**ANNEX NO. 4a OF DOCUMENTATION OF THE PROCUREMENT PROCEDURE**

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**SPECIFICATION OF THE PUBLIC CONTRACT SUBJECT for lot 1 of the public contract**

The subject of the public contract shall meet the following requirements for technical parameters and equipment:

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| **Technical specification – 9T/4T cryogenic measurement system** | | |
| **Designation of the delivery (min. brand and type)** | |  |
| **Individual technical parameters of the performance** | | **Data about the offered performance** |
| 1 | Supply and installation of a measurement system consisting of a dual axis superconducting magnet, nitrogen-shielded liquid helium dewar, variable temperature insert (VTI) with additional sample chamber |  |
| 2 | Dewar:   * minimum 7-day helium holding time * liquid helium level meter * at least four mounting point for optical table/breadboard * KF-type port for the connection to the helium recovery line |  |
| 3 | Superconducting magnet (vertical 3.5” bore) operating at 4.2K allowing persistent mode:   * at least 9T in the vertical direction (max 0.1% central field homogeneity over a 10 mm DSV) and 4T in the perpendicular direction (max 0.5% central field homogeneity over a 10 mm DSV) |  |
| 4 | VTI (inner diameter 60mm minimum):   * with an intermediate shield to reduce helium boil-off, * minimum operating temperature range from 1.8K to 300K, * at least 130mm of free space below the magnet center, * sample holder allowing rotation along the vertical axis with copper mounting block (with attached calibrated thermometer covering the whole temperature operation range) * with a minimum of 16 wires between mounting block and room temperature connector | ***and will enter the actual value*** |

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| 5 | Additional sample tube (chamber) insert fitting into the VTI, KF50 flange on top for access to the sample space, 200mm copper tail, more than 120mm of free space below the magnet center, minimum inner diameter of 52mm, additional flange on the VTI-sample tube adapter for VTI vapor pumping. | ***and will enter the actual value*** |
| 6 | Control electronics (fully compatible with 230 V, 50 Hz) allowing remote (GPIB, USB, or Ethernet) monitoring and control across the full range of specifications, including a temperature controller, liquid helium meter, magnet power supply, and VTI needle valve |  |
| 7 | no pressure air available on-site, laboratory’s access clearance 1.95m height, 1.44m width (door dimension) |  |

Instructions for the participants:

*The participant fills in the data in the “Data about the offered performance” column, indicating for each item whether the performance offered by him meets the relevant request of the contracting authority (“****YES****”) or does not (“****NO****”).*