Clarification No: 2

EUROPEAID/122834/D/S/TR "Supply Of Laboratory Equipment For Ministry Of Health Provincial Laboratories And Refik Saydam Hygene Center-Turkey"

Q1. LOT 1- Item 1.3. GC with ECD,FPD, Purge and Trap: The new series of Purge and Trap Systems have to LC display on it, they are controlled by the PC. Is this acceptable?

A1. Yes it is acceptable, since the offered system meets our requirements.

Q2. Ref : LOT -1- Item 1.1. GC, Item 1.2.GC, Item 1.3. GC, Item 1.5. GC, Item 1.7. GC-MS:

Equipment General Properties:

Must have sample processing system which has 3 different working mode (Time saver, Enhanced solvent purge, Isolation mode. This statement is locking out specs for one company. Please delete this item from the tender.

A2. Your request for the removal of this item from the tender specifications is not regarded to be acceptable. An alternative system is acceptable if the information is provided that the above-mentioned modes can be used in the proposed system. If an alternative system will be offered as in Clarification 1, Question 119, it may be acceptable in accordance with the benefits provided by the suggested system.

Q3. Inlets: Four: split/splitless inlets, PTV on column Do you accept to install three injectors on the system?

A3. Yes it is acceptable since, 2 inlets for injectors: split/splitless and PTV is required The other 2 inlets are for the detectors.

Q4. Ref : LOT -1- Item 1.1. GC, Item 1.2.GC, Item 1.5 :

Flame ionisation detector:

Minimum detectable amount: better than 0.5 pg C/sec. for pentane, propane, nonane, hexadecane.

There is no GC-FID with sensitivity value of 0.5. pgC/sec in the market. Do you accept detectivity value of 2 pg C/second ?

A4. Please see Corrigendum No. 2, Article 1.

Q5. Ref : LOT -1- Item 1.1. GC, Item 1.2.GC, Item 1.3 : Column oven: Temperature control: between 4-450 °C Please advise if Column oven cryogenics is required. If not, this specifications has to be changed as ''ambient +4 °C''

A5. Please see Corrigendum No. 2 Article 4

Q6. Ref : LOT -1- Item 1.1. GC, Item 1.3. GC, Item 1.5. GC , Item 1.7. GC-MS: Autosampler:

Must have 2 different injection modes (slow, normal, rapid) which can be selected from gas chromatography keyboard

Our system has no modes like slow, normal, rapid . Do you accept programmable injection speeds which can be programmed at the selected speed rates?

A6. Yes a system with a programmable injection speed is acceptable since it fulfils the requirement stated in the tender specifications

Q7. Do you accept a variable injection syringe injecting up to 80 ul in 1 ul increments with 100 ul syringe and 0.1-10 ul in 0.1 ul increments with 10 ul syringe ?

A7. Yes the offered variable injection syringes together with increments 0.1 ul and 1 ul are acceptable since the values lie within the application limits of our analyses.

Q8. Ref : LOT -1- Item 1.2. GC, Item 1.4 GC:

Automatic Head Space Sampler

Must have 2 different injection modes (slow, normal, rapid) which can be selected from gas chromatography keyboard.

<u>Q-7-</u> Our system has no modes like slow, normal, rapid . Do you accept programmable injection speeds which can be programmed at the selected speed rates?

A8. Yes, a system with a programmable injection mode speeds is acceptable since it meets the requirements stated in the tender specifications

Q9. Ref : LOT -1- Item 1.2. GC, Item 1.4 GC: Automatic Head Space Sampler There is no transfer line in our systems. Do you accept an automatic headspace sampler designed without transfer line? **A9.** It is not possible to state that it is acceptable or not without knowing the information in the details of the suggested system. If the offered system without a transfer line meets the requirement it will be acceptable due to the data you will give at the offering phase.

Q10. Automatic Head Space Sampler

There should be minimum two spaces available on the sample table for preferential and emergent samples, these samples should be able to be analyzed initially once a space is emptied in conditioning sockets.

There are no spaces available on the sample table for preferential and emergent samples as it is not convenient to use our system in this way. It is acceptable?

A10. If an alternative system is offered as in Clarification 1, Question 16, it may be acceptable in accordance with the benefits provided by the suggested system.

Q11. Ref : LOT -1- Item 1.4 GC:

Operating cabin enabling to work without influence of dangerous and volatile substances at room temperatures

There is no Operating cabinet used with our system. Do you accept this?

A11. No it is not acceptable, your system may not have an operating cabinet but you may offer an acceptable designed cabinet, that will fit the instrument, to remove the dangerous and volatile substances.

Q12. Ref : LOT -1- Item 1.7 GC-MS: Injection System Heat rise rate of PTV injection block is 200 °C/min. Do you accept a heat rise rate of 180 °C/min ?

A12. Yes it is acceptable, since the offered heating rate lies within the application limits of our analyses.

Q13. Injection System and Mass Spectrometer..large volumes of injection (greater than 100µl)..100 ul is too much for this system. Do you accept large volume injections up to 50 ul?

A13. 50 ul was also regarded to be acceptable in accordance with expectations and the related modification was made in the TS. Please see Corrigendum No. 23 article 1.7

Q14. Mass Spectrometer Working range must at least 2-800 Daltons. There is no practical use of masses under 10 amu. Do you accept a system having mass range starting from 10 u? **A14.** Yes it is acceptable since the offered bottom limit meets the application limits of our analyses.

Q15. The device must be capable of working in impact ionization (EI) mode. It must be adjustable within a range of 10 - 240 eV.

All commercial spectral libraries are based on standard 70 eV Ionization Energy. Do you accept adjustable ionization Energies at 20 eV, 70 eV and 150 eV ?

A15. Yes it is acceptable since the offered values are suitable for our applications.

Q16. There must be at least two flaments, it must be possible to chose required flament from computer.

In terms of easy alignment, performance and lifetime single filament is better than dual filament. Do you accept our system has single filament. Is this acceptable?

A16. Yes it is acceptable since the difference between the single and two flaments does not cause any any significant change in our applications.

Q17. And mass resolution must be 0.1 amu.

Low resolution mass spectrometers all have mass resolutions of 0.7 amu. The resolution of 0.7 amu can be obtained with High Resolution Mass Spectrometers. Do you accept the resolution of 0.7 amu?

A17. Yes it is acceptable since the offered resolution values meet the requirements for our applications.

Q18. ...rather than an electron multiplier, it must have a photomultiplier detector .. The scintillators used in photomultiplier detectors cause contamination thus sensitivity loss. Do you accept electron multiplier detector?

A18. Please see Corrigendum No.2, Article 8.

Q19. Ref : LOT -1- Item 1.8. HPLC, Item 1.9. HPLC, Item 1.10. HPLC: Pump flow rate range

1-10.000 μ L/min and with 1 μ L/min increments

Do you accept the pump flow rate range of 10-10.000 μ L/min in 0.01 ml/min steps between 0.00 and 1.00 ml/min and , and 0.1 ml/min steps between 1.0 and 10.0 ml/min ?

A19. Yes it is acceptable since the offered flow rates meet the requirements of our applications in analyses.

Q20. Ref : LOT -1- Item 1.8. HPLC, Item 1.9. HPLC, Item 1.10. HPLC: FLUORESCENCE DETECTOR

Wavelength reproducibility :±0.2 nm

Do you accept the wavelength reproducibility value of $+/_0.5$ nm.

A20. Yes it is acceptable since the slight difference between the required and the offered reproducibility values do not cause significant difference

Q21. Ref : LOT -1- Item 1.9. HPLC, Item 1.10. HPLC: PHOTODIODE ARRAY DETECTOR

Light source

Deuterium, tungsten

Do you accept the light source of Deuterium, quartz halogen?

A21. Please see Corrigendum No.2 Article 9.

Q22. Ref : LOT -1- Item 1.10. HPLC: PHOTODIODE ARRAY DETECTOR

Monitoring

at min. 4 different wave lengths at the real time

Do you accept a system measuring one wavelength at the time while a three-dimensional view topview and spectrum can be shown at the same time?

A22. Yes it is acceptable, since provision of wavelengths not at real time but later –since they ate saved- meets also our requirements.

Q23. Flow cell

10 mm path length

Do you accept the path length of 9 mm?

A23. Yes it is acceptable since the slight difference in path length does not cause a significant change in the applications.

Q24. Ref : LOT -1- Item 1.11.HPLC System with (RI-MASS Detector and Autosampler): MASS DETECTOR Mass range: 30-2000 amu

The masses for disinfactant analysis are generally not higher than 500 amu. Do you accept the mass range of 10-1500 amu?

A24. The mass range was rearranged after reviewing the requirement in accordance with applications. Therefore the offered range was acceptable. Please see Corrigendum No. 18 Article 1.11

Q25. Accessories

Our manufacturer does not manufacture Flow Injection System ? Our system provides all capabilities of Flow Injection System. Do you accept this?

A25. If your suggested system will provide an alternative system as in Clarification 1, Question 32, it may be acceptable in accordance with the benefits provided by the suggested system.

Q26. Furnace autosampler

"... stock standard solution for forming an automatic calibration curve up to 15 standard point and 1 blank value.."

Our system prepares up to a 10 point concentration from one bulk standard. Do you accept this?

A26. Even if 15 points are said to be required for a calibration curve, 10 points are also enough for a calibration curve and does not make any significant change when compared to the curve by 15 point, therefore it is acceptable.

Q27. ".... pipetting which can be adjusted between 1 - 99 μ l with 1 μ l increments at different speeds...."

Do you accept a pipetting volume of 1-70 ul with 1 ul increments?

A27. Yes it is acceptable since the offered 1-70 μ l range meets the required limits of our applications

Q28. Wavelength accuracy ± 0.2 nm

Do you accept a wavelength accuracy value of +/-0.5 nm while Wavelength repeatability value is +/-0.04 nm?

A28. Yes it is acceptable since ± 0.5 nm wavelength accuracy is also acceptable due to low (± 0.04 nm) wavelength repeatability.