

To whom it might be concerned

INVESTMENTS DEPARTMENT

organizacijska enota

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datum

ANNONCEMENT OF TECHNICAL DIALOGUE FOR THE SUPPLY OF EQUIPMENT FOR A SPECIALIZED WAREHOUSE FOR STEEL COILS DISTRIBUTION

Luka Koper d.d. (Port of Koper plc) has started with activities related to building, equipping and automating of a new warehouse, dedicated to steel coils distribution centre activities. It is likely that the purchase procedure (at least for some part of this investment) to be executed according to Slovenian public procurement law. Accordingly, we need to be guided as per its article 64, which says:

Before launching a procurement procedure, the contracting authorities may conduct technical dialogue with a scope of preparing the procurement and informing of economic operators (potential suppliers) about purchasing subject's procurements plans and requirements.

For this purpose, contracting authorities may conduct a technical dialogue to seek or accept advice which may be used during 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.

Basic outline of the project:

- Moving existing steel coils related businesses from non-specialized box-shaped warehouses, where heavy forklift is the main handling equipment – to a new specialized, heavy weight cargo enabled warehouse, with the scope to:
 - Reduce the costs of order picking through optimized warehouse (WH) layout and handling techniques
 - Reduce the risk of cargo damage during handling operations
 - Reduce the need of labour intervention in all stages of WH management and operations
 - o Achieve increased utilization of the port ground area
 - Achieve at least partial switching from diesel-powered machinery to electricpowered machinery – practically implying switching from forklift-based operation to overhead crane operations – or eventually to rack-system.
- An empty land plot was designated for this project, measuring 60m x 180m (with a likely option to extend up to 230m by jeopardizing nearby communication road). At least one short side will be against the wall of the adjacent WH, implying the accesses to the WH to be along the long sides.



- Through strengthened foundation plate a carrying capacity of 8 t/m2 can be achieved, which is the bear minimum considered for this project. Increased carrying capacities of up to 21 t/m2 can be achieved through incremental use of piles. Ground carrying capacities beyond this limit are considered particularly expensive to execute and beyond the possible scope of multi-layered stacking of cargo (unless on racks).
- Our target yearly throughput implies the use of heavy-duty equipment.
- Operations typically run Mon-Fri in 2 shifts of 8 hrs each and one shift on Sat. During vessel operations working hours might be extended up to 24/7 model – but such increased hours typically lasting only for 2-4 days (rarely applied though). Typically, coils do turn around 7-8 times per year.
- All coils are received, stored and re-loaded in the eye-to-the-side position.
- Typical sizes of the coils handled (outer dimensions):
 - Wide-fit & light-weight: (width x Ø) 1,7m x 1,1-1,2m, 8-12 mt each.
 - o Mid-fit & light-weight: (width $\times \emptyset$) 1,2-1,3m \times 1,4-1,5m; 8-12 mt each.
 - o Mid-fit & heavy: (width x Ø) 1,1-1,4m x 1,9-2,1m; 18-23 mt each.
 - Wide-fit & extra-heavy (width x Ø) 1,7m x 1,7m; 26-30 mt each.
 - o Mid-fit & extra-heavy (width x Ø) 1,3m x 2,1m; 26-30 mt each.
- Typical spread of weight of coils:
 - o Light-weight: 70%
 - o Heavy: 20%
 - Extra-heavy: 10%
- WH needs to be optimized to handle coils in Light-weight and Heavy range while for extra-heavy coils we shall consider the cost of additional investment needed at this WH – versus option to keep this group of coils at existing premises.
- Peak capacity. WH must be able to sustain intake from vessel operations (2 hands) + outbound truck-loading operations at the same time of this intake from vessel:
 - Light-weight 80 pcs/hr equivalent to 12.600 mt/16 hr working day
 - Heavy
 55 pcs/hr equivalent to 15.100 mt/16 hr working day
 - o Extra Heavy 48 pcs/hr equivalent to 19.100 mt/16 hr working day
- Typical peak-capacity requested at handling trucks (and occasionally wagons):
 - Light-weight 30 pcs/hr equivalent to 3300 mt/16 hr working day
 - Heavy & Extra Heavy: 18 pcs/hr equivalent to 4240 mt/16 hr working day
 - New WH is not expected to feature rail-links directly into WH as those are located about 10 m away from the site. Wagon operations are foreseen by mean of forklift that shall shuttle coils from hand-over place within WH to the wagons.
- WH to be optimized for import flows
- Detailed e-packing list for each shipment is available prior vessel arrival listing (among others) coil ID number (mostly same as shown in bar-code, occasionally requiring format adjustment/simplification ¹), material specification reference, purchase order nr, outer diameter, inner diameter, width, net weight, brutto weight...
- Occasionally might be necessary to store together coils only from a specific purchase order (manual intervention on storage plan should be possible). Otherwise the storage plan shall maximize storage intake capability while respecting the usual standards of safety and carrying capacity of coils to sustain a further 1-2 rows of coils on top. Preparing of a storage plan should be as automated as possible.

¹ Reading of a barcode occasionally generates a longer string of information, while our customer's preadvice reports a shorter string (cuts some digits and omits blank spaces / hypens etc. that would be natural for certain standard). Manual intervention on pre-advice data should be possible. Readings from bar-code scanners should be occasionally manipulated to reach target format – as available from pre-advice. Working with multiple bar-code standards should be supported.

- Typically dispatch order is listing exact coil ID numbers, rarely the purchase order and material specification (where final choice of exact coil remains with us).
- Due to wagons and minor nr. of trucks, which have only side loading capabilities, it is necessary to foresee a handover area, from where the forklift could collect the coil for loading to trucks/wagons positioned outside the warehouse.
- All top-loading enabled trucks should be directed to truck handling area within the warehouse and loading shall be performed without intervention of forklifts
- Warehouse Management System (WMS) should be able to:
 - Elaborate the pre-advice of the inbound coils to the extent to confirm there is enough storage capacity available to accept the cargo
 - Based on very short lead-times from scanning to inbound handling at the warehouse²- to suggest to which gate to direct each terminal tractor for prompt unloading (dynamic spreading of the work plan among the cranes).
 - Maintain position information of each coil at all times from arrival to the WH till dispatched.
 - Prevent (even during manual operations/planning) risky combinations of coil stacking
 - Minimize the extent of manual intervention needed
 - Should be able to connect and communicate to other systems as Port Community System, Customer solutions (we do have 4 solutions in Koper that Logistic operators use) and Main Port IT system (TINO) for EDI exchange with customers, customs, etc.
- Magnetic grabs and C-hooks are preferably avoided.

During technical dialogue we would like to discuss:

- Vendor's ability to supply partial or integrated solutions.
- o Main technical requirements for the handling equipment and WMS installation
- Options for the equipment to support working with fixed coil cradles / movable coil cradles / continuously corrugated plate cradles / open space (no cradles) – and combinations of these models
- Necessity to provide for exact truck loading position vs roughly designated loading area (lane with +/- 1m position longitudinally and +/- 0,3 m across (or similar)
- o Functionalities of the WMS and EDI hereto
- o Process recommendations to fully exploit the potential of your equipment
- Manning of the crew necessary to run the operations
- Safety system /measures offered (collision prevention, computing allowable combinations for multilayer stacking of coils, computing of the stockpile's height and soft-landing & self-centring capabilities)
- Requested working conditions of your equipment
- Type of electrical and mechanical components
- o Recommended order lead times / equipment delivery times
- Warranties & certificates; requested maintenance to secure the same (who, intervals, typical downtimes at each intervention, reaction lead time)
- Equipment & system robustness expected life-time of the components; expected typical time between stoppages
- o After-sales activities
- State of the building during crane installation (roof still open or already closed)

² Possible time-window for inbound scanning (to determine inbound sequence) is from the moment coil is discharged from the vessel to the shore and latest up to the entry to the WH. Exact moment/solution for scanning – to be discussed.

Based on this announcement we are asking all interested potential suppliers/bidders to apply to participate in the technical dialogue latest until 30th September 2019 via email borut.cok@luka-kp.si and mara.zerjal@luka-kp.si. The main purpose of the dialogue is to exchange technical and other information regarding the future subject of the public procurement — equipment for steel-coil distribution warehouse — whole system or components hereto — in order to better understand the options/technical characteristics etc. Based on your application we will call the meeting with the interested supplier(s)/bidder(s) at our premises or at the premises of the interested supplier/bidder or at the premises where relevant equipment/solution can be seen in action (preferred). We reserve the right to call joint meeting with all interested suppliers/bidders and to see and/or request the information on your reference supplies of relevant/similar equipment. Potential suppliers/bidders will have to attend the meeting together with their technician(s) to be able to provide also technical information.

We will also request in a course of a dialogue your informative bid for the future subject of public procurement. The received informative bid will be regarded as confidential and will only be used:

- To narrow down the choice of technical options to those that have potential to be economically viable and-
- o For budget and timeline planning reasons for the future procurement procedure.

Due to transparency and equal treatment principle the Minutes of such meeting(s) on the exchanged technical and other information will be held. Technical and other information submitted by the potential supplier/bidder will be regarded and safeguarded as confidential if marked as such by the potential supplier/bidder.

Please do not hesitate to contact us for any additional information you may need via email: roberto.levanic@luka-kp.si.

Thank you in advance,

LUKA KOPER d.d.

