# A close-up of a flag AI-generated content may be incorrect.

# *ANNEX II + III :* TECHNICAL SPECIFICATIONS + TECHNICAL OFFER

**Contract title: Supply of Ultrasound device - CALL4HER**

**Ref. Number: HR-RS00054/CALL4HER/HCAP/01**

**Columns 1-2 should be completed by the Project partner**

**Columns 3-4 should be completed by the tenderer**

**Column 5 is reserved for the evaluation committee**

Annex III - the Contractor's technical offer

The tenderers are requested to complete the template on the next pages:

* Column 2 is completed by the Project partner shows the required specifications (not to be modified by the tenderer),
* Column 3 is to be filled in by the tenderer and must detail what is offered (for example the words “compliant” or “yes” are not sufficient)
* Column 4 allows the tenderer to make comments on its proposed supply and to make eventual references to the documentation

The eventual documentation supplied should clearly indicate (highlight, mark) the models offered and the options included, if any, so that the evaluators can see the exact configuration. Offers that do not permit to identify precisely the models and the specifications may be rejected by the evaluation committee.

The offer must be clear enough to allow the evaluators to make an easy comparison between the requested specifications and the offeredspecifications.

The requirements set out in the technical specifications represent the minimum technical characteristics which offered goods must satisfy, unless stated otherwise, and tenderers are not allowed to modify technical specification in any way.

For each item for which it is not explicitly stated that it is allowed to offer goods of the equal characteristics, i.e. for each item where it is not stated “or equivalent”, for the purposes of this tender documentation it is assumed that words “or equivalent” are stated, and tenderer is allowed to offer equivalent goods / goods of equivalent characteristics.

**1. GENERAL REQUIREMENTS**

**Below general requirement shall apply to all of the items specified.**

**1.1. Technical Requirements**

1.1.1 All the equipment shall be provided complete with the necessary accessories and/or parts such as to ensure that the unit is capable of operating to the required technical and quality specifications.

1.1.2 All specification details listed for each item are the minimum requirements. Any improvements on the specifications or additional features offered should be clearly identified in the tenderer’s offer.

1.1.3 It should be noted that whenever a specific name of a product is mentioned in the Technical Specifications, a sufficiently precise and fully intelligible description is not possible, and it has to be understood as that product or its equivalent.

| **1.**  **Item Number** | **2.**  **Specifications Required** | **3.**  **Specifications Offered** | **4.**  **Notes, remarks,  ref to documentation** | **5.**  **Evaluation Committee’s decision (Y/N)** |
| --- | --- | --- | --- | --- |
|  | **All requirements mentioned and requested in this document shall be considered as the minimum acceptable criteria.** |  |  |  |
| **1** | **Item name: Ultrasound device with (multifrequency probes and compatible printer and software)**  **Quantity: 1 set** | | | |
|  | **GENERAL:**   * Adjustment via the control panel of depth, height (motor powered) and left-right. Digital depth gain control (TGC) with sliders via optional touch screen. * Main monitor size minimum 23", resolution minimum 1920 x 1080 pixels. Setting the monitor independently of the control panel, the monitor placed on the movable arm adjustable in height, depth, tilt and rotation. * Additional high-resolution color screen for controlling the device, touch-sensitive, size minimum 12'. |  |  |  |
|  | * Minimum 4 active connectors for ultrasound probes. * The device must support at least 5 probe types: convex, sector, linear, microconvex and 3D probes. * Number of signal processing channels: minimum 11,750,000. * Dynamic range of the system: minimum 290 dB. * System frequency range: minimum from 1 to 19 MHz. * Operation modes: 2D (B), M view, tissue harmonic imaging (THI), extended field of view for linear probes, color Doppler, pulsed Doppler (PW Doppler), Power Doppler, directional Power Doppler, triplex view - simultaneous view 2D, color Doppler and PW Doppler in real time. |  |  |  |
|  | * "2D (B) view:   - depth of image display minimum 40 cm;  - automatic image optimization by pressing one button;  - maximum refresh of the image minimum 9,600 frames per second;  - minimal post-processing parameter setting: gain, change of gain factor, dynamic; range, grayscale map change."   * "Color Doppler:   - range of the speed scale minimum from 2 cm/s to 170 cm/s;  - the function of changing the parameters of the image in the post-processing, minimally: changing the color map, amplification, inversion."   * "Pulse Doppler (PW Doppler):   - speed scale range from at least 10 cm/s to 1,070 cm/s;  - Doppler angle adjustable minimum +/- 88⁰ in steps of maximum 1⁰;  - repetition frequency range (PRF) minimum from 1 kHz to 27 kHz;  - automatic Doppler calculation in real time, minimum PS, ED, PS/ED, PI, RI;  - possibility of spectrum inversion and angle correction;  - automatic spectrum optimization by pressing one button, which adjusts the minimum: baseline, inversion, pulse Doppler frequency (PRF) in the live image and angle correction;  - automatic positioning of the measuring volume (sample volume) and the angle of the Doppler beam;  - vascular reports;  - minimal adjustment of image and video parameters in post-processing: baseline shift, Doppler angle change, gray scale maps, spectrum inversion, display format."   * Reduction of speckle artifacts. |  |  |  |
|  | * Panoramic reconstructed view, display length minimum 60 cm. * Elastography program in 2D view using an acoustic pulse without the need for manual tissue pressure (shear wave). Results displayed visually and quantified by color in the selected area of ​​interest, display of results in kPa and m/s, possibility to adjust the size of the area of ​​interest. * A program for imaging with contrast agents. * Attenuation assessment of the ultrasound beam in the liver available on one of the offered convex probes. * 3D mode: 3D recording in B-mode, 3D breast recording, possibility to change the thickness of the displayed layers. * Export images and videos in minimum AVI or JPEG or BMP or PNG or WMV formats. * Video (cine) display. * Storage of images and video sequences on the built-in HDD of minimum 1 TB, DVD(RW) and USB memory. * Connections at least: Display Port or DVI or HDMI, network connection, 4 x USB. * Integrated gel heater. * Integrated UPS. * Built-in interface for network communication in a standardized format for digital imaging and communication in medicine, at a minimum: confirmation, printout, storage, modality worksheet, storage confirmation, modality procedural step performed, media exchange, structured reporting. |  |  |  |
|  | **MULTIFREQUENCY PROBES:**   * **Convex Probe**    + Convex probe made from one piece of crystal, frequency range minimum from 1 to 6 MHz. Number of elements: minimum 192. Display angle minimum 60°. Display width minimum 62 mm. * **Linear Probe**   + Linear probe with a minimum frequency range of 5 to 18 MHz. Number of elements: minimum 256. Display width minimum 50 mm. * **Convex transvaginal Probe:**   + Convex transvaginal probe with a minimum frequency range of 3 to 12 MHz. Number of elements: minimum 192. Display angle minimum 130°. Display width minimum 28 mm. * **Linear volumetric Probe:**   + Linear volumetric probe (3D) with a minimum range of 5 to 16 MHz. Display width minimum 38 mm.   **PERIPHERAL DEVICES:**   * Black and White Thermal Printer   **WARRANTY:**   * + 5 years minimum |  |  |  |