**Section II: Schedule of requirements**

E-Sourcing reference no: RFQ/2024/54523

1. **Summary of Requirements for the supply of steel pipes and bends to Ukraine.**

**UNOPS requirements are comprised of the following items:**

**Steel pipes and bends including the below items:**

**Item 1. Steel pipe Ø57×3.5, L=12 000 mm - 30 PCS**

**Item 2. Steel pipe Ø76×4.0, L=12 000 mm - 30 PCS**

**Item 3. Steel pipe Ø89×4.0, L=12 000 mm - 30 PCS**

**Item 4. Steel pipe Ø108×4.0, L=12 000 mm - 30 PCS**

**Item 5. Steel pipe Ø133×5.0, L=12 000 mm - 30 PCS**

**Item 6. Steel pipe Ø159×5.0, L=12 000 mm - 30 PCS**

**Item 7. Steel pipe Ø219×6.0, L=12 000 mm - 30 PCS**

**Item 8. Steel pipe Ø325×8.0, L=12 000 mm - 30 PCS**

**Item 9. Steel pipe Ø426×8.0, L=12 000 mm - 30 PCS**

**Item 10. Steel pipe Ø530×8.0, L=12 000 mm - 20 PCS**

**Item 11. Steel pipe Ø630×8.0, L=12 000 mm - 20 PCS**

**Item 12. Steel pipe Ø720×8.0, L=12 000 mm - 20 PCS**

**Item 13. Steel pipe Ø820×10.0, L=12 000 mm - 20 PCS**

**Item 14. Steel pipe Ø920×10.0, L=12 000 mm - 10 PCS**

**Item 15. Steel pipe Ø1020×10.0, L=12 000 mm - 10 PCS**

**Item 16. Steel pipe Ø1220×12.0, L=12 000 mm - 10 PCS**

**Item 17. Steel bend steeply curved, 90° Ø57×3.5 - 40 PCS**

**Item 18. Steel bend steeply curved, 90° Ø76×4.0 - 40 PCS**

**Item 19. Steel bend steeply curved, 90° Ø89×4.0 - 40 PCS**

**Item 20. Steel bend steeply curved, 90° Ø108×4.0 - 40 PCS**

**Item 21. Steel bend steeply curved, 90° Ø133×5.0 - 40 PCS**

**Item 22. Steel bend steeply curved, 90° Ø159×5.0 - 40 PCS**

**Item 23. Steel bend steeply curved, 90° Ø219×6.0 - 40 PCS**

**Item 24. Steel bend steeply curved, 90° Ø325×8.0 - 20 PCS**

**Item 25. Steel bend steeply curved, 90° Ø426×8.0 - 20 PCS**

**Item 26. Steel bend steeply curved, 90° Ø530×8.0 - 20 PCS**

**Item 27. Steel bend steeply curved, 90° Ø630×8.0 - 20 PCS**

**Item 28. Steel bend steeply curved, 90° Ø720×8.0 - 6 PCS**

**Item 29. Steel bend steeply curved, 90° Ø820×10.0 - 8 PCS**

**Item 30. Steel bend steeply curved, 90° Ø920×10.0 - 6 PCS**

**Item 31. Steel bend steeply curved, 90° Ø1020×10.0 - 8 PCS**

**Item 32. Steel bend steeply curved, 90° Ø1220×12.0 - 8 PCS**

**B. Technical specifications for Goods – Comparative Data Tables**

| **N** | **UNOPS minimum technical requirements** | **Is Bid Compliant?** Bidder to complete | **Details of the offered goods.** Bidder to complete |
| --- | --- | --- | --- |
|  | **STEEL PIPES AND BENDS including the below items** |  |  |
| **1** | **Steel pipe Ø57×3.5, L=12 000 mm - 30 PCS** | ☐ Yes ☐ No |  |
| **2** | **Steel pipe Ø76×4.0, L=12 000 mm - 30 PCS** | ☐ Yes ☐ No |  |
| **3** | **Steel pipe Ø89×4.0, L=12 000 mm - 30 PCS** | ☐ Yes ☐ No |  |
| **4** | **Steel pipe Ø108×4.0, L=12 000 mm - 30 PCS** | ☐ Yes ☐ No |  |
| **5** | **Steel pipe Ø133×5.0, L=12 000 mm - 30 PCS** | ☐ Yes ☐ No |  |
| **6** | **Steel pipe Ø159×5.0, L=12 000 mm - 30 PCS** | ☐ Yes ☐ No |  |
| **7** | **Steel pipe Ø219×6.0, L=12 000 mm - 30 PCS** | ☐ Yes ☐ No |  |
| **8** | **Steel pipe Ø325×8.0, L=12 000 mm - 30 PCS** | ☐ Yes ☐ No |  |
| **9** | **Steel pipe Ø426×8.0, L=12 000 mm - 30 PCS** | ☐ Yes ☐ No |  |
| **10** | **Steel pipe Ø530×8.0, L=12 000 mm - 20 PCS** | ☐ Yes ☐ No |  |
| **11** | **Steel pipe Ø630×8.0, L=12 000 mm - 20 PCS** | ☐ Yes ☐ No |  |
| **12** | **Steel pipe Ø720×8.0, L=12 000 mm - 20 PCS** | ☐ Yes ☐ No |  |
| **13** | **Steel pipe Ø820×10.0, L=12 000 mm - 20 PCS** | ☐ Yes ☐ No |  |
| **14** | **Steel pipe Ø920×10.0, L=12 000 mm - 10 PCS** | ☐ Yes ☐ No |  |
| **15** | **Steel pipe Ø1020×10.0, L=12 000 mm - 10 PCS** | ☐ Yes ☐ No |  |
| **16** | **Steel pipe Ø1220×12.0, L=12 000 mm - 10 PCS** | ☐ Yes ☐ No |  |
| **17** | **Steel bend steeply curved, 90° Ø57×3.5 - 40 PCS** | ☐ Yes ☐ No |  |
| **18** | **Steel bend steeply curved, 90° Ø76×4.0 - 40 PCS** | ☐ Yes ☐ No |  |
| **19** | **Steel bend steeply curved, 90° Ø89×4.0 - 40 PCS** | ☐ Yes ☐ No |  |
| **20** | **Steel bend steeply curved, 90° Ø108×4.0 - 40 PCS** | ☐ Yes ☐ No |  |
| **21** | **Steel bend steeply curved, 90° Ø133×5.0 - 40 PCS** | ☐ Yes ☐ No |  |
| **22** | **Steel bend steeply curved, 90° Ø159×5.0 - 40 PCS** | ☐ Yes ☐ No |  |
| **23** | **Steel bend steeply curved, 90° Ø219×6.0 - 40 PCS** | ☐ Yes ☐ No |  |
| **24** | **Steel bend steeply curved, 90° Ø325×8.0 - 20 PCS** | ☐ Yes ☐ No |  |
| **25** | **Steel bend steeply curved, 90° Ø426×8.0 - 20 PCS** | ☐ Yes ☐ No |  |
| **26** | **Steel bend steeply curved, 90° Ø530×8.0 - 20 PCS** | ☐ Yes ☐ No |  |
| **27** | **Steel bend steeply curved, 90° Ø630×8.0 - 20 PCS** | ☐ Yes ☐ No |  |
| **28** | **Steel bend steeply curved, 90° Ø720×8.0 - 6 PCS** | ☐ Yes ☐ No |  |
| **29** | **Steel bend steeply curved, 90° Ø820×10.0 - 8 PCS** | ☐ Yes ☐ No |  |
| **30** | **Steel bend steeply curved, 90° Ø920×10.0 - 6 PCS** | ☐ Yes ☐ No |  |
| **31** | **Steel bend steeply curved, 90° Ø1020×10.0 - 8 PCS** | ☐ Yes ☐ No |  |
| **32** | **Steel bend steeply curved, 90° Ø1220×12.0 - 8 PCS** | ☐ Yes ☐ No |  |
| **1** | **General qualification requirements** |  |  |
| **1.1** | **Materials, goods and equipment shall be supplied in accordance with applicable Ukrainian laws, regulations and rules, and shall comply with relevant European and international standards and be certified in accordance with the ISO9001 system. In case of discrepancies between national and international standards, the standards with higher requirements shall apply.** | ☐ Yes ☐ No |  |
| 1.1.1 | Producer of the equipment must be ISO 9001:2015 certified and the bidder must provide the certificate | ☐ Yes ☐ No |  |
| 1.1.2 | In this Technical Specification, references to Ukrainian standards do not negate the need to comply with the relevant standards EN. In particular, all products must meet the requirements of Ukrainian standards. | ☐ Yes ☐ No |  |
| 1.1.3 | The materials and goods manufactured abroad and imported to Ukraine shall have the certificate of conformity to Ukrainian DSTU standards. | ☐ Yes ☐ No |  |
| **1.2** | **The Bidder must be in continuous business of supplying of the offered or equivalent equipment for at least past 3 years.** | ☐ Yes ☐ No |  |
| **1.3** | **The Bidder must have experience in the delivery of similar goods in Ukraine or EU/EEA countries and must provide evidence (contracts, POs, certificates of completion, etc) of successful implementation of at least 2 contracts for supply of the offered or equivalent equipment realised in the past 3 years.** | ☐ Yes ☐ No |  |
| **1.4** | **If the goods are delivered by an intermediary, the intermediary shall provide the required manufacturer's documentation without any modification.** | ☐ Yes ☐ No |  |
| **1.5** | **Bidder or producer of the equipment must have a representative office in Ukraine that provides after sale service available in Ukraine or agreement with the local representative of the producer or service company that can provide maintenance and after sale services for the equipment. Bidder must provide contact details of the service centre (or list of the service centers) as well as confirmation from the service centre that it will provide after sale services for the proposed equipment.** | ☐ Yes ☐ No |  |
| **1.6** | **Warranty service. Within the warranty period, the Supplier or its authorized service center shall provide maintenance, repair services, and/or replacement of the equipment no later than 30 (thirty) calendar days from the date of receipt of written or email notification from an authorized party. The name of the company, address, telephone and fax numbers, and email address must be mentioned in the bid. All costs connected with warranty maintenance are covered by the Supplier.** | ☐ Yes ☐ No |  |
| **1.7** | **The warranty for the equipment must be a minimum of 1 year, covering manufacturing defects and labor charges.** | ☐ Yes ☐ No |  |
| **1.8** | **In the production of the Equipment offered for this procurement, the use of materials and components included in the List of goods prohibited for importation into the customs territory of Ukraine originating from the russian federation, approved by the Resolution of the Cabinet of Ministers of Ukraine No.1147 dated December 30, 2015, is not allowed. The Bidder shall submit the relevant Declaration (confirming that the offered equipment is compliant with the above resolution).** | ☐ Yes ☐ No |  |
| **1.9** | **The following documents must be provided with the Bid and with the goods upon delivery (all documentation shall be made in Ukrainian, the delivery is not considered to be completed until the documentation pointed out below is delivered in full and accepted by the customer):** | ☐ Yes ☐ No |  |
| 1.9.1 | Certificate of conformity for each of the items; | ☐ Yes ☐ No |  |
| 1.9.2 | Necessary requirements for waste disposal and recycling of materials used for district heating pipes should be specified in the manufacturer's documentation; | ☐ Yes ☐ No |  |
| 1.9.3 | All required manufacturer’s certificates and quality guarantees; | ☐ Yes ☐ No |  |
| 1.9.4 | Instructions for transporting and storing equipment and materials; |  |  |
| 1.9.5 | Manufacturer's maintenance, operation and repair manuals including the below information: | ☐ Yes ☐ No |  |
| 1.9.4.1 | Periodicity of required preventive repair during maintenance and normal operation; | ☐ Yes ☐ No |  |
| 1.9.4.2 | Logs and instructions on maintenance | ☐ Yes ☐ No |  |
| 1.9.4.3 | Information on Goods and Manufacturer: Manufacturer’s name and address, Type and model of the goods, Serial number (if applicable), List of service centers (if applicable) ,Duty and rate (if applicable). | ☐ Yes ☐ No |  |
| **1.10** | **All the goods must be new** | ☐ Yes ☐ No |  |
| **1.11** | **The goods must be produced in compliance with the below regulatory documents. Compliance must be confirmed by the manufacturer's manuals for the goods as well as quality certificates and compliance declarations. Bidder must provide declaration of compliance of the goods with the required standards.** | ☐ Yes ☐ No |  |
| 1.11.1 | DSTU 9218:2023 - Longitudinal welded steel pipes | ☐ Yes ☐ No |  |
| 1.11.2 | ISO 9329 - Seamless steel pipes for pressure purposes – Technical delivery conditions | ☐ Yes ☐ No |  |
| 1.11.3 | ISO 9330 - Welded steel pipes for pressure purposes – Technical delivery conditions | ☐ Yes ☐ No |  |
| 1.11.4 | DIN 1626 - Welded circular unalloyed steel pipes subject to special requirements; technical delivery conditions | ☐ Yes ☐ No |  |
| 1.11.5 | NPAOP 0.00-1.81-18 - Rules of labor protection during operation of pressurised equipment | ☐ Yes ☐ No |  |
| 1.11.6 | DSTU 8943:2019 - Electric-welded steel pipes. Technical conditions | ☐ Yes ☐ No |  |
| 1.11.7 | DSTU 9219:2023 - Welded steel pipes for main gas and oil pipelines. Technical specifications | ☐ Yes ☐ No |  |
| 1.11.8 | ISO 404 - Steel and steel products – General technical delivery requirements | ☐ Yes ☐ No |  |
| 1.11.9 | ISO 559 - Steel pipes for water and sewage | ☐ Yes ☐ No |  |
| 1.11.10 | DIN 50049 - Documents on materials testing | ☐ Yes ☐ No |  |
| 1.11.11 | EC Directive 97/23/EC - On harmonisation of legislation of Member States | ☐ Yes ☐ No |  |
| **2** | **Technical requirements** |  |  |
| **2.1** | **General technical requirements goods** |  |  |
| 2.1.1 | All parameters of the heat conducting steel pipes, components and products in insulation shall be based on the following conditions: | ☐ Yes ☐ No |  |
| 2.1.1.1 | Calculated pressure - not less than 1.6 MPa | ☐ Yes ☐ No |  |
| 2.1.1.2 | Maximum pressure - not less than 2.5 MPa | ☐ Yes ☐ No |  |
| 2.1.1.3 | Operating temperature - 124°C | ☐ Yes ☐ No |  |
| 2.1.1.4 | Maximum temperature - 130°C | ☐ Yes ☐ No |  |
| 2.1.1.5 | Air temperature (limit values) - "-37°C … +37°C" | ☐ Yes ☐ No |  |
| 2.1.1.6 | Calculated temperature - "-23°C" | ☐ Yes ☐ No |  |
| 2.1.2 | The pipes shall be resistant to internal corrosion caused by water of district heat supply system with the below characteristics (The Bidder shall take into consideration the above quality of the district heat supply system water): | ☐ Yes ☐ No |  |
| 2.1.2.1 | Carbonate index: ≤1.0 (mEq/l)2 | ☐ Yes ☐ No |  |
| 2.1.2.2 | Dissolved CO2: 0 | ☐ Yes ☐ No |  |
| 2.1.2.3 | Dissolved oxygen: <20 mg/dm3 | ☐ Yes ☐ No |  |
| 2.1.2.4 | pH: 8.3-9.5 | ☐ Yes ☐ No |  |
| 2.1.2.5 | Iron: <0.5 mg/dm3 | ☐ Yes ☐ No |  |
| 2.1.2.6 | Suspended solids: <5 mg/dm3 | ☐ Yes ☐ No |  |
| 2.1.2.7 | Oil products: <1 mg/dm3 | ☐ Yes ☐ No |  |
| 2.1.3 | The Bidder shall guarantee that the declared requirements will be met to provide operation for at least 25 years in case of the maximum calculated temperature. | ☐ Yes ☐ No |  |
| 2.1.4 | The customer has the right to visit the selected goods manufacturer and send any part of the equipment for independent evaluation. Any attempt to use the goods previously in use anywhere, whether accidentally or not, will be considered fraudulent | ☐ Yes ☐ No |  |
| **2.2** | **Technical requirements for pipes** |  |  |
| 2.2.1 | Steel pipes shall be either seamless or welded, suitable for the intended application. All pipes must meet the following requirements to ensure compatibility with system pressures and temperatures:  Material Standards: Pipes must comply with one or more of the following standards as appropriate for the material and manufacturing process:  For seamless pipes: EN 10217-2 (P235GH) or equivalent.  For welded pipes: EN 10217-5 (P235 GH), EN 10220, or equivalent Ukrainian standards such as DSTU 8938:2019 or DSTU 9218:2023 for electric-welded pipes.  Diameter Tolerance: Must conform to EN 253:2009 or its equivalent in Ukrainian standards for all manufactured pipes.  Certification: All pipes must have certificates of conformity to the specified standards issued by a recognized certification body. If manufactured in Ukraine, compliance with DSTU 8943:2019, DSTU 9219:2023, GOST 550, and GOST 8731 is also required.  Bidders must provide detailed documentation including test reports, material certificates, and compliance declarations to prove adherence to these specifications, ensuring the pipes are fit for high-pressure and high-temperature environments typical in district heating systems. | ☐ Yes ☐ No |  |
| 2.2.2 | The pipes material should be steel of appropriate quality, for example, St3sp5 (or equivalent, or better), which meets the requirements of NPAPP 0.00-1.81-18 "Rules of labor protection during operation of pressurized equipment ". | ☐ Yes ☐ No |  |
| 2.2.3 | The pipes surface (both external and internal) must be thoroughly cleaned and degreased before further processing. An anti-corrosion coating must be applied to the inner and outer surface, the quality of which must be confirmed by the manufacturer's certificates with guarantee for anti-corrosion coating for 5 years. | ☐ Yes ☐ No |  |
| 2.2.4 | Each pipe must be labelled by the manufacturer, with information on the pipe size, trademark or name of the manufacturer, batch number and date of manufacture. Each pipe must also have a duplicate waterproof sticker at both ends for quality control purposes. | ☐ Yes ☐ No |  |
| **2.3** | **Technical requirements for bends** |  |  |
| 2.3.1 | Steeply curved bends must be factory-made with a bending radius of at least one pipeline diameter. | ☐ Yes ☐ No |  |
| 2.3.2 | Steel bends can be seamless or welded with a longitudinal seam and must meet the standards specified in DSTU 4615-2006/4616-2006, ОSТ 36-43-81 and DSTU GOST 17375:2003, and others, and have certificates of conformity issued by Ukrainian certification bodies. | ☐ Yes ☐ No |  |
| 2.3.3 | The material of the bend should be steel of appropriate quality, for example, St3sp5 (or analogue, or better), which meets the requirements of NPAPP 0.00-1.81-18 "Rules of labour protection during the operation of equipment operating under pressure». | ☐ Yes ☐ No |  |
| 2.3.4 | The surface of the bend (both external and internal) must be thoroughly cleaned and degreased before further processing. An anti-corrosion coating must be applied to the inner and outer surface, the quality of which must be confirmed by the manufacturer's certificates with guarantee for anti-corrosion coating for 5 years. | ☐ Yes ☐ No |  |
| 2.3.5 | Each bend must be labelled by the manufacturer, with information on the size of the bend, the trademark or name of the manufacturer, the batch number and the date of manufacture. Each bend shall also have a duplicate waterproof sticker on both ends for quality control purposes. | ☐ Yes ☐ No |  |
| 2.3.6 | The quality of the supplied bends is confirmed by the relevant quality certificate. In case of doubt as to the product characteristics and qualities specified in the certificate, the customer has the right to conduct a laboratory test of the delivered products. If the characteristics are found to be inconsistent, the Supplier shall reimburse the costs of the test. | ☐ Yes ☐ No |  |
| 2.3.7 | Each bend must be equipped with corrosion caps at both ends. | ☐ Yes ☐ No |  |
| **2.4** | **Requirements for containers and packaging** |  |  |
| 2.4.1 | The Goods shall be shipped in packaging appropriate to the nature of the Goods being delivered. The packaging must comply with the established norms and standards, which ensures the safety of the goods during transportation to the destination and unloading of the vehicle. | ☐ Yes ☐ No |  |
| 2.4.2 | Transport containers must meet the requirements for ensuring the safety of these goods, maintaining clear labelling, which must be observed during their filling (packaging), loading, transportation (in compliance with the established temperature conditions), unloading, as well as the possibility of performing reloading operations and stacking cargo in a mechanised manner. | ☐ Yes ☐ No |  |
| 2.4.3 | Each place shall be accompanied by a packing slip indicating the name, quantity of the Products, net and gross weight of the place, the name of the manufacturer and supplier. The cost of containers and packaging is included in the price of the Goods. The packaging is irreversible. | ☐ Yes ☐ No |  |
| 2.4.4 | The product shall be transported and stored in accordance with DBNV.2.5-39: 2008 "Heating networks" and in accordance with the manufacturer's recommendations. | ☐ Yes ☐ No |  |
| 2.4.5 | The contractor is fully responsible for the transportation and unloading of equipment and materials at the site of the replacement of heating network sections. | ☐ Yes ☐ No |  |
| **3** | **Additional general requirements** |  |  |
| 3.1 | Bidder provided shipping dimension: L x W x H, as well as Kerb/shipping weight in kg of the equipment. | ☐ Yes ☐ No | Please provide details |
| 3.2 | Bid includes the Country of origin of the goods. | ☐ Yes ☐ No | Please provide details |

**C. Delivery requirements**

| **UNOPS Requirements** | | **Is the bid compliant?** Bidder to complete | **Details**  Bidder to complete |
| --- | --- | --- | --- |
| **Delivery time** | **Bidders shall deliver and unload the goods as soon as possible but not later than within 100 days after contract subscription. Bidders must provide realistic delivery time for the proposed goods.**  **DDP Incoterms: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_calendar days from the date of PO signature.**  Partial delivery of the goods in batches (one batch should contain a minimum one full item (full q-ty required for item) according to the requirements) within this period is acceptable. | ☐Yes ☐ No |  |
| **Delivery place and Incoterms rules** | DDP, Kharkiv city, Ukraine.  The bidder will be responsible for covering the demurrage costs, if any. | ☐Yes ☐ No |  |
| **Consignee details** | Delivery address and consignee details will be provided to the successful Bidder | ☐Yes ☐ No |  |
| **UNOPS Right to vary requirements** | At the time the Contract is awarded, UNOPS reserves the right to vary the quantity of the goods and associated services specified above, provided this does not exceed +/- 20%, without any change in the unit prices or other terms and conditions of the RFQ. | ☐ Yes ☐ No |  |

**D. Inspections and tests**

The following inspections and tests shall be performed:

(i) The Supplier shall perform all needed tests before the shipment to confirm that the goods meet the Purchaser requirements. Documented confirmation of such tests has to be sent to the Purchaser before the shipment;

(ii) The Purchaser will check the availability of Compliance Certificates issued for equipment supplied;

(ііі) The Supplier shall demonstrate that the software has been properly installed on the corresponding equipment;

(іv) The Purchaser (with the assistance of the Supplier) will check the functionality/operability and the compliance of main characteristics of all items of equipment with Technical Requirements. If the consumables should be used for equipment checking - they must be provided by the cost of the Supplier.

UNOPS or its representative may inspect and/or test any or all items of the goods to confirm their conformity to the contract, prior to dispatch from the supplier’s premises. Such inspection and clearance will not prejudice the right of the consignee to inspect and test the goods on receipt at destination.

If the goods fail to meet the laid down specifications, the supplier shall take immediate steps to remedy the deficiency or replace the defective goods to the satisfaction of the purchaser.