

## Reply to the Request for Clarification SMART City (Data Management) Platform Bid

1. The solution has to address the two cities or the corresponding area, since in some cases cities are mentioned as target and in other points as regions in the RFP

RE: The solution has to address the two cities - Cahul and Ungheni municipalities. Both are considered to be the focal regions under the EU4Moldova Programme.

2. ***“To ensure the sustainability, continuity, and necessary support in the maintenance of the platform after 18 months (post-warranty maintenance) the costs for running the platform and hosting will be assured and co-funded by Ungheni and Cahul Municipalities starting this period of the project implementation.”*** page 38

Please clarify if the hosting of the platform should be provided by the Bidder, for both the 9 months of development and the 18 months of maintenance, and included into the cost of the solution, or we could use IT resources available by Ungheni and Cahul Municipalities.

If the Bidder should provide the IT resources, should the hosting infrastructure be located in Moldova, or could we use any Datacentre of our preference within the EU?

Can we assume that the cloud service is provided?

RE: Yes. The hosting of the platform should be provided by the Bidder, for both the 9 months of development and the 18 months of maintenance and included into the cost of the solution. After 18 months (post-warranty maintenance) the costs for running the platform and hosting will be assured and co-funded by Ungheni and Cahul Municipalities.

The SMART City Platform could operate on the [Moldovan Governmental Cloud Platform](#) and consider the information systems and platforms built so far at the national/central public authority level and utilize back-end integration. However, it should not be a problem to have the infrastructure / platform stored on something else than MCloud. It is important to be ensured the portability if it is the case and consider the RM legislation in force applicable to the hosting of public data outside the country/Moldova.

3. **Can we assume that the service for sending SMS is provided by the city in HW or SW?**

RE: Yes, cost of SMS sending is covered by city. The Platform should be capable to integrate to the Bulk sms sending aggregator or to e-mail sending service. The cost of SMS/e-mail server sending will be covered by the Municipal enterprise(s) as well as collection of the relevant mobile numbers and e-mails. For example, for the SMART System for Monitoring and Ensuring Waste management Service Safety Project (Ungheni municipality), this part (the notification via email or SMS) is envisaged to be the responsibility of the Operator (Municipal Enterprise AVE Ungheni); for the SMART Water Metering Project (Ungheni municipality) – the responsibility of Municipal Enterprise will be on APA Canal Ungheni Operator.

Sending SMS notifications is a basic way to inform users about the services provided. At the moment there are at least three (3) companies in Moldova that offer SMS notification services (in bulk) [https://www.orange.md/business/sms-marketing&utm\\_source=b2b\\_home\\_page\\_sectionSmsMk&utm\\_medium=section&utm\\_campaign=produse\\_servicii\\_business](https://www.orange.md/business/sms-marketing&utm_source=b2b_home_page_sectionSmsMk&utm_medium=section&utm_campaign=produse_servicii_business)

Since the SMART projects are under implementation or to be launched starting 2022, as described into the RFP - the SMART City solution should be programmed in such a way as to offer the two cities the

following possibility for Operators (i.e. AVE Ungheni, APA Canal Ungheni, etc.) of notifications via email and SMS on breakdowns/ malfunctions/ bugs, ...'. While defining the SMART Water use case 'in the Central platform, there has to be a tool for creating notification rules. In a case of water level exceeds a defined threshold the platform has to send an email or SMS to a specified recipient'.

**4. Can you please provide the range of the number of parking, lights, etc. to be monitored? Please indicate/share an estimation of a number of sensors to be deployed and connected per type (for example XX number of parking sensors, XX number of waste management sensors).**

RE: *At the moment there is an estimated 1,000 sensors per municipality. It could reach up to 1,500 sensors per municipality in the future.*

*The Projects embedding SMART elements are to be launched/implemented starting 2022. i.e.*

For Ungheni Municipality:

- *for the **SMART Water Metering Project** is envisaged to have 1,000 SMART water meters (project to be implemented in 2022).*
- *For the **SMART Transportation** - 9 bus stations will be part of the first batch. They will be equipped with display systems/LED billboards to offer a complete summary information regarding arrivals and departures of minibuses (private transportation vehicles) at the bus stations. As part of the pilot project at least 20 minibuses will be equipped with sensors, GPS, and trackers to monitor the fuel consumption of the minibuses (project to be implemented in 2022).*
- *For the **SMART System for Monitoring and Ensuring Waste management Service Safety** – project under implementation - **GPS Trackers** for solid waste management vehicles to support data reading (sensors for fuel consumption, speed of the vehicles, temperature) required to ensure the optimization process (routes and reschedule trucks loading/servicing more effectively), increase the productivity and decrease vehicle service costs. Mobile Tracking Services via GPS Trackers (6 services) will be procured, including 20 video cameras for platforms; 12 video cameras for trucks; Software programming; video recorders, etc.*

For Cahul Municipality:

- *Under the **SMART Lighting Project** in the first stage (which is under implementation) the SMART lighting dimming system will be incorporated into the 926 luminaires. If referring to the entire network, additional 2,937 luminaries will be considered – in total 3,863 luminaries to be installed for the entire network. **Attached for reference two (2) schemes.***

**5. In Task 4, page 38 of the tender document, the costs for the data transfer from sensors should be quoted. Please provide more specific information on the kind of sensors and their amount in order to provide the related quote. Please also clarify if you are referring to the underlying data network transfer cost. For example, if the network to be used is a Telco network (3G/4G/ etc.) there is going to be a data transfer cost. Are you referring to that? On the other hand if the sensor's data are to be transferred over a 'free' data network (like LoRa or Wifi) then the H/W and set-up of such network infrastructure entail a cost (ie the cost of data transfer).**

**Please clarify if the cost is related to the Datacentre connectivity – data transfer costs, or/and the telecommunication service cost for a mobile network connecting the sensors with the Datacentre.**

RE: *The supporting data transfer infrastructure – either LoRaWan or Mobile operators need to be analysed and included in the current offer. Please estimate capital investment and data transfer cost in both cases*

- a. *Mobile operator Network is used. - Both cities has coverage of all 3 Moldovan operators.*
- b. *LoRaWan other supporting network is deployed. – Both cities has no current networks implemented, except for several WiFi hot spots.*

*All costs necessary to collect data from sensors to controllers and from controllers to server/data centre should be included. Please provide these costs separately for each municipality.*

*There is no preference in mobile network type to be used. Please provide an estimation for several types of networks.*

**Should the provided cost be a cumulative total cost, or a cost per type of each sensor to be used?**

RE: *Cost per each type of sensor is necessary to be provided.*

**6. Can we assume that the proposal will not address the quotation of the sensors HW?**

RE: *The sensors will be purchased as a separate acquisition process under the EU4MD Programme.*

**7. Can you elaborate on the optional major changes and define the criteria upon which these changes will be considered major?**

RE: *Major changes are related to introduction of new services, adding new modules to the interface, changes to the logic of service delivery requiring extensive programming. The major changes are not contracted at the moment but provides a quotation for the future works in case needed.*

**8. Can you please clarify whether the key experts team is required to local or their work can be remotely based? (if hybrid model also specify and describe)**

RE: *Hybrid model might be acceptable. Key experts team is not required to be local. But it could be considered at least one local facilitating or assisting with contacts with stakeholders, logistics, meetings organization, etc.*

**9. The tender document specifies that the references may be provided by members of a JV/Consortium. Can you please confirm if a sub-contractor's reference project can be used?**

RE: *The references may be provided only by members of a JV/Consortium.*

**10. Section 2.4: Performance monitoring and evaluation mechanism and tools. Can you please confirm if the monitoring and performance mechanism is relating to the project management team and governance or it refers to the platform and each operation.**

**In the same section, please be so kind to explain further what is meant by “„how they shall be adopted and used for a specific requirement”**

RE: *It refers to the proposal/platform and each operation.*

**11. “2.3 Explain whether any work would be subcontracted, to whom, how much percentage of the work, the rationale for such, and the roles of the proposed sub-contractors and how everyone will function as a team. Subcontracting must not exceed 30% of the contract value.”**

**Please confirm that this is applicable only in case of subcontracting and not in case of a JV/Consortium/Association.**

**Usually, in Consortium agreements, the Leader of the Consortium could have any percentage of the contract value, please confirm that this applies here too.**

RE: *Yes, this is applicable **only** in case of subcontracting.*