

LRPS-2021-9168325- WATER QUALITY MANAGEMENT SYSTEM

ANSWERS TO QUERIES # 2

Annex 1 TOR Page 1: Scope Of work: on-site surveys on water systems and collection of data of sampling sites by certified water quality engineer fully dedicated during the project period of 1 year	Should the vendor provide Water Quality Engineers? Or will each water establishment dedicate such engineer from its own team?	The vendor shall provide a Water Quality Engineer
Annex 1 TOR Page 2: Scope Of work: Configuration of the WQMS applications and database for laboratories where needed	Any preferences for Databases?	No
Annex 1 TOR Page 2: Scope Of work: Configuration of the WQMS applications and database for laboratories where needed	Any existing database? If yes, how many? Do you have connectors or should be developed by vendor?	Database structure to be designed by vendor. Connectors to be developed by vendor.
Annex 1 TOR Page 2: Scope Of work: Configuration of the WQMS applications and database for laboratories where needed	Are there any database licenses available? If yes, please specify	
Annex 1 TOR Page 2: Scope Of work: Integration between ERPs in-use and WQMS for good and harmonized synchronization of data.	How many ERPs? What is the nature of integration between each ERP?	If more than one ERP exists, nature of integration between each ERP to be designed by vendor.
Annex 1 TOR Page 2: Scope Of work:	What is the nature of GIS system to ingrate with?	ArcGIS

Integration with GIS maps to enhance tracking and location features of the system.		
Annex 1 TOR Page 2: Scope Of work: Integration with GIS maps to enhance tracking and location features of the system.	Is there an existing GIS map system such as Esri or other products? Or are using open-source maps such as google maps?	Esri
Annex 1 TOR Page 2: Scope Of work: Integration with GIS maps to enhance tracking and location features of the system.	In case of use of a third-party software such as Esri, are there any licenses to be acquired? Are all required licenses available? Should the vendor provide any required GIS license?	For Esri, no licenses to be acquired. If vendor requires licenses other the ones available in the establishment for routine operations, they shall be included in the offer. As required by vendor software.
Annex 1 TOR Page 2: Scope Of work: Accurate Reporting / dashboards / analysis tools to improve decision-making and enhance data visualization	Is there a need for a self-service BI tool? Or the vendor can provide the required Reports Dashboards after gathering business requirement and provide a ready set of dashboards/reports?	Up to vendor. Up to vendor.
Annex 1 TOR Page 2: End Products/deliverables, Section 6 Sampling points survey: Create & Build reliable, comparable and accurate database according to standards and norms	Please clarify which standards and norms.?	Water Quality standards and norms.

Annex 1 TOR Page 2: End Products/deliverables, Section 6 Sampling points survey: Create & Build reliable, comparable and accurate database according to standards and norms	Are there any specific norms regarding Water Quality management systems to be used?	Yes, local and international norms.
Annex 1 TOR Page 2: End Products/deliverables, Section 6 Sampling points survey: Create & Build reliable, comparable and accurate database according to standards and norms	Are there any internally defined norms in water establishments? if yes, will the norms be provided?	Norms defined by LIBNOR (as an example) If other than norms defined by local or international institutes, Yes.
Annex 1 TOR Page 2: Scope Of work: Annual inventory pre-management & procurement	Please elaborate on the requested features so that we can determine if there is a need for an inventory management and procurement module	Software shall determine inventory required for certain periods for timely stock management and procurement.
water quality engineer	Work location	It is not clear the work location of the water quality engineer? As required by implementation phase (to cover the area under BMLWE mandate for sampling points allocation, training of personnel, laboratories...). BMLWE HQ is in Beirut.
water quality engineer	Office and telecom equipment	Please confirm that the water authority will provide the water quality engineer with office space, telecom access i.e.: internet, phone connectivity etc..

		Yes
water quality engineer	Laptop with Office and support	<p>Please confirm that the water entity will provide the quality engineer with a computer i.e. Laptop with Microsoft office and related support.</p> <p>No, only a working space shall be offered.</p>
water quality engineer	Reporting	<p>Please advise who shall the water quality engineer report to</p> <p>Who shall report to the quality engineer</p> <p>Quality engineer shall assure proper implementation and function of the software for the assigned period.</p>
water quality engineer	Working hours	<p>Please confirm that the water quality engineer will have the same office working hours as the water establishment office employees</p> <p>Yes</p>
water quality engineer	Collection of samples	<p>Will the quality engineer be responsible for the samples collection from sites?</p> <p>If yes who pay for his travel expenses and how are they calculated?</p> <p>Quality engineer shall guarantee proper functioning of the software. He shall be responsible for</p>

		<p>facilities and water source visits for allocating sample points, tagging them, personnel training... All expenses for sample points visits shall be included in the offer. It is the vendor's responsibility to arrange for travelling vehicle, gas, insurances, tag printing, training literature...</p>
Water Quality	Equipment	<p>Water quality is tested for:</p> <ul style="list-style-type: none"> • Physical test • Chemical test • Bacteriological test <p>What is the job of the water quality engineer vis a vis the above tests</p> <p>Software functionality.</p>
Water Quality	Equipment	<p>Please confirm that the water establishment has:</p> <ul style="list-style-type: none"> • Bacteriological lab • Spectrophotometer • Liquid chromatography • Gaz chromatography <p>With the latest software revision and columns to detect and identify any substance in the water</p> <p>Testing equipment are the responsibility of the establishment.</p>
Water Quality	Testing	<p>Please confirm that it is not the responsibility of the water engineer to run the needed tests on the</p>

		<p>samples, but rather to assess the testing sample and provide advice to the water establishment. Yes</p>
<p>Risk Assessment & Analysis: Highlight exceedances</p>	Responsibility	<p>Please confirm that the role of the water quality engineer is to advise the management</p> <p>All responsibilities remain at the management level and none is transferred to the water quality engineer</p> <p>Quality engineer shall guarantee proper functioning and implementation of the software.</p>
Availability of material and team	Economic situation	<p>Please confirm that it is not the responsibility of the water quality engineer for any lack of material due to the current economic situation in the country</p> <p>Quality engineer shall guarantee proper functioning and implementation of the software</p>
Water Quality Engineer	Remote work	<p>Please confirm that remote work is accepted due to lack of car fuel and the COVID_19 that may close the country again,</p> <p>No</p>
Mobile Application	Operating System	<p>Please confirm that the mobile application should</p>

		be provided for Apple and Play Store No
How many people are supposed to use the System?		As required for proper system functioning.

<p>Multi Standards / Multi Applications: Testing process with respect to all international standards and norms included in the software's library (e.g.: LIBNOR 191:2016) for drinking water, sewage and irrigation water. 2 Points</p> <p>❑ Set allowable limits and ranges for specific parameters as per used standards.</p> <p>❑ Risk Assessment & Analysis: Highlight exceedances and show their direct impact on health and safety while mentioning the degree of harm that each tested parameter could cause.</p>	<p>Automatic display of Health impact, safety and harm? In which way?</p> <p>Set allowable limits and ranges for specific parameters as per used standards. Some exceedances may not be harmful to health, and thus tolerable if compared to water system shutdown.</p>
<p>Laboratories' Management: Link laboratories to one central database. Access to all data of many distributed locations, gain visibility into corporate level compliance, get high-level insights, drill down to more granular data and configure user access based on facility needs. 4 Points</p> <p>❑ Event queue organization & assignment distribution</p> <p>❑ Annual inventory pre-management & procurement</p>	<p>What is meant by :</p> <p>Event queue organization & assignment distribution</p> <p>Sample testing events to be stacked in queues for timely testing process management.</p> <p>Annual inventory pre-management & procurement ?</p> <p>Software shall determine inventory required for certain periods for timely stock management and procurement.</p>

<p>❑ Pre-set sampling / testing design</p> <p>❑ Instantaneous result exposure & analysis with decision guidelines.</p> <p>.</p>	
<p>5. Multi-Management Level report customization / support: Water usage and environmental impact is one of the most important sustainability program factors, and water management system reporting process should be fully integrated with ability to export thousands of historical records, forecast statistical patterns and get automated reports serving as a data analysis and decision support tool. 4 Points</p> <p>❑ Flexible reporting structure based on customizable KPIs.</p> <p>❑ Use of KPIs to track laboratories and samplers' performances.</p> <p>❑ Reliability and validity: Scientific statistical analysis including curves, patterns...</p> <p>❑ Dynamic dashboards and data analysis tools</p>	<p>Use of KPIs to track laboratories and samplers' performances. What is supposed to be tracked? Which KPIs ?</p> <p>Laboratory technicians' performance, equipment performance, sampler performance... Parameters behavior against time, temperature... KPIs, including statistical analysis and pattern recognition, to be proposed by vendor for water quality management integrity.</p>
<p>7. Track & Locate exceedances: Receive alerts when the system recognizes an exceedance, drill down into the data and metadata to easily view and locate relevant information in one location (GIS maps), and make better decisions to remediate events as they happen. 5 points</p>	<p>Locates and tracks pollution instantaneously in Water systems. >> What is meant by</p>

<p>❑ Locates and tracks pollution instantaneously in Water systems.</p> <p>❑ Early event prediction</p> <p>❑ Marks pollution / exceedances on GIS maps.</p> <p>❑ Analysis by location / parameter / season / date.</p> <p>❑ Auditing ability</p>	<p>instantaneous? What does track mean (automatically find the source of pollution)?</p> <p>The software shall track pollution from testing results and automatically find the source of pollution. Instantaneous means as soon as testing results are inputted into the software.</p>
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We will cost each item separately and thus arrive at the total Project offer YES (irrespective of the given price weight %) **NO the price offer must be in line with the % given.**