy standards, like the GDPR.
- 4.12. Elaborate if the output of the application was used in any enforcement proceedings against operators/ was used as a legal document in a court proceeding.
- 4.13. Elaborate about ways of checking the reliability and consistency of the measurements – especially when there is only small amount of measurements.

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- 4.14. What is the output of an area that was not measured – is it decided as an area with no coverage or with insufficient data? What is the minimal number of measurements for decision of coverage?
 - 4.15. What is the minimal resolution of the output in the map (in square meter)
 - 4.16. When was the application developed? How many years is it in commercial use? How many times was it downloaded?
 - 4.17. How many regulators/operators are using the application? Can you elaborate part of them and provide contact persons?
 - 4.18. Was the application certified by any regulator as compliant with ITU standards and can be used by the regulator for measurement of coverage and performance.
 - 4.19. Is the application a stand-alone application or is it an SDK that can be embedded in other applications?
 - 4.20. Is the application available for IOS and Android cellular operation systems?
 - 4.21. Does the application work in passive mode – meaning it collects only the information based on the end user tasks or is it active – meaning – it is also doing its own measurements while the end user is not using its phone?
 - 4.22. Is the information of the measurements sent via Wifi or cellular?
 - 4.23. Please elaborate your ideas on how to incentivize users to download the application.
 - 4.24. Does the information collected include the location of the end-user? Please elaborate if you can provide the altitude of the end-user as well (this is especially important in order to identify measurements in tall buildings and if possible to be able to ignore them in the statistics).
 - 4.25. Please list the information that you collect via the application such as:
 - 4.25.1. Date/time of the measurement
 - 4.25.2. Location
 - 4.25.3. Altitude
 - 4.25.4. Technology (2,3,4G and later 5G)
 - 4.25.5. Frequency band used
 - 4.25.6. Phone model and operating system version.
 - 4.25.7. Measurement of the signal and the noise, such as: RSRI, RSRP, RSRQ, RSCP, Ec/Io.
 - 4.25.8. How many times is the information measured during a call?
 - 4.25.9. Number of access fails and locations
 - 4.25.10. Number of dropped calls and locations
 - 4.25.11. Average and peak data speed per session for upload and download
 - 4.25.12. Delay
 - 4.25.13. Jitter

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- 4.25.14. Voice quality (if possible) for Wi-Fi calling and VoLTE.
 - 4.25.15. Average voice call length.
 - 4.25.16. The performance for reaching specific services as established by the end user such as Google, Facebook, WhatsApp Instagram, and other popular online applications, services and websites might be included).
 - 4.26. Please notify the number of handsets in Israel which are using your application and number of measurements that were done in the last 3 months.
 - 4.27. The customer (MOC) will access the server and get relevant information. Elaborate specifically:
 - 4.27.1. How often can the MOC access the information (daily/weekly/monthly/on demand)?
 - 4.27.2. Can the structure of the reports be modified by MOC? Please elaborate
 - 4.28. Generation of reports:
Please list all types of reports and forms generated by the system. e.g.
 - 4.28.1. Text formats
 - 4.28.2. Graphic format reports
 - 4.28.3. Transactions activity
 - 4.28.4. Status reports
 - 4.28.5. Queries etc.
 - 4.29. Specify the level of details obtained from these reports:
 - 4.29.1. Is it possible to compare between maps/ measurements that were made at different times and show the output in a graphic manner?
 - 4.29.2. Which reports are available?
 - 4.29.3. Can the output be exported to GIS system or external BI tool?
 - 4.29.4. Is it possible to tailor the reports based on MOC needs?
 - 4.29.5. Please describe how the system administrator can define access permissions to users with various profiles. Indicate the way users' access to the system is managed according to the security level.
 - 4.29.6. Please elaborate about the capability to make changes/add features according the customer's request and how is it done.
 - 4.30. Please attach samples of such reports – and if you especially if you have already for Israel.
 - 4.31. Please list standards the system is compliant with, such as ITU and others.
 - 4.32. Please elaborate if any regulation certified your product as compliant with standards.
 - 4.33. Please attach to the RFI response, any additional and relevant information such as technical data, marketing materials, brochures etc.
 - 4.34. If you have relevant tools for landline customers such as an application that can be installed in end user's premise and measure the performance of the subscriber for broadband data, please elaborate your capabilities.

5. Training

- 5.1. Please elaborate about courses that are available to the customer (MOC) for system administrators and for users.

6. Support, maintenance and new software features

- 6.1. Describe the organization and structure of your technical support services.
- 6.2. How often are system updates released?
- 6.3. Describe the level of your system flexibility when customization or development changes are required. e.g. create or change of reports, add new features.
- 6.4. Please describe the main capabilities of your proposed SLA, such as:
 - 6.4.1. Help desk
 - 6.4.2. Responsiveness
 - 6.4.3. Bug fixes time frame.
 - 6.4.4. Contact person is Israel
 - 6.4.5. How often are new versions released?
- 6.5. Publishing the output
 - 6.5.1. We would like to publish the information to the public – as a benchmark between the operators. Please elaborate the option of publishing the information with your certification.

7. Prices

Please send this article in a separate file.

It is clarify that the prices does not bind anyone and does not constitute a quote.

- 7.1. Please describe in details the cost breakdown for relevant modules/packages options - including training ,connectivity, new software features, reports and other fees relevant to the project.
- 7.2. Please elaborate your packages price based on the requested reports (daily, weekly, on demand etc)
- 7.3. Please send an estimated proposal, based on several relevant options.
- 7.4. Please include also maintenance and support fees per year/3 years/5 years.