



**QUESTIONS AND ANSWERS**  
as of 10 February 2022

**RfQ22/02421: EU4MD/ Automated and intelligent systems for collecting and monitoring data and processes within the water supply and sewerage service in the Ungheni region**

**Q1: Can ultrasonic domestic water meters be offered instead of mechanical meters? These are characterized by their insensitivity to mechanical impurities in the water (no blocking), a very low start-up flow rate and high accuracy.**

A1: Please note that only offers of mechanical remote reading meters in accordance with the Requirements of the Specifications shall be accepted.

**Q2: In the software specification, a data transmission range of 3 km is required in the sixth bullet point. This is not possible in urban areas with LoRaWAN transmission by direct means. The data must be collected by special concentrators and then transmitted together periodically via 3G/4G or fibre optic cable to a server. The required number of concentrators depends on the distribution of the meters, the topography and the density of the buildings. If such an infrastructure is not available, it must be additionally planned and implemented.**

A2: Data transmission range from meters up to 3 km means that the location of the buildings that should be equipped with smart meters is within the 3 km range.

Therefore, the bidder should estimate the number of LoRa gateways (concentrators, local servers, access points, LoRa relays etc. whichever is applicable for his solution) necessary for appropriate coverage of the indicated area.

The cost of such equipment, that is related to the collection system, should be included in the offer for the Item 2 "Software". Cost can be estimated based on the area location where meters will be installed, without this information the estimation is difficult.

**Q3: Can the installation location be provided?**

A3: The meters are to be installed in a sector of the city. Thus, in this pilot project, 6 water meters will be installed at public institutions, 761 meters in blocks of flats (exact locations are included below), and the other 233 meters will be installed at private houses on the ground, on the Biohim, Ștefan cel Mare, Sărăcuța, Curculioanca, Ungheni Deal streets.

| #                | Address                 | no. consumption places |
|------------------|-------------------------|------------------------|
| <b>Buildings</b> |                         |                        |
| 1                | str. Z.Arboare 73       | 13                     |
| 2                | str.Caragiale 3,5       | 79                     |
| 3                | str.p.Rareș 10,19       | 135                    |
| 4                | str.N.Iorga 48,48a      | 45                     |
| 5                | str. Burebista 41,43,47 | 166                    |

|                            |                               |            |
|----------------------------|-------------------------------|------------|
| 6                          | str.Ștefan cel Mare 159       | 117        |
| 7                          | str.Ștefan cel Mare 163       | 150        |
| 8                          | str.Ștefan cel Mare 79        | 56         |
| <b>Total</b>               |                               | <b>761</b> |
| <b>Public institutions</b> |                               |            |
| 1                          | Școala Profesională Ungheni   | 2          |
| 2                          | Liceul Teoretic „Ion Creangă” | 2          |
| 3                          | Grădinița nr.2                | 1          |
| 4                          | Centrul Medical               | 1          |
| <b>Total</b>               |                               | <b>6</b>   |

**Q4: In the eighth bullet point of the technical specification, a "maximum measuring range Q3/Q1 of 160" is required. Is it correct that this means that the meters must have a metrological classification according to MID of at least R160 (Q3/Q1), which corresponds to the Moldovan minimum requirements for the accuracy of domestic water meters and that higher accuracy classes (R400, R800) are also permitted?**

A4: The requirement set out in the Technical Specifications remains valid. This tender is announced for mechanical water meters with remote reading with the stated characteristics.