

State of Israel
Ministry of Communications



Israeli Ministry Of Communications

Request for Information For Spectrum Management System

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SECTION 1 – INTRODUCTION

This Request for Information (RFI) is an invitation to provide information for a commercial off-the-shelf Spectrum Management System (SMS) for the Israeli Ministry of Communication (MOC). The intent is to obtain information on an off-the-shelf SMS and the supplier's capabilities to adapt it to best meet the needs of the Israeli MOC, to maintain and upgrade it for long-term use.

This RFI document is not a referral order for offering suggestions and not part of tender procedures. Therefore, it 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.

The MOC office reserves the right to use the information received following this appeal to potential suppliers and everything at its sole discretion.

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.

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.

The MOC office may make use of the information given in response to this RFI and there will be no claim for copyright.

All questions and inquiries regarding this RFI should be directed to:

Shoshi Ben Aharon
Israeli MOC CIO
Israeli ministry of communication
Email: shosh@moc.gov.il

Anticipated time frames for evaluation:

Issue RFI to vendors	31.10.2017
Questions on RFI due	10.11.2017
Responses to questions due	15.11.2017
Responses to RFI due	30.11.2017

**Please submit your response to the above Email address.
Responses to RFI received after 30.11.2017 will not be considered.**

SECTION 2 – BASIC REQUIREMENTS OF RESPONSES

The Ministry Of Communication (MOC) office will consider the responses to this RFI to assess vendor's ability to:

1. Meet the functional and technical requirements described in this RFI as evidenced by the RFI response.
2. Meet the requirements for the customer service and technical support as described in the SLA shown in this RFI document - section 8.
3. Provide a cost-effective solution that meets the financial goals of the customer.

SECTION 3 – VENDOR PROFILE

This section primarily intends to provide a quick overview on vendor's business profile and a primary contact person for this RFI document.

Please refer to the questions listed bellow and reply in the appropriate tables:

3.1	Identify the company name, address, city, state, zip code, phone and fax numbers.
Vendor Comments	

3.2	Identify the name, title, address, phone and fax numbers, and e-mail address of the primary contact person for this RFI document
Vendor Comments	

3.3	Please provide a brief overview of your company including number of years in business, number of employees, nature of business, and description of clients.
Vendor Comments	

3.4	Identify any parent corporation or subsidiaries if appropriate.
Vendor Comments	

3.5	Please provide a brief description of the evolution of the spectrum management technology of your system. Include the date of the first installed site and major developments which have occurred; e.g. new versions, new modules, specific features, and previous ownership if appropriate.
Vendor Comments	

3.6	List any industry awards or recognition that you have received, the awarding party, and the date received.
Vendor Comments	

3.7	Indicate the total number of installations in the last two years by the year of installation.
Vendor Comments	

3.8	Describe a summary of your company's short-term and long-term goals and strategic vision.
Vendor Comments	

SECTION 4 – CUSTOMER’S TECHNICAL ENVIRONMENT

The aim of this section is primarily to provide the vendor a general overview of the technical environment from one hand, and on the other hand provide the customer information regarding the system structure and the matching capabilities to the desired customer environment.

The section discusses in the system architecture, installation environment, technical information and system security.

Please refer to the questions listed bellow and reply in the appropriate tables:

SMS architecture

Please describe in short, the basics of the system architecture such as: whether the system is working over LAN, supported protocols, the location of system modules e.g., location of central database server, frequency plans data and engineering test module etc. please describe briefly the interconnections and data flow between the main modules.	
Vendor Comments:	

Data flow: Please describe in general the basic data flow concept in the system. Whether the system can be set to bi-directional or unidirectional flow, e.g. for the sake of working in two separated working areas such as secured and non-secured zones. Also indicate whether it is possible to enable or disable these paths at any time.	
Vendor Comments:	

Installation environment

The system must be installed on premise and not be connected to the cloud or vendor site.

It is required that the two working areas will be physically and not logically separated.

General question:
Is the system fitted to work on cloud while the secured area stays on premise and the non-secured moves to cloud?
Note: working areas should always be physically and not logically separated.
Vendor Comments:

System installation area: The system's working areas may be outlined as follows:

Secured area: For use such as; working on frequency plans, microwave links, reports, administrative documents, engineering tests results and engineering tools (programs), database operations, server location, etc.

Non- secured area: For use such as; license request processing, data management and report generators, queries, financial module etc.

Please describe the ability of your system in terms of system's modularity, to work in such working environment as described.

You may add your reply in the following table:

System Installation area
Vendor Comments:

Technical information:

Please refer to the table below and provide general information such as type, vendor, item description, e.g.

Operating system: Operating system and platform as server/client etc.
Database: Type and vendor.
Number of users: Maximum number of users who can work simultaneously on the system.
System Hardware: List all of system's hardware modules and the role of each module etc.

Vendor Comments:	
Operating system	
Database	
Max. number of users	
System Hardware	

System security:

Please describe the security mechanism of your system.

Indicate the security mechanisms and the way they're administrated. Please indicate if there are other security access nodes which lead to other modules or to external connections and the reason they're assigned for.

Vendor Comments:	
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Disaster recovery (DR) and cyber security mechanism:

Please describe the existing mechanism of your system in regard to:

DR: How the system may guard against disaster and recovery events (DR) such as, power outages security breaches, hardware failures, data loss and restore, recovery time. Please refer to expected recovery time by minutes, hours, etc.

Cyber security: How the system may cope with cybernetic attacks and prevents illegal access of hostile entities to the working environment as outlined in this section.

Vendor Comments:	
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SECTION 5 – FUNCTIONAL REQUIREMENTS

The purpose of this section mainly intends to describe the functional aspects and capabilities of the system.

Please refer to the following questions and reply in the appropriate tables:

System operational overview:

Please provide some general aspects related to system operation, processes and management capabilities from the operator point of view.	
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Vendor Comments:	
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System modularity:

Describe the essential components of the system that will cope with system's functionality requirements as detailed in this RFI document.	
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Please refer to software modules and hardware as relevant, and the role of each module.	
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Vendor Comments:	
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Functional Requirements list:

Refer to the following functional requirements checklist. A response to each checklist item is required. Brief comments may be added in the appropriate tables.

Elaborate on items shown in this section that may differentiate you from other vendors in terms of pros and cons if known.

Assign one of the following Function Availability Codes to each item in the appropriate tables:

A - Feature is available.

C - Feature is available but customization may be required.

D - Feature is currently under development (Indicate anticipated date of availability).

N - Feature is not available

5.1 Management of frequency plan:

Please describe how the system may achieve the technical administration of the frequencies allocations, allotments and assignments for use in accordance to the International Telecommunication Union – Radio Sector (ITU-R) Radio Regulations and national frequencies allocations and assignments.	
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Feature Availability	
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Vendor Comments	
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5.2 Licensing and billing:

Please describe the system ability to manage: a. Issuance new licenses, modify, renew or cancel a license. b. Billing calculation to licensees, invoices, fees and payments according to the national law.	
Feature Availability	
Vendor Comments	

5.3 Integrated Financial Module:

Please describe the tasks and capabilities of your system's integrated financial module, e.g. producing fee calculations to licensees, balance and invoicing statuses managed by the system's workflow processes etc. In addition, is there a suitable API available for sending all mentioned data and related parameters to an external SAP system?	
Feature Availability	
Vendor Comments	

5.4 License compliance and related monitoring capabilities:

Please describe the system's capabilities to monitor wireless activity within a defined frequency band while enabling the regulator to detect any user signals which are deviating from their license parameters or unlicensed signals Please list all related signals and parameters possibly be measured and monitored by the system in this regard	
Feature Availability	
Vendor Comments	

5.5 Licenses management

Please describe the system capability to administrate, issue or renew licenses for licensees with several wireless systems belonging to the same customer or operator, license owners for personal use, and considering other organizations or licensees that operate wireless equipment.	
Feature Availability	
Vendor Comments	

5.6 Radio stations notification:

Please describe the system ability to directly prepare the notification forms of radio telecommunication stations in accordance to ITU-R regulations and recommendations to preserve the administration's rights in the international arena	
Feature Availability	
Vendor Comments	

5.7 Frequency spectrum refarming: (Reallocation of frequency band):

Please indicate the system capabilities to provide the regulator analysts to manage and calculate factors such as prices, costs, license conditions and compensations easily whenever frequency spectrum refarming is required whenever technological changes are driven by market trends or when spectrum users will have to make changes to their operations etc.	
Feature Availability	
Vendor Comments	

5.8 Technical handling of frequency plans:

Please describe how the system technically supports and maintains the import of specific ITU frequency tables and their modification with the appropriate allocations for the required use according to the national regulations and radio frequency channel assignment for the required use.	
Feature Availability	
Vendor Comments	

5.9 Handling various wireless services and parameters:

Please describe the system capability to handle various wireless services such as selecting specific channels for microwave links, public broadcasting, or Satellite services with the required engineering parameters according to a specified frequency plan.	
Feature Availability	
Vendor Comments	

In addition, indicate whether these parameters are editable for each defined assignment, e.g., minimum and maximum channel frequency, duplex spacing, bandwidth of each channel, separation between nearby channels, channel polarization, analysis of information such as transmitter power, antenna patterns, propagation and other parameters etc.	
Feature Availability	
Vendor Comments	

5.10 On premise installation:

As part of the functional requirements, the system must be installed 'on premise'. Please add any related information that might be relevant to the 'on-premise' functional aspects. Please also refer to section 4 for the environmental requirements in this regard.	
Feature Availability	
Vendor Comments	

5.11 System's user interface languages and updates:

Please refer to the system user's interface and the supported languages. Please specify if there is support in Hebrew. Also refer to software changes and upgrades whenever user's interface changes or additional functionality is added to the system.	
Feature Availability	
Vendor Comments	

5.12 System reports generation and printing capabilities:

Reports generation:

Please list all type of reports and forms generated by the system. e.g.

- a. Notices, invoices, correspondences, emails submission, engineering analysis, etc.
- b. Text formats
- c. Graphic format reports
- d. Transactions activity
- e. Status reports
- f. Queries etc.

In addition, specify the level of details obtained from these reports.

Feature Availability	
Vendor Comments	

Printing capabilities:

Please list all available printing capabilities and output reports formats types existing in the system. e.g. excel, document formats, text, access, maps, etc.

Feature Availability	
Vendor Comments	

5.13 Customer accounts management:

Please describe the main parameters provided by the system's account management module.

- a. Payments follow-up
- b. Calculations of fees followed by any administrative changes of assignment or of license.
- c. Generation of documents e.g. automatic and manual options to send via workflow process all invoices, licenses, payment reminders to licensees etc.

Please describe a typical customer's account record profile, related fields and level of details etc.

Feature Availability	
Vendor Comments	

5.14 System workflow management and capabilities:

<p>Please describe the system work-flow mechanism and all type of procedures provided by this function, including some examples of processes control and transitions, e.g. each member can carry out a specific process, which in turn sets into part of the workflow, until the whole operation is completed etc.</p> <p>Please specify the ability to edit, change or define new additional workflow steps according to customer needs.</p>	
Feature Availability	
Vendor Comments	

5.15 Users access permission administration:

<p>Please describe how the system administrator can define access permissions to users with various profiles.</p> <p>Indicate the way users access to the system is managed according to the security level.</p>	
Feature Availability	
Vendor Comments	

5.16 System's Log and event history files:

<p>Please describe how the system provides the technical team a first-hand information about the system health and activities by log files. Please refer to the log file types, level of detailed provided and other important capabilities related to this context.</p> <p>Please also refer to the archiving event history of system activities including customer's record history, extracting history from archive, save of record modes etc.</p>	
Feature Availability	
Vendor Comments	

5.17 Built-In Test (BIT):

<p>Please describe the system BIT capabilities and its support of continuous monitoring of the entire system performance and auto diagnostics capability. etc.</p>	
Feature Availability	
Vendor Comments	

5.18 GIS Module):

Please describe in brief the system built-in GIS module and its basic capabilities e.g. import and export maps, formats, supported clutter profiles - editable or pre-defined for the engineering team, etc.	
Feature Availability	
Vendor Comments	

SECTION 6 – CUSTOMIZATION

The information requested in this section applies to the following subjects:

System flexibility whenever customization and changes are required, development capabilities according to the customer needs, API and add-ons description etc.

Please refer to the questions listed bellow and reply in the appropriate tables:

6.1	Describe your system flexibility when modifications and upgrades are required due to change by industry needs, regulatory requirements, and technology developments.
Vendor comments:	

6.2	Describe the level of your system flexibility when customization or development changes are required. e.g. create or change of reports, add new feature, create new workflow or change an existing workflow etc.
Vendor comments:	

6.3	Please describe your system's programming code languages. If there more than one per different system modules, please specify.
Vendor comments:	

6.4	Please describe the required level or amount of development and adaptation work needed, to meet the requirements listed in this RFI. In case there are major gaps from the specified requirements please refer accordingly.
Vendor comments:	

6.5	Please describe the dependency level of the customer in vendor when functional customization is required. In addition, in what extent customization capabilities are available and open to the customer when required?
Vendor comments:	

6.6	Please describe the design capabilities of web services and API's. In addition, please indicate an existing API's and web services that already provided by the vendor or other available tool kits that supports the customer for add-on features and development changes in the future.
Vendor comments:	

6.7	Please describe the capability of add-on's design in general. writing new ones, change an existing add-on, add new functionalities to the system, etc.
Vendor comments:	

SECTION 7 - SYSTEM MAINTENANCE

The information requested in this section applies to the following subjects:

Software change request process, software upgrade procedures, formal releases and software 'bug fixes' between formal releases, mean time between system's formal releases and vendor policy regarding source code etc.

Please refer to the questions listed bellow and reply in the appropriate tables:

7.1	Please describe the way customer's requests for enhancements, change requests, bug fixes and customizations are handled. Please describe the vendor procedure and estimated time frame of a typical process.
Vendor comments:	

7.2	Are software upgrades provided as part of the SLA? Also specify if included within warranty or extended warranty, etc.
Vendor comments:	

7.3	Please describe the methodology and process used by the vendor to ensure secured software updates, upgrades and "bug fixes".
Vendor comments:	

7.4	Are their "bug fixes" or "updates" when required by the vendor or the customer between formal release versions?
Vendor comments:	

7.5	Are their "bug fixes" or "updates" when required by the vendor or the customer between formal release versions?
Vendor comments:	

7.6	How often new versions are released? In addition, please indicate whether the vendor can assure fast delivery of new software releases due to customer requirements for development changes, fixes and add-ons or in case of other system adaptations are necessary, etc.
Vendor comments:	

7.7	Describe the company's policy regarding source code.
Vendor comments:	

SECTION 8 – GENERAL INFORMATION

The information requested in this section applies to the following subjects:

SLA, Technical support, Operational and Technical Training, Costs and Fees, Standards and Recommendations, Warranty, System support, etc.

Please refer to the questions listed bellow and reply in the appropriate tables:

1. SLA

Please describe the main elements of your proposed SLA: For example: a. Type of service to be provided by the vendor. such as operation and maintenance etc. b. The service's performance level and responsiveness etc. c. The steps for reporting issues with the service etc. d. Response and issue resolution time-frame etc.	
Vendor comments:	

2. Technical support

2.1 Is there a vendor representative in Israel?	
Vendor comments:	

2.2 Where is your technical support center located?	
Vendor comments:	

2.3 Describe the ongoing system support provided by the vendor and the method for contacting the technical support.	
Vendor comments:	

2.4 What are your hours of operation for technical support?	
Vendor comments:	

2.5 Describe the organization and structure of your technical support services.	
Vendor comments:	

2.6 Describe the qualifications of your technical support staff.	
Vendor comments:	

3. Operational and technical training

Please describe the vendor's brief training outline and location.	
Vendor comments:	

4. System costs and fees:

Please describe in detail a cost breakdown of all system modules, e.g. software, applications, packages or hardware. Similarly, include costs and fees breakdown for ongoing maintenance and support, training, extended warranty, special services etc. Please differentiate between one-time cost when purchased, or on-going cost like monthly, yearly, etc.	
Vendor comments:	

5. Warranty

Please describe the warranty comes with the system and the warranty period. In addition, please refer to an extended warranty such as extended service contract, etc.	
Vendor comments:	

6. Standards and recommendation bodies

Please list recommendation or standards the system is qualified with. For example; ITU-R etc.	
Vendor comments	

7. Request for additional information

Please attach to the RFI response, any additional and relevant information e.g, technical data, marketing materials, brochures etc.