

Expert dialogue prior to the public procurement procedure for:

DREDGED MARINE MATERIAL TREATMENT in Luka Koper d. d.



### 1. INTRODUCTION

The purpose of this request for information is to identify expert companies for the cooperation in the establishment and implementation of the treatment of marine dredged material treatment, generated in the dredging of the seabed in the freight Port of Koper. Meanwhile, we would like to obtain the information for the preparation of call for the public procurement for the establishment and implementation of the treatment which would take into account both needs of Luka Koper d.d. and the capabilities of expert companies. However, thereby Luka Koper d.d. does not give any commitment to actually implement the aforesaid call for invitation.

All needed information about Luka Koper, are available on https://luka-kp.si/ website.

Tender will be done according to Slovenian public procurement law. We are planning to perform preliminary technical dialogue with the potential providers, according to the article 64 of Slovenian public procurement act which says: Before launching a procurement procedure, contracting authorities may conduct technical dialogue with a view to preparing the procurement and informing economic operators of their procurement plans and requirements. For this purpose, contracting authorities may conduct a technical dialogue to seek or accept advice which may be used in the preparation of the procurement documents, provided that such advice or recommendations do not have the effect of preventing or restricting competition and do not result in a violation of the principles of equal treatment of tenderers or the transparency of public procurement.

The invitation comprises basic data on intentions and needs of Luka Koper d.d. with respect to the treatment of the marine dredged material, basic information on the current situation in connection with the dredged material treatment and the instructions for the preparation of the response. For all additional information the expert companies may need, the contact person indicated in the Instructions for the preparation of the response, shall be available.

All invited expert companies are expected to:

- Preserve the confidentiality of this document as business secret and use it exclusively for the purpose of the preparation of the response within the circle of coworkers who will cooperate, and inform them about this commitment, obliging them to respect it;
- Forward accurate data about their undertakings and references supported by their signed authorized representatives.
- Endeavour to present as realistically as possible their point of view on the marine dredged material treatment,
- Cover all costs incurring in the preparation of the response and implementation of all required activities in this respect by themselves.

# Luka Koper, d.d., will:

- Protect the confidentiality of all documents received from the expert companies and will
  use them exclusively for purposes as defined in the first paragraph of this item within the
  team of internal and external parties.
- Provide that the information forwarded to the expert companies will enable them to have the most realistic understanding about its requirements.
- Enable the most effective implementation of the public procurement process.

RFI\_obdelava mulja\_v2021-04-21\_ENG pregled Datum: MAJ 2021 Stran: 2/8



Luka Koper, d.d. reserves the right to:

- Hold the received information and the pertaining documents in its possession without any payment to the expert companies.
- Additionally require the verification of data provided by the expert companies, as well as additional information and explanations;
- Change single parts of this document in the selection process.
- Invite to participate in further steps to find a solution only those expert companies for whom it assesses they have shown and adequate responsiveness and indicated adequate solutions providing appropriate references and own capabilities for the establishment of the cooperation, without obligation to explain its decisions to all or to unsollicied expert companies.

RFI obdelava mulja\_v2021-04-21\_ENG pregled Datum: MAJ 2021 Stran: 3/8



# 2. CHALLENGES RELATING TO THE MARINE DREDGED MATERIAL TREATMENT

# 2.1. IMPORTANCE OF THE MARINE DREDGED MATERIAL TREATMENT

By implementing the adequate procedure of the marine dredged material treatment, Luka Koper d.d. may follow the outlined company's development strategy. The objective is to have the possibility to deposit a larger volume dredged material on the intended area and quickly put in use the areas, where the dredged material will be deposited.

Therefore, the solution has to be found – the manner of treatment of the dredged marine material, thanks to which the area for the disposal of the material in the Ankaran Bonifika area would be utilized most effectively resp. the volume of the deposited dredged material would be reduced with respect to the initial volume in the original, undisturbed position on the seabed. In relation to the most optimal treatment procedure with purpose of a durable disposal, it is necessary to project the adequate mode of excavation works and transportation of the dredged material to the treatment site.

# 2.2. STARTING POINTS FOR DEVELOPING SOLUTIONS

In order to understand the challenges Luka Koper d.d. has been facing in this respect, please find hereinafter some starting points

- 1. In future 10 -15 years, the excavation of approx. 1.5 mio m3 marine material, measured in the original, undisturbed position, is planned.
- 2. The expected approximative yearly quantity of treated (dehydrated dredged material) after the completed treatment process is 150.000 250.000 m3.
- Currently, the dredging is not envisaged as a continued process, but it will be carried out with interruptions to the extent which is necessary for the implementation of a specific segment of infrastructure (it is about the dredging of waterways or dredging immediately adjacent or under the shoreline constructions).
- 4. We estimate that currently approx. 1.4 mio m3 of the space in the rear areas of the port, in the Ankaran bonifika (the size of area approx. 40 ha) is available for a permanent disposal in case we take into account the procedure currently used for the disposal of the material on the landfills.
- 5. The treated dredged material is intended to be permanently disposed in the Ankaran bonifika area, i.e. built-in in the bearing construction of future storage areas in this zone. Due to the depression of actual areas, it is necessary to heighten these areas for approx. 3-4 m, i.e. to the height +2.00 m or more.
- 6. Regarding the previous item and according to data collected so far in usual construction procedures, the material to be installed must be dehydrated up to W = 25-30% gravimetric water content.
- 7. Planned developments in the port zone are regulated by the Decree on National spatial plan for comprehensive spatial arrangement of the international port in Koper (Official Gazette of the Republic of Slovenia, No. 48/11).
- 8. The characteristics of the marine dredged material are given in the Enclosures 1 and 2. The area projected for the dredged material treatment facility and disposal of the processed dredged material are given in Enclosure 3.

RFI obdelava mulja v2021-04-21\_ENG pregled Datum: MAJ 2021 Stran: 4/8



# 2.3. ADDITIONAL GUIDANCES FOR DEVELOPING SOLUTIONS

The expert company is expected to give his proposal for the most optimal solutions for the marine dredged material treatment – from the dredging up to the final disposal in accordance with the abovementioned starting points in item 2.2.

Hereinafter, we are giving only for information also the additional data with respect to the dredged material treatment based on our previous activities and knowledge:

- So far, the dredging has been carried out by cutter suction dredgers, the dredged material
  has been transported (pumped) through the pipeline to landfills constructed for this purpose
  in the rear port areas, where it has been gradually dehydrated and consolidated. The surface
  generated by natural drying, has been unutilized for a longer time and the time is needed
  before the useable areas can be set up.
- 2. Due to rather congested navigational routes at ship arrivals and departures at the port and the occupancy of the existing berthing places in the port area, the ship must be suitable in size and maneuverability in order the dredging can be carried out (the dredging is carried out simultaneously with the port operations, where port operations can be interrupted only exceptionally and the ship must be able to effect the withdrawal and the works must restart in the shortest possible time).
- 3. In case the dredging is envisaged by the cutter suction dredger, it is necessary to take into account that the speed of progression of pumping/disposal of the dredged material on the landfill is rather limited due to a large amount of fine particles and since it is necessary to prevent the water leak from the landfill to the greatest possible extent. Up to the present, the excess water flew in Rižana river (in the south) or in the peripheral Ankaran channel (in the north). Consequently, the consideration has to be given to the examination of the dredging by the grab dredger and transportation of the material on the disposal area by trucks or alternatively (e.g. the conveyor belt).
- 4. The total approximative amount of 450.000 m3 of material was disposed on two landfills in the Ankaran bonifika in 2015, and namely measured in the original, undisturbed position and respectively on the landfill 799/29 west approx. 200.000 m3 and on the landfill 799/29 east approx. 250.000 m3. It is necessary to examine if it makes sense to dehydrate the material from the landfill and use emptied landfill as a temporary.»basin« in the dredged material dehydration process.
- 5. Currently, in the Ankaran bonifika area, there are no electrical installations and no water supply. We estimate that for the needs of an eventual installation of the facility, the potential water supply is envisaged from Rižana river, for which adequate permits have to be obtained. Because of tidal effects, the water in the river in this area is constantly partially salty. The entire electrical-energy installations have to be constructed.
- 6. Expectedly, the environmental permit has to be obtained for the operation of the material treatment facility, besides other permits related to the spatial developments (e.g. building permit for the construction of the treatment facility).
- 7. It is desirable that the dredged material treatment includes also the solution concerning the transport and roughly defines the manner of disposal of treated material on a permanent embankment.
- 8. The whole Ankaran bonifika area is depressed, which should be taken into account in the design of the drainage of the whole area with emphasis on the area where the installation of the dredged material treatment facility is projected. Adequate drainage has to be ensured on

RFI obdelava mulja v2021-04-21 ENG pregled Datum: MAJ 2021 Stran: 5/8



- the whole disposal area for the period until the level of the disposed material does not achieve an appropriate height, which ensures protection against flooding.
- 9. In the National spatial plan, currently in force, the area destined for the dredged material treatment is intended in the southern-western side of the landfill 799/29 west, but the deviations from the envisaged solutions are possible, which is also defined in the National spatial plan.
- 10. Regarding the developing modes of cooperation in ensuring the implementation of the marine dredged material treatment process we accept multiple options which have to be examined in detail with respect to the obtained information and namely:
  - The expert company shall provide the design documentation, carry out the construction and manage the dredged material treatment facility/carry out the treatment process. Luka Koper, d.d. should conclude the contract for a definite term of time with the expert company, based on which the provided service of dredged material treatment shall be paid per unit of measure. The expert company himself shall obtain all required permits to set up and operate the facility.
  - The expert company shall provide the design documentation, set up the facility and hand it over to use to the contracting party, he shall carry out an adequate training and provide the assistance in the operations and maintenance for a determined period of time. The expert company himself should obtain all necessary permits for the construction and operation of the facility.
  - The expert company himself shall be only requested to provide the design documentation for the facility, whilst the contracting entity will provide the contractor for the construction of the installations and will manage the facility.

# 2.4. KEY INFORMATION TO BE PROVIDED IN THE RESPONSE

In the light of starting points given in item 2.2 and directions given in item 2.3, the potential expert companies are expected to provide the following information:

- 1. The suggested mode of dredging and transport of the dredged material related to the selected dredged material treatment procedure and separate estimation of the capacity and cost of dredging as well as the transport in the rear port areas (up to the to the sludge treatment/disposal site).
- 2. The suggested mode of dredged material treatment to reach the wished level of water content proposal of the whole process (definition of the mode of dehydration type of the mechanical equipment and similar, annual capacity, modular increasing or reducing treatment capacity option). Estimated timeline and the construction cost of the installations for the dredged material treatment per unit measure and estimation of the cost of the dredged material treatment per unit measure m3 of dredged material measured in the original, undisturbed position on the seabed.
- 3. The estimated reduction of the volume of treated (processed) material with respect to the volume of the material in the original, undisturbed position on the seabed (expressed in % and in m3) due to the reduced humidity.
- 4. The proposed mode of transport and mode of placing of treated material on the permanent disposal site (i.e. Ankaran bonifika area).
- 5. Use of filled up landfills whether it is reasonable to empty or use them in the planned procedure of the sludge treatment. The cost estimation related to the intervention in the landfills.

RFI\_obdelava mulja\_v2021-04-21\_ENG pregled Datum: MAJ 2021 Stran: 6/8



6. The proposal of the alternative modes of treatment (with emphasis on the dredged material dehydration) as the supplement of the basic mode of treatment.

# 3. INSTRUCTIONS FOR THE EXPERT COMPANIES

#### 3.1. GENERAL

Expert companies are expected to present the proposal of solution of the marine dredged material treatment, which will show that he is an appropriate expert company in further steps.

Based on the received responses, the company will decide with which expert company the additional discussions will be carried out and the course of further steps.

For an adequate cost estimation and the duration of the project of setting up the dredged material treatment, the expert companies are expected to provide rough cost estimations and timelines of the treatment procedure implementation. Thereby, the prices can be given using price ranges, with mandatory statement of parameters which mostly affect the positioning within these ranges.

Contact persons for all additional information are Gregor Mavrič (<u>gregor.mavric@luka-kp.si</u>), or Žiga Fišer (<u>ziga.fiser@luka-kp.si</u>). It is preferable to submit questions in writing and correspondingly, the responses will be provided in writing.

# 3.2. EXPECTED CONTENT OF THE RESPONSE

# 3.2.1. Summary for the Management Board

In this item, the expert company is expected to summarize the reason why he estimates his solution as the most appropriate to meet our expectations specified in chapter 2.

### 3.2.2. Presentation of the expert company

The expert company is expected to provide as much as possible authentic information, supported by the authorised company's representative. The expert companies are expected to provide general information: denomination and seat, registered activities, technological infrastructure, ownership and management structure, number and structure of staff employed, history, products and the turnover achieved in recent years and other information you estimate as relevant.

# 3.2.3. Presentation of the proposed solution

The expert company is expected to present transparently the submitted solution, which includes the mode of dredging, dredged material treatment (with emphasis on dehydration) up to the level, when this is adequate for permanent disposal resp. positioning.

Responses to key questions from item 2.4. must be compulsory given in the presentation. Submitted solutions must be justified by reference cases.

#### 3.3. TIME LIMITES

Responses of potential expert companies are expected until 30th June 2021.

RFI\_obdelava mulja\_v2021-04-21\_ENG pregled Datum: MAJ 2021 Stran: 7/8



#### STARTING POINTS IN FURTHER SELECTION OF THE EXPERT COMPANY 3.4.

Luka Koper, d.d. must comply with public procurement law when ordering services and construction works.

With relation to the information obtained in this collecting information procedure, we will select the most optimal procurement procedure, as laid down by the legislation. The publication of an adequate procurement procedure is foreseen in the Official Gazette of the Republic of Slovenia and the Official journal of EU.

Potential expert companies must show their competence and ability to implement the solutions, which must be evidenced by appropriate references.

Port Infrastructure Manager
Investment Department

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RFI\_obdelava mulja\_v2021-04-21\_ENG pregled Datum: MAJ 2021 Stran: 8/8