

January 26, 2022

**Re: RFI (Request for Information) on Water Flow Velocity Technology**

**1. General**

- 1.1 The Government Water and Sewage Authority (hereinafter: “**the Authority**”) is interested in obtaining information on water flow velocity technology meeting all or at least most, of the requirements specified in this document.
- 1.2 This request may be viewed on the Procurement Administration Website <http://mr.gov.il/ilgstorefront/en>, under the Tenders tab “RFI (Request for Information) on Water Flow Velocity Technology”.
- 1.3 The respondent will be entitled to no compensation or indemnification on account of expenses and/or damages incurred by it in connection with the preparation or submission of a response to this RFI.
- 1.4 It is emphasised that the Authority has yet to decide whether to publish a tender in this matter; this notice is **not** to be regarded as an invitation to submit offers or proposals (RFP), nor does it constitute part of a tendering process, so that it is not such as to create a commitment of any kind towards any of the parties responding to it.
- 1.5 The sole aim of this notice is to obtain information, in the light of which the Authority will decide on its subsequent actions based on professional considerations.
- 1.6 Should a tendering process be conducted in the future, the Authority will be entitled to change or add conditions and requirements – all in line with its professional discretion and considering its needs.
- 1.7 The Authority reserves the right, insofar as may be necessary, to contact respondents to this notice requesting fuller information and clarifications, presentations and demonstrations, performance of a pilot trial, visits to customers’ sites and the sites of suppliers responding to this notice.
- 1.8 The Authority is entitled to disregard a response received after the deadline.
- 1.9 Any early response submitted will not be cause for special preference in the tender if executed and will not be cause for any binding participation in the tender.
- 1.10 **Intellectual Property:**  
Subjected to any law, the Authority will keep the received information confidential, and will not use it, as detailed below:
  - 1.10.1 Will not publish the information publicly.
  - 1.10.2 Will not infringe the intellectual property of the respondent.
  - 1.10.3 It will not be used commercially, except for the purposes of subscribing for information.
  - 1.10.4 Will not pass the information to a third party, except to a party involved in designing the engagement, such as a professional consultant.
  - 1.10.5 Notwithstanding the foregoing, the Authority shall be entitled to contact the respondent and request him to use the information, in the manner mentioned in sections 1.10.1-1.10.4 above.

**2. Background**

- 2.1 Discharge rate measurement in creeks and streams is a complex and challenging, and occasionally hazardous task. The first essential is to focus effort on velocity measurement that is accurate and continuous over time with the least possible interference with flow. In certain flow conditions there is no access into the stream or creek channel to perform measurements; hence measurement techniques that do not involve entering into the stream or creek channel make for more efficient work, enabling velocity measurements, so that the discharge rate may be determined at any given moment.
- 2.2 The Hydrological Service is interested in renting a flow velocity technology, which by means of sophisticated optical image processing, or by other type of technology, can determine continuously the average velocity of the water surface.
- 2.3 Based on hydrological data of the cross-section, the surface velocity may be linked to the overall rating curve of the cross-section at any elevation (given depth). This technique should have high potential compared to the limited possibilities presently available for calculating the rating curve at a cross-section, performed by a hydrological team visiting the measurement cross-section points only a few times in the course of the rainy season, in which the measurement abilities are subjected to limitations dictated by the flow velocity, whereas the product's technology should not have such limitation.

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- 2.4 The purpose of hiring/ procuring a product based on a technology as described, is to test its velocity determination method, the accuracy of discharge calculations, and whether the rating curve of the stations may be enhanced. Thus, insofar as the technique is found to be reliable and suited to the flow conditions in Israel's streams and creeks, its use may be extended (subject to any law), potentially achieving a clear improvement in the rating curve calculations for the stream and creek cross-sections where hydrometric stations are set up.

### 3. Service to be Required by the Authority under the RFI Process

The following are details of the services to be required by the Authority under this RFI process, insofar as this should be conducted:

- 3.1 Renting of a technology based product that will allow the service required.
- 3.2 Payment of system software licence usage fee.
- 3.3 Installation of metal cabinet and equipment necessary for system operation.
- 3.4 Installation of marker signs (or equivalent) for measurements on the opposite bank.
- 3.5 Installation of the system by the manufacturer or, subject to Covid19 restrictions, by a local team to be operated by the supplier in coordination with the manufacturer.
- 3.6 Training of the Water Authority designated staff in operating and maintaining the system Provision of maintenance services and full warranty for apparatus, including but not limited to travel expenses, working time, and spare parts.
- 3.7 It is to be made clear and emphasised that routine operation and servicing are to be carried out by Water Authority personnel. The supplier will handle failures and faults that the Water Authority staff has not resolved.

### 4. Information Requested under this Process

#### 4.1 General

- 4.1.1 Please describe implementation of product or product's technology by organizations worldwide, in regular, or experimental use;
- 4.1.2 Please describe whether the supplier of the product is an authorised dealer for the manufacturer;
- 4.1.3 Please describe whether the supplier of the product in Israel is authorised by the manufacturer.

#### 4.2 Product Features

- 4.2.1 Please describe what type of technology is used as sensor/s for the measurement system for acquisition of the surface velocity profile and water level at daylight, and at night (for example: IP camera-based, Infra-red beamer, etc.).
- 4.2.2 Please describe product's ability to function regardless of the presence of Independent floating items.
- 4.2.3 Please describe product's ability to measure continuously, and product's dependence on weather and location.
- 4.2.4 Please describe product's ability to measure water level.
- 4.2.5 Please describe product's ability to remote transmit calculations (online discharge calculation).
- 4.2.6 Please describe product's ability to use non-intrusive measurement methods, using only out-of-water sensor/s.
- 4.2.7 Please describe product's ability to manage smart alarms.

#### 4.2.8 **OPTIONAL ONLY – If product is Camera based – please describe technical Specifications:**

- 4.2.8.1 Width
- 4.2.8.2 Resolution
- 4.2.8.3 Protection Class
- 4.2.8.4 Frame Rate
- 4.2.8.5 Night Vision
- 4.2.8.6 Operating System
- 4.2.8.7 Measuring Range
- 4.2.8.8 Flow Velocity Accuracy

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- 4.2.8.9 Water Level Accuracy
- 4.2.8.10 Discharge
- 4.2.8.11 Camera Operating Temperature
- 4.2.8.12 Central Unit Operating Temperature
- 4.2.8.13 Power Supply
- 4.2.8.14 Protective Housing
- 4.2.8.15 Mounting
- 4.2.8.16 Protective Housing Dimensions

**4.3 Experience**

- 4.3.1 Please provide details of the company's experience with the product/software proposed.
- 4.3.2 Please provide details of sites where the product/software of the type proposed is installed and the parties operating it, including particulars of the contact person for the customer on whose premises the system is installed.
- 4.3.3 Please provide details of the length of time over which the software/product has been installed at an active site and the extent of the customer's operational experience with it.

**4.4 Additional Infrastructures Required**

- 4.4.1 Please provide details of the infrastructures and/or any other item required for installing the software/product.
- 4.4.2 Cost of licence and usage fee, insofar as these are applicable.

**4.5 Warranty and Maintenance**

- 4.5.1 Please provide details of the costs of hiring the product and using the software per period of time.
- 4.5.2 Please provide details of the warranty required for the product and software.
- 4.5.3 Please provide details of the maintenance required for the product and software.
- 4.5.4 Please provide details of the sum required for maintenance of the product and software, during and following the expiry of the warranty period.
- 4.5.5 Please provide details of the frequency of software updates, and whether these are covered under the warranty and maintenance period.

- 4.6 Detailed Reference to the Mode of Provision of the Required Services
- 4.7 A full response to each of the items listed in Paragraphs. 3.1 - 3.8 is to be provided.
- 4.8 Any other relevant information regarding the product/software/manner and nature of provision of the services.

**5. Authority Representative for Managing the Process**

- 5.1 The Authority's representative in charge of this process, to whom queries and clarification requests in connection with the process are to be addressed, is Ms. Raya Blei-Kraftmacher, Head of Procurement Unit (hereinafter: **"the Representative"**).
- 5.2 The Representative may be contacted by e-mail only to [michrazim@water.gov.il](mailto:michrazim@water.gov.il). Confirmation of receipt of the message by return e-mail is required.
- 5.3 Replies to significant queries will be sent to all respondents. The decision as to the significance or otherwise of a query is at the sole discretion of the Authority.
- 5.4 Deadline for forwarding clarification questions no later than **February 21<sup>nd</sup>, 2022**.
- 5.5 Deadline for publishing answers to clarifying questions no later than **March 01<sup>nd</sup>, 2022**.

**6. Directions for Submitting Information**

- 6.1 The information submitted by each respondent shall address each of the parameters listed in Section 4 above.
- 6.2 Responses may be submitted in English or in Hebrew only.
- 6.3 Manner of submitting response:

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- 6.3.1 The response shall be submitted to the Authority Representative by no later than **12pm on March 27<sup>nd</sup>, 2022**.

The response is to be submitted by e-mail only, to [michrazim@water.gov.il](mailto:michrazim@water.gov.il). Confirmation of receipt of the message by return e-mail is required.