

Request for Information (RFI) Regarding In-Pipe Fiber Optic Cables Deployment Methods in Water Distribution Networks for Commercial Usage in the Israeli Market

1. General

- a. Mekorot Water Company Ltd. (“**Mekorot**”) is a government company in the State of Israel which exists for over 83 years and supplies the residents of the State of Israel more than 80% of their drinking water and about 70% of the overall water consumption. In the framework of its activity, Mekorot also engages in development of the water sector, in the laying of pipelines, the construction of pools and water reservoirs, water treatment plants, etc.
Mekorot is the largest producer and supplier of water in Israel. Mekorot operates approximately 4,000 facilities nationwide, through approximately 2,200 employees at Mekorot and its subsidiary companies.
- b. The water transmission and distribution network of Mekorot constitutes the largest underground real estate network in Israel with control sites along the whole country of Israel. About 11,000 km of Mekorot's pipelines are deployed in the Country, where the majority of the pipes are made of steel.
- c. The purpose of this request for information (the “**Request**”) is to receive information for the purpose of studying, comparing and evaluating capabilities and potential existing possibilities of companies whose area of expertise is as stated below. It is Mekorot's intention to consider, inter alia, according to the information received as part of this Request, alternatives for engaging with companies for the purpose of carrying out the following activities.
- d. It is hereby clarified that this Request does not constitute a tender and/or a request for bids, but rather a preliminary request for information according to the provisions of Regulation 14A of the Israeli Mandatory Tenders Regulations, 5753-1993.
- e. In view of the aforesaid, Mekorot wishes to receive information about innovative alternatives for fiber optic cables and communication infrastructure in-pipe deployment for commercial purposes in the Israeli market. Mekorot may examine and create future technological and business cooperation for developing, exploring and deploying fiber optic cables and infrastructure in the water distribution pipelines for internal and commercial usage, including:
 - 1) **Fiber optic cables for leasing to, inter alia, communication operators, Internet and TV service providers and national strategic customers;**
 - 2) Considering maintenance values of fiber optical usages for distributed sensing and monitoring, predictive maintenance and/or security.

- f. To the best of Mekorot's knowledge, proof of the ability to deploy fiber optic cables in-pipe (in the water transmission and distribution pipeline network) exists in the world. These usages are mainly intended economize and increase efficiency of the fiber optics cables deployment while avoiding prolonged permits processes, complex infrastructure works (including risks of causing damage to national infrastructures, changes in traffic arrangements, etc).
- g. The solutions will be required to conform with Israeli and/or International regulations on health subjects (foreign materials contact with drinking water) and communication (fiber usage characterization, end sites, etc.).
- h. It is hereby clarified that this Request should not be regarded as a tender and/or a selection process of a supplier/cooperation party and/or RFP and/or an obligation by Mekorot to carry out any follow-up activity to this proceeding and/or undertake to conduct a competitive process or tenders with any person or body, including any of the respondents to this Request and/or undertaking to enter into an engagement of any kind or type with any of the respondents to this Request, or to prevent Mekorot from acting or from taking any decision it deems appropriate or in accordance with its authority under any law. Mekorot is only interested in receiving information in order to assist it in making decisions and to examine the available options.**
- i. Responding to this Request will not constitute a threshold condition for participating in any resulting tender that will be held, if and insofar as it is conducted, will not grant the respondent to this Request any advantage in any tender solely because it complies with this Request and any such response does not obligate Mekorot to let the respondent participate in any tender, process or engagement in any other way, to the extent that such may follow this Request.
- j. Mekorot may, at any stage, reach any decision regarding the matters that are the subject of this Request at its sole discretion, including deciding to terminate the proceeding and/or postpone it and/or cancel it.
- k. Mekorot does not represent or warrant that the information contained in this Request or any other information which it or anyone on its behalf provided to respondents is either complete, accurate or underwent any independent verification by Mekorot. Any reliance of the respondents or anyone on their behalf on any such information and the making of any deductions, interpretations or conclusions from information which is provided by Mekorot or anyone on its behalf, is at the respondents' sole responsibility.
- l. Mekorot shall not be responsible or liable towards any respondent or anyone on its behalf in connection with the Request, including for any loss or damage whatsoever suffered by any respondent by the reason of any reliance on or use of information contained in this Request or provided in connection therewith.

2. Background - Mekorot's Pipeline Network Main Characteristics

- a. Mekorot water network consist in approx. 11,000 km of pipelines. The pipelines material is presented below:
 - 85% steel pipes
 - 7% polyethylene pipes
 - 3% prestressed concrete
 - The remaining are fiberglass/ asbestos-cement/ cast pipes, etc.
- b. Pipelines segments length range from hundreds of meters to tens of km.
- c. Pressures range is usually from 8 to 15 atmospheres. However there are several sections operating under pressures of 35 atmospheres, 60 atmospheres and inclusive, few systems reaching almost 100 atmospheres.
- d. The pipes are characterized according to types:
 - Steel pipes in 3" to 110" diameters - usually made of steel grades GR-B, X-42, X-52, according to Israeli Standard API 5L PSL1 / 530, Rev. 44, internal cement coat per EN10298 and external coat of threaded polyethylene, per EIN30670.
 - Polyethylene pipes in 50 to 1,200 mm, in grades up to PN-16, per Standard ISP 4427.
 - Fiberglass pipes according to IS 1892 (adopting standard AWWA-C950).
 - Prestressed concrete pipes, types SP-5, SP-12 (Yuval Gad) which were installed up to the 1960's.
- e. The pipes are usually placed in trench sections while using standard filling materials according to the instructions of Mekorot's Chief Engineer, based on standard regulations guidelines of AWWA (usually M11).
- f. Installation depth ranges usually from 1.2 m to 4 m above the pipe's crest. In exceptional cases, caused by geometric constraints, trench depth may be higher. Pipes installed through horizontal drilling may reach an installation depth of up to 25 m.
- g. A major part of the lines passes through open areas or areas running in parallel to or crossing main infrastructures, such as roads, railway tracks or other national infrastructures. As well as in built-up areas or crossing polluted rivers.
- h. In addition, the water delivery networks include about 3,000 water supply end facilities, including infrastructure facilities, water quality control, sewage treatment facilities, desalination installations, etc.

2. Information Required from the Responders

Mekorot is interested in receiving the following information from the responders:

- a. Details of the responder to this Request - incorporation type, operations period, holding companies etc.
- b. Case studies and world-wide experience.
- c. Project description including scope of works, project description, financial analysis and customer's details or recommendation letters.
- d. Description of the technology, including:
 - Presentation of the Company and partners
 - Deployment methodology description
 - Equipment description and specifications
 - Deployment and cable limitations
 - Suitability and feasibility of the solution according to Mekorot's water network
 - Description of the system's maintenance and a method for handling optic fiber cables ruptures
 - Deployment rate (meter per day) and methods for bypassing water valves and water equipment along the lines
 - Conformance with contact with drinking water standard (IS 5452 and/or another or similar international standard)
 - Additional technical details of the system, use of patents and any other information about the system
 - Capabilities and advantages, including, but not limited to:
 - Know-how and experience in establishing, operation and maintenance of the system
 - Existing technical support to the technology [in Israel/ Abroad]
 - The responder shall present the licenses, approvals, permits, authorizations and consents required to operate the system.

3. Administrative Information

- a. The information shall be submitted by the interested parties on a voluntary basis, based on the understanding that it is requested only for information gathering purposes.
- b. This request is a stage of a general information gathering process and is not a public tender or any obligatory process and is not any commitment whatsoever to proceed and/or act in any procurement process of any technology and/or cooperation and/or any agreement or for preventing Mekorot from performing any process, transaction or action, as it deems fit, regarding any matter and interest related to this RFI. This RFI is not any request to receive bids, or commitment to enter an agreement with any of the responders to any request and/or any commitment on Mekorot's part.

- c. Mekorot is entitled, at any stage, to reach any decision regarding this request, including even a decision to terminate and/or suspend and/or cancel it.
- d. All expenses related to submitting the response to this Request shall be solely at the expense of the respondent. In no event shall the respondents be entitled to any consideration for their participation and/or any refund and/or compensation and/or indemnification for expenses and/or damages caused to them in connection with the reply and/or preparation and submission of the response.
- e. Mekorot maintains the right to insert corrections and/or changes in this Request, including the date of submission and the right to cancel this Request, all at any time and at Mekorot's sole and absolute discretion.
- f. Without derogating from the stated in this document, Mekorot reserves the right to request clarifications or requests to receive additional information and/or data from the respondents, in whole or in part, as well as from any other party.
- g. This RFI does not create a commitment and/or a basis for any type and kind of an agreement with any of its responders, and this response does not create any commitment and/or advantage of any type and kind to its responders. Mekorot shall be entitled to consider its actions and act according to its exclusive consideration.
- h. It is hereby clarified that by submitting a response to this Request, the respondent confirms that he agrees to all the terms of the Request, including but not limited to the terms of Section 7 below (use of information received).

4. How to Submit a Response to this Request

- a. Respondents are requested to submit a response to this Request that will include the information required in this Request, as well as any other information that the respondents wish to provide to Mekorot, solely through the e-mail: **o-jpollak@mekorot.co.il**, until the deadline specified below.
- b. In addition, respondents are requested to register by e-mail, contact o-jpollak@mekorot.co.il with the following details: respondent's name, first and last name of the contact person, address, postal code, telephone, mobile phone, email address and company/authorized dealer number.
- c. The deadline for submitting a response is August 9th, 2021, at 12:00 noon (Israel time).
- d. No respondent may submit a response other than in the manner above described.
- e. Each respondent registered as above will receive an instruction manual and explanations for using the system which will be sent to the e-mail address submitted in the system. The Mekorot representative may be contacted for individual telephone guidance regarding the submission of a response through the system, as specified in Section 6 below. It is hereby clarified that Mekorot does not undertake to provide technical support during the three business days prior to the deadline for submission of a response and that support will be provided only during the normal Mekorot working hours.
- f. The documents of this Request must be signed by the respondent at the bottom of each page, scanned and uploaded into the system (including letters of clarification published by Mekorot, if any).

- g. Mekorot reserves the right to request additional clarifications regarding the information it receives during this process from the respondents to this request and its right to meet with any of them in order to receive explanations and clarifications.
- h. If the information provided to Mekorot contains trade secrets, this should be stated clearly and prominently in every relevant place in the response document. See also Section 7 below (Usage of the Received Information).

5. Details and Clarifications

- a. For inquiries, questions and clarifications, please contact Mr. Jorge Pollak by writing an e-mail to the address o-jpollak@mekorot.co.il. It is hereby clarified that the aforesaid representative of Mekorot should not be contacted in connection with this RFI by telephone, fax or e-mail.
- b. Mekorot may or may not address inquiries, questions or clarifications, at its sole discretion.

6. Usage of the Received Information

- a. The requested information is required as part of Mekorot's activity, to evaluate the possibilities of contracts and transactions regarding the drilling works described above and this request does not create any obligation whatsoever on the part of Mekorot or any of its representatives towards any of the respondents.
- b. Mekorot shall be entitled to make use of the information received for its purposes and at its discretion, without consideration, but in any event, Mekorot undertakes that the information provided will be used solely for the purpose of evaluating its activity in connection with this request. Information defined as a trade secret under the provisions of SECTION 5.g above will not be disclosed to third parties other than: (i) the persons engaged in this proceeding within Mekorot; (ii) Mekorot's consultants, subject to their obligation to maintain confidentiality; and (iii) to any person authorized by law or by an order from a competent authority to review the aforesaid information.
- c. The list of respondents that will be made as a result of this Request does not constitute, by virtue of the submission of a response, a list of closed bidders for the purpose of carrying out any competitive process, insofar as such a procedure is indeed conducted, and the respondents will not have any special status in such proceedings solely by virtue of their participation in this proceeding.
- d. It is hereby clarified that subject to the provisions of Section 7.b above, Mekorot will be entitled to make use of the information that will be given in response to the Request, and the respondent will not have any claim and/or demand and/or cause for this, including in respect of the proprietary rights inherent in the information.

7. Mekorot Propriety in this Process Document

To remove any doubt, it is hereby clarified that any document from Mekorot that will be forwarded, insofar as forwarded to the responders to this RFI is Mekorot's property and may not be used for any purpose other than for responding to this FRI.

8. Governing Law and Jurisdiction

This request for information and all matters associated therewith shall be governed by and construed in accordance with the laws of the State of Israel, without regard to the conflict of law provisions thereof. The competent courts of Tel Aviv, Israel shall have exclusive jurisdiction over all matters arising out of or relating to this request for information or any obligation hereunder.

We thank in advance you for your cooperation.

Gil Groskop

Director of Operational Technology

Mekorot Water Company

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