

EuropeAid/117373/D/S/TR

Strengthen the capacity to monitor air quality with the aim of improving the environmental conditions in Turkey

Clarifications to tender no. 1

Question 1: We would like to receive answers to the following issues, regarding the article 1.1 Shelters for Stations, to avoid possible mistakes

- a) The article above mentions that the door height of the shelters are to be 2.0 cm, however the same dimension in the drawing at the attachment C is indicated to be 2.10 cm
- b) The thermal insulation material is not described, if any additional material will be applied other than PU foam
- c) The working bench material and dimensions are not clearly described other than cupboards.

Answer 1:

- a) **There is a syntax error in the drawing at the attachment C, so the door height of the shelters will be 2 meters as mentioned in article 1.1.**
- b) **The thermal insulation material will be PU foam.**
- c) **Dimensions of the working bench will be 245 x 60 cm according to the attachment C.**

Question 2: As a result of reading the technical specifications, we have seen that, our measurement method is different from the stated specifications. Our company uses open path DOAS (Differential Optical Absorption Spectroscopy) method to measure SO₂, NO, NO₂, NO_x, CO, O₃, and benzene instead of stated operating principles like UV Fluorescence and Chemiluminescence methods. For your information, we have a lot of references around the world for these kind of air quality monitoring applications, and has TÜV and EPA approvals. We have also some problems with measurement ranges. As an example, our dust measuring range for PM₁₀ and PM_{2.5} is 0-1000 micro gram / m³ instead of stated 0-5000 micro gram / m³. In the tender documents, it is mentioned that these specifications are open to equivalent methods, and as we understood, different methods could be accepted. Consequently, we need to be informed regarding above uncertainties to clarify our situation whether we can attend the tender.

Answer 2: This will be a reference laboratory to be established in Ankara. Therefore the Beneficiary will use the conventional reference measurement methods described in the European regulations. This means for SO₂ the Fluorescence method, for NO₂,NO,NO_x the Chemiluminescence method, for ozone the UV Photometric method, for CO the Non-dispersive Infrared method. Therefore the DOAS method will not be acceptable. For PM₁₀ and PM_{2.5} measurement the beneficiary has quite high concentrations, so they need the range of 0-5000 microgram/m³.

Question 3: Delivery in 60 days for Lot 4 is almost impossible because the delivery period for the vehicles are up to 10-12 weeks + indoor designs according to technical specifications are nearly 2 weeks. Extension for the delivery period is needed for 120 days.

Answer 3: The delivery time is extended to 120 days. Please see “Corrigendum to Tender” for details.

Question 4: Delivery in 30 days for Lot 3 is almost impossible to combine all goods from manufacturer; besides there is gathering, distributing, installing and training. Extension for the delivery period is needed for 90 days.

Answer 4: The delivery time is extended to 90 days. Please see “Corrigendum to Tender” for details.

Question 5: If the beneficiary can not provide the laboratories at the time of installation for lot-2, which procedure shall be followed?

Answer 5: Beneficiary will provide the Laboratories at the time of installation for Lot 2. Otherwise please also see article 20.1 of the General Conditions of the contract.

Question 6: Who will be responsible for the underworks (electrical current, water supply, air conditioning, waste connections etc.) at the installation site?

Answer 6: There will be no underworks in the laboratory for electrical current, water supply, waste connections; only air conditioning systems in the laboratory and balance room will be installed by the Contractor. There is no need for water supply at the stations, the basic electrical current will be supplied by the Beneficiary but connection from this line to the stations including to the outdoor and indoor display units will be done by the Contractor. All things connected with the stations including outdoor and indoor display units are within the responsibility of the Contractor.

Question 7: Will alternative offers be acceptable? For example: 2 different brands or models of the same manufacturer for the same item.

Answer 7: No, the Contracting Authority will not accept alternative offers as per article 1.4 of the Instructions to Tenderers

Question 8: Lot 2 Item 1- In the Training Section: 1."General Training Requirements apply (Number of staff 4 and total duration 20 working days); 2. at least 4 members of Beneficiary's laboratory staff directly after installation at least 15 days.

Lot 2 Item 2 - In the Training Section: 1."General Training Requirements apply (Number of staff 4 and total duration 20 working days); 2. at least 4 members of Beneficiary's laboratory staff directly after installation at least 1 day.

Lot 2 Item 3 - In the Training Section: 1."General Training Requirements apply (Number of staff 4 and total duration 20 working days); 2. at least 4 members of Beneficiary's laboratory staff directly after installation at least 1 day.

Which point applies for training; "General Training Requirements" or "Technical Specifications Requirements"?

Answer 8: There is a syntax error in general training requirements for Lot 2. Technical specifications requirements shall be valid as total 17 working days. Please refer to “Corrigendum to Tender”.

Question 9: Is it obligatory for the tenderers to provide the certificates of origin approved by the Chamber of Trade and Commerce while preparing tender dossier or will it be enough to declare those certificates only as sworn statement? Could the certificates of Origin approved by the Chamber of Trade and commerce be provided at the signature the contract?

Answer 9: During the tendering stage, the tenderers are expected to provide a statement attesting the origin of the supplies tendered (or other proofs of origin) as per article 11.4 of the Instructions to Tenderers. Therefore a statement will be enough at the tendering stage. However the provisional acceptance cannot be issued before submission of the certificate of origin for all the items. Please also see Annex II technical specifications article 1.6.3.

Question 10: Regarding the required units in LOT 4; who will pay expenses such as:

- a. Private (Special) Consumption Tax (OTV)
- b. Registration
- c. Vehicle Plates (Government / Official / Commercial)
- d. Mandatory Traffic Insurance

Regarding the vehicle registration and plates; is it going to be commercial or official? If they are asked to be official and will be paid by the bidder how can they be invoiced?

Answer 10: The contractor will not be subject to the Special Consumption Tax as per Annex A, Title III Grant of Facilities, Article 8 Taxation and Customs, bullets 2 and 5 of the Framework Agreement that was signed between the Commission of the European Communities and the Government of the Republic of Turkey. The procedure that will be followed for obtaining the registration, plates (government) and the mandatory traffic insurance of the vehicles will be arranged by the Contractor in close corporation with the Beneficiary Institution. All the costs incurred for these procedures will be borne by the Beneficiary Institution.

Question 11: There are some important items to be exempt from Country of Origin requirement.

Lot 3.4 Laser Colour Print, Copy, Scan Machine
Lot 3.5 Data Projector
Lot 3.6 Digital Camera

Answer 11: There is no need to grant derogation for the rule of origin to the above mentioned items which can be provided from either Member States of the European Union or Turkey or EU Candidate Countries or the Beneficiary countries of the MEDA or CARDS programmes

Question 12: Lot 4 Item 4.1 Vehicle:

Accessories: Fire extinguisher - Please clarify Fire Extinguisher's specifications. Do you require a special type?

Answer 12: A special type is not required. It shall be officially appropriate for that class of vehicle.

Question 13: Ventilation Fan - Please clarify why ventilation fan is needed? The vehicle has Air Condition providing heating & cooling. Please provide the place where the ventilation fan is going to be installed and its specifications?

Answer 13: The ventilation fan is needed especially for the cargo place and it will be installed at the ceiling of the cargo place to suck the ambient air. There will be a transparent dividing wall between the sitting place and the cargo place. All calibration gas cylinders and transfer standards will be installed to cargo place. If there is any leakage from cylinders, calibration gases can affect human health adversely. Therefore an additional fan is needed to prevent the accumulation of the gases inside the cargo place. The capacity of the fan should be enough to evacuate the gases to outside.

Question 14: Is it allowed to offer for PM10 monitor (pos. 1.8.) and for PM2,5 monitor (pos. 1.9) also an instrument based on an oscillating microbalance method? Comment: Art. 1.1. of „Annex II; Technical specifications” of the tender specification states “The Ankara Air Quality Monitoring System shall be in accordance with the following EC Directives on air quality: Air Quality Framework Directive 96/62/EC and the Daughter Directives 99/30/EC, 2000/69/EC, 2003/3/EC as well as with other EU standards and regulations existing in this field.” The technical specification states also in Art. 1.2. of annex II: The assessment of air pollutants in EU is based on minimum data criteria exemplified by reference method. This means that all methods able to measure a specific compound within the uncertainty limit and with data coverage specified in the corresponding Daughter Directives may be used. Thus all methods fulfilling these requirements can be used. This means that e.g. for the measurement of SO₂ the EU Directive 1999/30/EC and the European Standard EN14212 should be applied and in the tender document it is accordingly specified for this instrument. Similarly for the PM10 measurement the directive 1999/30/EC is applicable and accordingly the standard EN12341. The EN12341 describes the reference (manual) method for measurement of PM10 but does not specify the method which should be used for continuous monitoring of PM10. Please note that no European Standard exists for the PM2,5 monitoring yet. Nevertheless the current formulation of the tender specification limits the measurement method to the beta absorption. This limitation has neither legal nor technical grounds. In particular the oscillating microbalance method (also known as “TEOM”) should be allowed. There are several reasons for this:

- 1 Oscillating microbalance method is a proven measurement method. The equivalency with the EN12341 has been proven by the independent accredited body (German TÜV) and the instrument has been accepted by the German Government for PM10 measurement according to EN12341.
- 2 Oscillating microbalance instruments are also successfully used for continuous PM2,5 monitoring. Since there is yet no European Standard for the PM2,5 measurement no certification to such standards is possible, but the oscillating microbalance has been successfully certified to other PM2,5 standards existing worldwide and is successfully used for this measurement also in the EU.
- 3 Oscillating microbalance instruments are widely used in the EU AQM Networks – more

than 2000 instruments have been installed in Europe.

- 4 Oscillating microbalance instruments are manufactured in European Union.
- 5 Oscillating microbalance instruments have been successfully delivered for EuropeAid funds – PHARE projects.
- 6 Oscillating microbalance measures directly the mass of the collected dust while the beta absorption method measures it indirectly. This makes the oscillating microbalance insensitive to the changes in dust composition or humidity which influence significantly the beta absorption readings
- 7 Oscillating microbalance instruments have better measurements quality parameters than the β -absorption method, e.g. the detection limit is better, better repeatability, better time resolution etc.
- 8 Oscillating microbalance instruments contain no radioactive sources
- 9 Oscillating microbalance instruments offer the possibility for future expansions not provided by the β absorption method, e.g.:
 - FDMS, a method to monitor in real time the semivolatile and non volatile fractions of PM10 or PM2,5 and thus eliminate the “correction factors” necessary for traditional continuous PM monitors
 - Ethalometer for monitoring of ‘black sooth’
 - Accu, a unit for collecting samples for laboratory analysis, e.g. heavy metals concentrations in the air
- 10 Oscillating microbalance instruments contain less moving parts and are thus more reliable especially in a long term operation.

Concerning all above we can see no objective reasons for excluding the oscillating microbalance method from the technical specification and we will see such exclusion as an arbitrary distortion of fair competition by locking out a manufacturer from one of the EU-countries.

Please note that opening the specification for this instrument will require following changes in the specification:

Operation principle:	beta-ray absorption, oscillating microbalance
Filter type:	glass fibre tape, teflon coated glass fibre (Pallflex)
Calibration: For beta radiation:	Manually with PM 2.5 mass foil calibration kit and/or automatically with a reference membrane in the measurement path. For oscillating microbalance: with pre-weighed calibration filters.
Beta ray source:	not applicable to oscillating microbalance
Period of unattended operation:	Minimum 14 days (for beta radiation: by using automatic filter change).

Answer 14: Oscillating microbalance method is also acceptable. Please refer to “Corrigendum to Tender” for the new specs

Question 15: Can we offer DOAS (Differential Optical Absorption Spectroscopy) method which enables to measure all of the gases together (SO₂, NO, NO₂, NO_x, CO, O₃, Benzene) instead of “operating principle” (UV Fluorescence, Chemiluminescence etc.) method? The DOAS method has TUV and EPA certification.

Answer 15: Please refer to answer 2.

Question 16: If there is a problem with measuring range, (for example: if not providing 0-5.000 micro gram / m³ for dust measuring (PM₁₀ AND PM_{2.5})) can we offer range of 0-1.000?

Answer 16: Please refer to answer 2.

Question 17: There is a remark in the tender specifications on Pb and UV-AB measurement but the related specifications are not given. Should we offer necessary equipments for Pb and UV-AB measurement?

Answer 17: Pb analysis will be performed in the laboratory after the sampling of PM₁₀ by PM₁₀ sampler. There is no need for any equipment for the analysis of Pb. Contractor is expected to provide UV-AB measurement only for one station.

Question 18: Page 118. Station Computer for Data Acquisition. The specs require "32 bit Sound Card & Powered Speakers" but most of the new motherboards come with sound outputs. Almost all computer systems do not require an additional Sound Card. Do you still require an additional sound card if it is already built in the motherboard?

Answer 18: Beneficiary does not need an additional sound card if it has been already built on the motherboard.

Question 19: Page 120. Powerful Server Computer for Central Dispatching Unit (CDU); "Backup Solution – 100/200GB DAT". There exists no DAT backup with a 100/200GB capacity. These backup should be SDLT, AIT or LTO Ultrium type cartridge systems.

Answer 19: Backup Solution is changed as 100/200GB DLT type or equivalent. Please refer to "Corrigendum to Tender" for the new technical specs.

Question 20: Page 120. Powerful Server Computer for Central Dispatching Unit (CDU); "Graphics – 64MB independent card (with cooling function)". Brand name servers do not come with independent video cards. The video system is always built in with 8 MB capacity. Are you really asking for an additional 64MB video card?

Answer 20: Yes, the Beneficiary is really asking for an additional 64MB independent video card with cooling function.

Question 21: Do you really need a tape backup system and a DVD writer on all servers?

Answer 21: Beneficiary needs a tape backup system on one server and DVD writer on all servers. A tape backup system from item 1.24 and 1.25 was deleted. Please refer to "Corrigendum to Tender" for the new technical specs.

Question 22: Most server and computer specifications do not match brand name computers such as HP, or IBM. These specs allow for custom build computers which do not meet the reliability requirements of such a project. But on the other hand, home made computers will offer a price

advantage to companies if they choose so. We believe there should be more detail on the server specs to avoid bidders to base their prices on very different systems.

Answer 22: Technical specifications are written in a way to ensure fair competition. The tenderer must comply with the provisions stated in article 1.6.3 of the Technical Specifications which ensures the quality.

Question 23: We are currently preparing for your tender with the title “Strengthen the Capacity to Monitor Air Quality with the Aim of Improving the Environmental Conditions in Turkey” and would like to receive answers to the following issues, specific to the “LED Public Outdoor Displays”, to avoid possible mistakes during technical design phase:

- What is the exact air pollutants that are planned to be displayed for public information, including the units, among all that measured?
- Does the sample LED screen design fit to your needs, in terms of general placement and core of information?

T.C. SAĞLIK BAKANLIĞI		
REFİK SAYDAM HIFZISSIHA MERKEZİ BAŞKANLIĞI		
www.rshm.saglik.gov.tr		
TARİH: 88.88.88	SAAT: 88:88	
ANKARA HAVA KALİTESİ ÖLÇÜM AĞI XXXXXXXXXXXX İSTASYONU		
SICAKLIK: 8°C	NEM: %88	BASINÇ: 88 mmHg
HAVA KİRLİLİĞİ ÖLÇÜM PARAMETRELERİ:		
KİRLETİCİ ADI:	ÖLÇÜLEN DEĞER:	AB LİMİTİ:
SO₂	888.88 ppb	888.88 ppb
NO_x	888.88 ppb	888.88 ppb
CO	888.88 ppm	888.88 ppm
O₃	888.88 ppb	888.88 ppb
TOZ	888.88 mg/m3	888.88 mg/m3

Answer 23:

- Exact air pollutants that are planned to be displayed; SO₂ (hourly-microgram/m³), NO₂ (hourly-microgram/m³), O₃ (hourly-microgram/m³), CO (hourly-miligram/m³), PM₁₀ (daily-microgram/m³), PM_{2.5} (daily-microgram/m³). Please refer to “Corrigendum to Tender” for details
- LED screen design fits the beneficiary’s needs. (The exact information to be displayed will be clearly defined during the design phase together with the Contractor according to the technical specifications)

Question 24: Item 1.1. Shelters for stations (page 86). The specification states: “Roof: additional aluminium sheet for water and sun protection.” Will you accept steel sheet, zinc coated, painted, anti-slippery? Please note that it will be more durable than aluminium.

Answer 24: Yes it will be acceptable. Please refer to Corrigendum to Tender for the new technical specs.

Question 25: Item 1.3. Set of meteorological equipment (page91). The specification states: “Stainless steel mast 10 meters high” Will you accept mast made of galvanized aluminium alloy? Please note that such mast is resistant to atmospheric corrosion while it is lighter than stainless steel and thus easier in operation.

Answer 25: Galvanized aluminium will not be accepted. Meteorological mast shall be stainless steel as described in the technical specifications.

Question 26: Item 1.13. Set of calibration unit for RSCH (page 105) Should the different calibration gases (SO₂, NO_x, CO, O₃) be generated simultaneously or one gas at a time?

Answer 26: Calibration gases will be generated simultaneously, but it should be possible to select single gases at a time. Please refer to “Corrigendum to Tender” for details

Question 27: Item 1.13. Set of calibration unit for RSCH (page 105) Should there be two separate permeation ovens for SO₂ and NO_x or is one oven used for both tubes possible?

Answer 27: There should be two separate permeation ovens for SO₂ and NO_x.

Question 28: Item 1.13. Set of calibration unit for RSCH – UV-Photometer for ozone measurement (page 106). Should the mass flow controllers be separate for each channel or may they be used for more than one gas in a sequence?

Answer 28: The mass flow controllers should be separate for each channel for each component. Please refer to “Corrigendum to Tender” for details

Question 29: Item 1.13. Set of calibration unit for RSCH – UV-Photometer for ozone measurement (page 106). Is this photometer meant to be a primary standard or secondary (transfer) standard?

Answer 29: The photometer is a primary standard.

Question 30: Item 1.14 Set of transfer standards for calibration (portable). (page 108) Is this item meant as a separate unit for each gas or may the standards be combined in common units?

Answer 30: Set of transfer standards for calibration will be a separate unit for each gas.

Question 31: Item 1.30 Local area network (Page 126) In order to determine the amount of

material and workmanship which are to be offered please provide following information:

- approximate length of CAT5 cables, optic fibre, cable ducts as well as the number of breakthrough openings in walls and ceilings
- number of LAN sockets and 10/100 network interface cards.

Answer 31: All relevant computers in CDU (See Attachment A) will be installed generally in one room (dimensions of the room approximately 7.80x3.80m). Additionally analytical balance will be supplied within Lot 2 and physical map will be connected to LAN. (See attached rooms plan)

Question 32: Item 1.32 Public information display boards (outdoor). The specification states: "They should be two sided" Does it mean that the display boards should have LEDs on both sides?

Answer 32: The display boards should have LEDs on both sides.

Question 33: We are going to participate in the above mentioned tender. Below please find our questions that need to be clarified regarding the Balance room in Lot-2, item 4.

- a) Place of the project- at downtown or suburb?
- b) The mentioned room in 7.8 X 3.8 m dimensions is an existing room or will it be modified from a larger one?
- c) According to attachment G the room has a window. If in room temperature and humidity has to be prevented what are the standards of windows, sub-door and main door.
- d) According to the plan there is an air outlet at the corner. Will it be existing in the room?
- e) What will be the electrical diagram of the room? In the specs it is said that it is required but there is no detail. Also PC network connection is required. Is there any network system at the building? If it exists how far is it from balance room?
- f) Is there any special painting required for the room (like water proof)?
- g) Regarding the room it is said that it has blind walls, although there is a window at one side. Will window be covered or cancelled?
- h) Regarding the main entrance door, is there any special specs for it, like fire proof?
- i) What is the AC capacity and detailed filter specs?

Answer 33:

- a) **Place of the project will be suburb.**
- b) **The mentioned room is an existing room which will be prepared by the beneficiary.**
- c) **The window will be cancelled. It will be blind.**
- d) **There is no air outlet at the corner. It will not be existing in the room.**
- e) **Electricity to the room will be provided by the Beneficiary. There is a network system at the same floor with the balance room (see attached rooms plan)**
- f) **Yes, it shall be waterproof. Please refer to "Corrigendum to Tender" for details**
- g) **The window will be cancelled. It will be blind.**
- h) **No need to be fireproof, however it shall be good isolated. Please refer to "Corrigendum to Tender" for details**
- i) **The filter specifications should consider the fact that this room will be used for the weighing of very small particulate matter concentrations (for PM₁₀ and PM_{2.5}) any**

influence of the air conditioning system through the particles from this machine should be reduced. Please refer to “Corrigendum to Tender” for details

Question 34: Chapter 1.24 (Modem) Will you use a private GPRS network within a phone company or phone company public GPRS network? What type of Rental system charge will you subscribe in central dispatching unit and stations? Will you use services of those 3 companies together?

Answer 34: The beneficiary will use a private GPRS network within a phone company. The beneficiary will sign a contract with the GPRS service provider and pay the operation costs. The beneficiary will select the GPRS service provider. Please refer to “Corrigendum to Tender” for details

Question 35: Chapter 1.30 (General) Could you give us more information (plan of the buildings, dispatching of material, etc.)?

Answer 35: Please find enclosed the floor plan published with the Clarifications and Corrigendum.

Question 36: Chapter 1.34 (Data Quality Control). Technical Specifications reads "Display of functional check values in parallel to the measuring values". Could you give us more explanations?

Answer 36: Measuring values should have, for instance, a sign or value which indicates a calibration or mass flow information, etc.

Question 37: On behalf of a.m. MEDA tendering procedure we have to appeal for modification of requirement definitions concerning lot no.1, Annex-II Part1. "Techn. Specific.", as follows, since those are, to our humble opinion, contradicting EU-regulations, terms of requirements of origin (also mentioned in You tender documents Annex A. par. 4 /4.1) and equal opportunity, namely: Par. 1.23, 1.24, 1.25 and 1.28 - Software: "Windows 2003 Server" and Par 1.34 "General" - Software: "Windows 2003 Server" - as well as "NORTON AntiVirus" At first, both are of US American origin and there exist European brand alternatives, just to name samples like LINUX (Swedish, German, French British, etc) in the field of operating systems and NORMAN a.o. in the field of anti virus software. Secondly it also forms an unnecessary lockout specification, since data format conformity for national and international data exchange is crucial, but not with application engineering bases. At third, even though knowledge and heavy use for MS WIN OS will be an argument for PC-working places in terms of ongoing administration, it does not come true with application / solutions like with air quality systems. Proper and 100% proprietary database implementations (not meant use of rDBMS!), data transaction and control as well as application programming are the crucial and hence knowledge prone SW components. Operating system plays a minor role in terms of operations and maintenance. To phrase it differently - we also support (!) and hence we do not intend to offend use of MW WIN OS in all organisational and administrative areas of professional computer use, all our client working places do run on PCs driven by MS WIN. As you can understand, deciding on that subject as requested above principally and hence on short term is of high importance, because not doing so excludes potential bidders as ours.

Answer 37: The beneficiary currently have a windows based active directory structure and the offered operating systems should be 100% compatible with the current infrastructure so that the offered computers can be integrated with the active directory.

Question 38: Item no. 1.13, set of calibration unit for RSCH; page 108; the zero air source is not described. Will one of the nine (9) Zero air generator (Item 1.12) be used at RSCH, or shall an additional zero air generator be offered?

Answer 38: One of the nine (9) zero air generators will be used at RSCH.

Question 39: Item no. 1.14 Set of Transfer standards (Portable); from our point of view it does not make sense to equip the portable transfer standards with both permeation tubes and gas dilution for one component. Dilution systems are easier to handle as transfer standards, as permeation systems need to be constantly heated and purged with zero air to deliver reliable values (therefore they need power supply during transport either by batteries or 12V). Is it sufficient to offer systems with only dilution? In case permeation shall also be offered shall power supply be included? If the stations zero air is used no internal zero air generation is necessary for dilution. The station zero air will always have higher quality than internal zero air. Is the internal zero air really necessary? The transfer standard can be realized as multi gas system with only two mass flow controllers and 3 solenoid valves to change between constituents. This is the most economic, but not the technically best solution. A technically better but also more expensive solution is one device constituent with the gas bottle fixed to the respective device. From the tender document it is not 100% clear which solution you are requiring. We suggest to use small gas bottles 1 or 2l as they are easier to handle. They can be stored in a case in combination with the dilution unit and do not need to be detached. This means that the portable calibrator is more compact and easy to handle and common mistakes by connecting the gas bottle/ deairisation of pressure regulator can be neglected.

Answer 39: The beneficiary would like to have additional permeation solution. Power supply will be supplied in the car and at the stations. Small gas bottles and separated gas component is required for the gas solution, not a compact calibrator. There is no need for zero gas in the transfer standard.

Question 40: Lot-1, item 1.4 - 1.5 – 1.6 – 1.7 – 1.8 – 1.9

- a) “Analog output: 0-1V” Since the most accurate and flexible communication between Analysers and DAS is RS 232 or USB (already requested), could you confirm that if the communication could be done via RS 232, analog outputs are not needed anymore ?
- b) “The equipment must have quality certificate to prove that it complies with international standards accredited by an international certification institution” “Type approval certificate has to be performed by an independent international certification institution. Certifications from international certification institution accredited or designed for such tests are to be submitted with the offer” Could you confirm that: The model name of the equipment on the certificate submitted with the offer should match the manufacturer name written on the same certificate & offered? Could you submit the list of the international certification institution accredited or designed for such test?

Answer 40:

- a) **Besides of RS232 or USB we need additional outputs for checking the analyzers.**
- b) **Each instrument should have the proof of one of the three certification institutes in Europe (Germany, France, England) (like type approval procedure in Germany).**

Question 41: Lot-1, item 1.4 - 1.5, “Permeation oven: Temperature: 35-50°C (adjustable)” Since in “function control – 2 points (zero and span)” are requested, it sounds useless to have adjustable temperature to change the concentration generated. Moreover, in order to keep accuracy of generation, temperature should be stable. This specific technical specification seems very restrictive to only few analysers even perhaps none. Consequently, could you confirm that adjustable is not needed anymore?

Answer 41: Term “adjustable” was deleted from the technical specifications. Please refer to “Corrigendum to Tender” for the new technical specs.

Question 42: Annex II: Technical specifications Article 1.6.3, “The tenderer should prove that the equipment proposed is produced by a manufacturer who is accredited by ISO 9001:2000” Could you clarify for which kind of supplies is it really requested? Since it sounds compulsory for analysers, it could not be needed for some accessories.

Answer 42: It is requested for all the items under the four lots.

Question 43: Lot-1, Item 1.3 “Telescopic pole : Stainless steel mast of 10 meters height”, Item 1.1 “Mast : 10 m telescopic mast for meteorological sensors suitable for one man operation” In which item should be included price and technical description for met mast as well as material which could be aluminium since it’s lighter?

Answer 43: Telescopic pole shall be stainless steel as described in the technical specifications.

Question 44: Administrative clarification required for lot-1.

A : EU member state tenderer

B : One or some sub contractors companies from Turkey

Invoice from B to A will include VAT since goods will stay in Turkey. How could A get back this amount of VAT from Turkish administration? Is it possible?

Answer 44: If you are awarded the contract, you will be required to obtain Tax Exemption Certificate from Ministry of Finance, General Directorate of Revenues. With this certificate you will be exempted from VAT for any service rendered or goods supplied or works executed under the EC contract. Goods supplied or services rendered or works executed by a Contractor to the EC Contractor shall also be exempted from VAT. Such exemption shall only be applied to the goods supplied or services rendered or works executed which are connected with the goods supplied or services rendered or works executed by the EC Contractor under the EC contract. Please refer to Annex VII: Grant of Facilities for more details.

Question 45: Clarification required for Instructions to tenderers; is it allowed to quote (as a producer) for some of the items to another companies to complete their product line when you are bidding the whole lot?

Answer 45: Please refer to article 10 – number of tenders of the Procurement Notice. Please also refer to article 6 of the General Conditions of the tender dossier.

Question 46: Special conditions: Article 29, “The contractor shall bear all risks relating to the goods until provisional acceptance ...” Does it mean that if the materials on site are destroyed or stolen or burnt, ...prior to provisional acceptance it will be on the tenderer responsibility if not insured ?

Answer 46: All the goods shall be under the responsibility of the Contractor until the provisional acceptance takes place. Please refer to Special Conditions Article 12 for the insurance.

Question 47: Special conditions: Article 32.2, “During the warranty period, the service will be assured by the contractor” Does it mean that all type of man power cost should be free of charge for any preventive maintenance (which should be done usually by the end user) or only for curative maintenance which means that warranty is covering spares and on site labour?

Answer 47: All type of man power cost should be free of charge during the warranty period.

Question 48: Lot 1 item 1.4 SO₂ monitor. Is it required to show the results in ppb and ppm and micrograms/m³? Please clarify if it will be accepted, for example if the value on the instrument display is milligrams/m³ with three digits after the decimal point (0.004mg/m³ which is 3 micrograms/m³) as being compliant with the technical specs? Same case with ppm, showing three digits after decimal point (0.003ppm which is 3ppb).

Answer 48: Regarding the concentration measured in ambient air, Beneficiary needs ppb and microgram/m³. Please refer to “Corrigendum to Tender” for the new specs.

Question 49: Lot 1 item 1.5 NO, NO₂ and NO_x monitor. Is it required to show the results in ppb and ppm and micrograms/m³? Please clarify if it will be accepted, for example if the value on the instrument display is milligrams/m³ with three digits after the decimal point (0.004mg/m³ which is 3 micrograms/m³) as being compliant with the technical specs? Same case with ppm, showing three digits after decimal point (0.003ppm which is 3ppb).

Answer 49: Regarding the concentration measured in ambient air, Beneficiary needs ppb and microgram/m³. Please refer to “Corrigendum to Tender” for the new specs.

Question 50: Lot 1 item 1.7 O₃ monitor. Is it required to show the results in ppm and micrograms/m³? Please clarify if it will be accepted, for example if the value on the instrument display is milligrams/m³ with three digits after the decimal point (0.004mg/m³ which is 3 micrograms/m³) as being compliant with the technical specs?

Answer 50: Regarding the concentration measured in ambient air, Beneficiary needs ppb and microgram/m³. Please refer to “Corrigendum to Tender” for the new specs.

Question 51: With all analyzers is it possible to use resistance on the connection point of the outputs to change 4-20mA outputs to 0-1volt analog output e.g. connecting to an external A/D card?

Answer 51: It is possible to change 4-20mA outputs to 0-1volt analog output e.g. connecting to an external A/D card.

Question 52: Annex VII, Grant of Facilities,

- a) Taxation and Customs Item 3. Please clarify if a local legal person (local company with establishment or fixed base in Turkey) is subject to VAT for the goods imported to Turkey for this project if it is awarded the project.
- b) Taxation and Customs Item 5. If the expenditures of a local legal person (local company with establishment or fixed base in Turkey) shall also be relieved from the Special Consumption Tax?

Answer 52: Provisions are clear. Participation in tendering is open on equal terms to all natural and legal persons of the Member States of the European Union, Turkey, EU Candidate Countries or the Beneficiary countries of the MEDA or CARDS programmes¹ Therefore any nationals of the said states and legal entities, companies or partnerships constituted under, and governed by, the civil, commercial or public law of such states and having their statutory office, central administration or principal place of business there, are subject to neither VAT nor SCT if awarded the EC contract.

Question 53: We would like to address our questions which are all related to - Annex-II Part1. "Technical Specifications". Please note, that they are sometimes related to more than one paragraph.

Par. 1.23 up to 1.28 (all servers in CDU):

- Backup tapes: "DAT" tapes are of type DDS5 which exist with 72GB max. only. Are there meant "streaming types" or please modify capacity
- Power supplies: There are sometimes 2*xyz W power supplies required, in coincidence with requirement of dual CPUs. Is there meant redundancy for failure of single plugin-unit or concerning power requirements for both CPUs
- pass mark specifications: sometimes there are, sometimes there are no requs. what's the reason for and under which configuration conditions and by which version of testing SW module (V3.5, 4.0 or 5.0 ?), reference tests will be done and compared to each other for better understanding: changing colour definitions changes spec results.

¹ **EU Member Countries** (Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, United Kingdom), **EU Candidate Countries** (Bulgaria, Croatia, Romania, Turkey), **MEDA Mediterranean Countries** (Algeria, Egypt, Gaza and West Bank, Israel, Jordan, Lebanon, Morocco, Syria, Tunisia), **CARDS Countries** (Albania, Bosnia and Herzegovina, Former Yugoslav Republic of Macedonia, Serbia and Montenegro).

- Mgmt. System topology (att. "B"): there three are "single points of failures" incorporated; please refer also to "Att. B mgmt. center drawing modified" as attached. When strictly bound to that proposal a high and costly amount od servers will be needed raising security holes and providing a higher risk of system availability and stability. We may propose different solution with as high as possible availability ratio on market since 11 years meanwhile (3.rd generation SW) - ok?

- Mgmt. System topology: security problem with access / Internet connections. When isolating WEB from CDU via firewall on one hand, one opens access via GPRS connection with either terminal server or central dispatching server on the other hand; we want to offer different, secure and fully redundant (!) solution - ok?

Par. 1.24 - Term. Server: "physical map on the wall (1.5 X 1.5 m.)" Does there exist already a map and if yes, which type of electrical connections are required / given

Par. 1.30 - LAN: topology. How should topology look like? What is cabling distance in between FO routers (at different floors); what about the totaling cable length per floor; how many outlets - per floor - will be required; why limiting transmission rate to 100MBs

Par. 1.33 - Training; requirements not clear at all. Since that is a rather intuitive "just read some data / presentation" application we do not understand necessity of training; please specify needs.

Par. 1.34 Data Mon.-2: Voice mail system. There is no specification for; is it to be supplied from scratch or does there exist one already - interconnection, mode of data transfer, etc required

Answer 53:

- **Dat tapes are changed to DLT type. Please refer to “Corrigendum to Tender” for details.**
- **Power Supplies: Redundant power supply for failure of single power supply (is meant).**
- **Passmark: The latest version of test should be run on the configuration offered for this tender.**
- **Mgmt. System topology (att. "B") equivalent of better solutions will be accepted.**
- **Mgmt. System topology equivalent of better solutions will be accepted.**
- **Par. 1.24 - Term. Server: There isn't an existing map on the wall.**
- **Par. 1.30 – LAN: All the system will be established on one floor. Floor plan is also published with the clarifications and corrigendum. There will be 24 outlets in one floor. Transmission rate is not limited to 100 MBs. This is the minimum value required, you can offer better rates. Please refer to “Corrigendum to Tender” for details**
- **Par. 1.33 – Training is required for general, preventive and corrective maintenance. Please refer to “Corrigendum to Tender” for details.**
- **Par. 1.34 Data Mon.-2: For extreme cases a warning sound is required. Please refer to “Corrigendum to Tender” for details.**

Question 54: We request you to provide the drawings and the detailed technical information for the required modifications in the vehicle.

Answer 54: Detailed information including the dimensions has already given in the technical specifications.