Request for Quotation ITB12/00559

Clarification Questions and Answers (received as of 16/07/2012)

Question 1: Regarding technical characteristics required for Lot 1/item 1 – Multistainer with cover-slipper. The maximum capacity required is – at least 550 slides per hour.

We kindly ask to modify this parameter, being overrated if we consider the final destination of the multistianer unit, which is not for industrial purpose. After checking the technical specifications of the major manufacturers of digital pathology equipment (Sakura Finitek Olanda, Diapath Italia, Leica Germania, Nikon-SLEE Germania), we require to modify this parameter, in order to allow free competition and an competitive environment for all participants.

Answer 1: We would like to reiterate that the technical specifications were developed by an international consultant, selected by UNDP through an open competition UNDP. The developed technical specifications were closely consulted with the Centre of Forensic Medicine. Bearing this in mind, the multistainer`s and microtome`s capacities are in line with the beneficiary`s needs. We consider that it is up to the Centre of Forensic Medicine to decide the envisaged destination and workload of this equipment.

It shall be also highlighted the fact that these are ***minimum*** specifications required for the proposed equipment, thus any model/product with similar or higher specifications is perfectly fitting the competition. On the other hand, as far as we know, most of the required equipment are configurable pieces, the manufacturers being able to construct an unit based on the required specifications. Following a market research UNDP has been reassured that the proposed specifications allow for several worldwide manufacturers of this kind of equipment to be technically qualified.

Question 2: We have studied the requested technical specifications and we came to a conclusion that most of the technical requirements make reference to concrete models of equipment. This creates an obstacle for participation of other bidders because the evaluation is on the lots and an offer can be disqualified from evaluation of the whole lot even if a single item is not corresponding to the desired technical specifications.

Answer 2: Please see the Answer 1 above, as well as the Clarification Questions and Answer (received as of 10/07/2012), Answer 1, posted on the UNDP Moldova web page on July 11, 2012 (http://www.undp.md/media/tender_supportdoc/2012/559/ITB12-00559%20Q&As%202012-07-10.pdf).

Question 3: The technical specifications which appear in Lot 2 are simply copy-pasted from the official brochures of the certain equipment manufacturers. These manufacturers are not even some reference companies in the field of forensic medicine or in analytical equipment industries. Taking into consideration the importance of this laboratory for the country, we believe that equipment that shall be purchased must be renowned and the results obtained in this laboratory must serve as a reference for other laboratories in Moldova.

Answer 3: We would like to reiterate that following a market research UNDP has been reassured that the proposed specifications allow for several worldwide manufacturers of this kind of equipment to be

technically qualified. The simple fact that the proposed equipment is produced by a renowned manufacturer of the required equipment is not sufficient to automatically qualify the technical offer of a potential bidder and is not considered as a criterion for the technical evaluation of the offer. The quality of the delivered equipment shall be proved through corresponding to a number of standards (GLP, CE certification, ISO Standards) (please see the Common requirements for each Lot in Annex VI (Technical Specifications) to the Invitation to Bid) and meeting other requirements set in the Invitation to Bid.

Question 4: Another tactic to limit the concurrency was to insert in Lot 2 some general laboratory equipment, which are not in any way connected with analytical equipment and serving solely as an obstacle for other potential bidders (Item 5, 6 and 9).

Answer 4: The Lot 2 is constructed around the analytical equipment and the ancillary equipment required for setting up an integrated system for the preparation and analytical examination of samples. If a potential bidder encounters difficulties in submitting individually an offer for the entire Lot, we encourage the grouping of several potential bidders in a consortium and submission of a common offer. In this case only the leader of the consortium will be included in the evaluation and will be responsible for the actions of each and all members of the consortium.

Question 5: Equipment requested in Lot 3 is part of different areas and are subject to different import procedures. Thus, for import and sale of Items 5, 7 and 8 a special license has to be obtained by the economic operators. The fact that these devices were included in one Lot with other general laboratory equipment makes us think that this was done only to limit the competition.

Answer 5: The Lot 3 consists of various laboratory and medical equipment to be used specifically by other units of the Centre of Forensic Medicine, including but not limiting to Forensic Biology Unit, Clinical Examination Unit, as well as by the territorial units of the CFM. We would like also to reiterate that if a potential bidder encounters difficulties in submitting individually an offer for the entire Lot, we encourage the grouping of several potential bidders in a consortium and submission of a common offer. In this case only the leader of the consortium will be included in the evaluation and will be responsible for the actions of each and all members of the consortium.

Question 6: In regards to Item 4, Lot 2 – Gas Chromatograph

- **A.** TOF mass spectrometer is not suitable for quantitative analyses.
- **B.** TOF mass spectrometer cannot work satisfactorily with small masses because the technique was specially developed for large groups of more than 10,000 amu.
- **C.** There are not applications and spectral libraries for GC-TOF for the compounds of interest in forensics.
- **D.** No one reputed manufacturer couples the TOF spectrometer to GC, but couples the TOF to HPLC thus being able to separate the compounds with a larger mass.
- **E.** There is only one vendor that couples the TOF with GC and the technical specifications which appear in Lot 2 (Item 4) are a simply copy-paste from their brochure. Even more simple chromatographs with FID or TCD that were sold by them did not benefit from their technical

support. We think that a more complex system will have even less technical support from their side.

Answer 6:

A. TOF MASS SPECTROMETER is capable of qualitative and quantitative analyses. TOF-MS instruments offer some advantages over similar instruments for quantitation. These advantages include increased dynamic range and the availability to perform reproducible quantitative analysis effectively without the need to run in Selected Ion Monitoring (SIM) mode. TOF can also provide repeatable quantitative results and full range mass spectra for qualitative identification in a single analysis. This streamlines the quantitation process for samples containing non-targeted compounds. There are also studies which reveal the importance of TOF-MS in having an accurate identification of needed compounds. This technique is more appropriate for identification of new compounds involved in forensics and is a modern option for correct identification of unknowns.

B. TOF-MS instrument coupled with GC systems can perform quantitative analyses for small masses (from aprox. 2 amu to aprox. 1100 amu). In specialized literature there are studies performed on GC-TOF- MS systems that demonstrate the utility of TOF-MS over other kind of instruments. Also in some forensic case studies the results obtained on TOF-MS systems, identified in spectral libraries, were more accurate than on other technical solutions.

C. The NIST is a comprehensive mass spectral library which includes the compounds according to NIST database. On the other hand, the GC is a multi-field instrument, which is used in different areas, including forensic medicine, and the spectral libraries, used by this instrument, are common, irrespective of the field were a compound was identified. There is no dedicated spectral library for the use of forensic medicine.

D. It is true that the TOF-MS instrument was initially coupled with Liquid Chromatography systems. Nevertheless, the evolution of technologies spread the use of this instrument to Gas Chromatography and TOF-MS proved very useful and reliable. TOF-MS provides fast acquisition and high sensitivity while collecting full-mass range spectra enabling accurate library searches of target analytes even in heavy sample matrices as well as areas of serious chromatographic coelution. We would like also to reiterate that the reputability simple fact that the proposed equipment is produced by a renowned manufacturer of the required equipment is not sufficient to automatically qualify the technical offer of a potential bidder and is not considered as a criterion for the technical evaluation of the offer.

E. We would like also to reiterate that following a market research UNDP has been reassured that the proposed specifications allow for several worldwide manufacturers of this kind of equipment to be technically qualified. In case if some GC manufacturer does not have in its range of products TOF-MS, there is the possibility to couple their system with TOF-MS from other manufacturer.

Question 7: Regarding Lot 2/Item 1 – Atomic Absorption Spectrometer

A. For the item Spectral Bandwidth 0.1, 0.2, 0.4, 1.0, 2.0 nm software selectable. Settings: 0.2, 0.5 and 1.0 plus reduced height slit of 0.5nm for graphite furnace operation. Is that acceptable?
B. For the item Wavelenght Accuracy +/- 0.15nm . +/- 0.37nm for wavelength accuracy. Is that acceptable?
C. For the item Resolution 0.2nm +/- 0.02nm. 0.2nm +/- 0.05nm. Is that acceptable
D. For the item Repeatability Cu<2.0% Cd<2.0%. Cu/Cd <3% RSD for determination of CU/Cd by graphite furnace, based on 2 replicates. Is that acceptable?
E. For the item Position Adjustment automatic changeover. Manual changeover from flame to furnace operation –mechanism allows changeover within <30seconds. Is that acceptable?
F. For the item Safety Functions Gas leak Sensor. We do not offer a gas leak sensor. Is that acceptable?
G. For the item Hydride generator Electo-heating, continuous flow peristaltic pump with speed control, high efficiency mixing section and gas-liquid separation. Electro-heating using the optional ETC-60; continuous flow peristaltic pump operating at fixed pump speed for optimum sensitivity and ease of use ; high efficiency mixing section and gas liquid separator. Is that acceptable?

Answer 7:

A. It is not acceptable. It must fit to minimal technical specification 0.1nm
B. It is not acceptable. Wavelenght accuracy must be +/- 0.15nm or better
C. It is not acceptable. The resolution must be 0.2nm +/- 0.02nm or better
D. It is not acceptable. Repeatability must be Cu<2.0% Cd<2% or better
E. It is not acceptable. The request is for an automatic changeover.
F. Yes it is acceptable.
G. Yes it is acceptable.

Question 8: Regarding Lot 2/Item 3 – High Performance Liquid Chromatograph

A. For the item Flow precision <=0.05%RSD or <=0.01 min SD whichever is greater. <=0.07%RSD, or <=0.02 min SD whatever is greater. Is that acceptable?
B. For the item flow accuracy 0.1%. +/- 1%. Is that acceptable?
C. For the item Pressure pulsation typically <0.2MPa (2bar) or <1% whichever is greater. <=2% amplitude (typically <1.3 %), or <3 bar at 1ml/min. Is that acceptable?
D. For the item Composition precision <0.15% SD at 1mL/min. <0.2%RSD. Is that acceptable?
E. For the item Local control Touch screen. Without touch screen. Is that acceptable?
F. For the item Temperature range degrees 6C…80C. 10C below ambient to 80C. Is that acceptable?
G. For the item Temperature stability +/- 0.1C. +/- 0.15 C. Is that acceptable?
H. For the item Column capacity four 30cm columns. Three 30cm. Is that acceptable?
I. For the item Heat-up/cool-down time 15 min from 20C to 50C, 15min from 50C to 20C. 5 minute from ambient to 40C, 10 minutes from 40C to 20C. Is that acceptable?
J. For the item Short term noise wide slit : <+/-8uAU at 254nm. <=+/-0.7x 10-5 AU at 254 and 750nm. Is that acceptable?
K. For the item Drift <1mAU/h. <0.9x 10-3 AU/h at 254 nm. Is that acceptable?

L. For the item linearity <3% RSD and corr. Coeff.>0.9995 up to 1.5AU. >2 AU (5%)at 265nm. Is that acceptable?
M. For the item Flow cells standard 13uL volume, 10mm cell path length, 120bar pressure maximum. Standard 14uL volume, 10mm cell path length and 40 bar. Is that acceptable?
N. For the item Detection type Deflection method. Refractive index. Is that acceptable?
O. For the item Range 0.25 to 512 uRIU. Is that acceptable to exclude this item?
P. For the item Response 0.1, 0.25, 0.5, 1.0, 1.5, 2.0, 3.0, 6.0 s. Is that acceptable to exclude this item?

Answer 8:

A. It is not acceptable. The flow precision must be as requested or better.
B. It is not acceptable. The flow accuracy must be 0.1% or better.
C. It is not acceptable. The pressure pulsation must not exceed 0.2MPa.
D. Yes it is acceptable.
E. It is not acceptable. System shall be equipped with touch screen.
F. Yes it is acceptable.
G. It is not acceptable. Temperature stability must be 0.1C or better.
H. It is not acceptable. It must fit at least four 30cm columns.
I. Yes it is acceptable.
J. Yes it is acceptable.
K. Yes it is acceptable.
L. Yes it is acceptable.
M. It is not acceptable. The flow cell maximum pressure must be 120bar or higher.
N. Yes it is acceptable.
O. It is not acceptable. The item "Range" shall not be excluded.
P. It is not acceptable. The item "Response" shall not be excluded.

Question 9: Regarding Lot 2/Item 4 – Gas Chromatograph

Is it possible to substitute the TOF based system by monolithic quartz, heated, quadrupole based analyzer supplied with complete methodology for toxicology screen of at least 650 compounds?

Answer 9: It is not acceptable. The request is for a larger range of masses to be detected and better peak separation needed in this field. Also TOF technology is a better option for a correct identification of unknowns.

Question 10: Regarding Lot 2/Item 6 – Semiautomatic Preparing System

What type of gel permeation chromatography is required: a soft gel or a hard gel solution?

Answer 10: Soft gel permeation chromatography is required.

Question 11: Three major systems of this tender are united together with a number of minor general laboratory equipment in one lot. First lot represents mainly general laboratory equipment which can be perfectly united together with the following positions from the second Lot: 6. Semiautomatic preparing

system; 7. Water purification system; 8. N2 generator; 9. Rotary evaporator; and from the third Lot: 1. Electric stirrer; 2. Laboratory centrifuge; 3. Ultrasonic bath; 4. Laboratory incubator; 6. UV box sterilizer.

From our point of view, it would be more reasonable to separate general lab equipment and sample preparation equipment from analytical part, as they are used autonomous and usually in special rooms dedicated for this purposes. In our opinion, all the medical equipment could be comprised in a separate lot as well.

In general, we consider that the second Lot comprising such a systems like Atomic Absorption Spectrometer, High performance Liquid Chromatograph, Gas Chromatograph should be divided in separate lots for each instrument, which would permit better competition. Thus, could you examine the possibility of revising division of lots in suggested manner?

Answer 11: All requested instruments were separated in lots according to their distribution in Center of Forensic Medicine. Lot 1 includes equipment that shall be used in Pathology/Histology tests, as well as other related examinations. Lot 2 is constructed around the analytical equipment and the ancillary equipment required for setting up an integrated system for the preparation and analytical examination of samples. Lot 3 consists of various laboratory and medical equipment to be used specifically by other units of the Centre of Forensic Medicine, including but not limiting to Forensic Biology Unit, Clinical Examination Unit, as well as by the territorial units of the CFM. We would like also to reiterate that if a potential bidder encounters difficulties in submitting individually an offer for the entire Lot, we encourage the grouping of several potential bidders in a consortium and submission of a common offer. In this case only the leader of the consortium will be included in the evaluation and will be responsible for the actions of each and all members of the consortium.