

TENDER: EUROPEAID/117373/D/S/TR

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

CORRIGENDUM TO TENDER

PROCUREMENT NOTICE

Article 15 – Period of Execution

Current text

The periods for the execution of the project shall be followed consequently and is summarized in the following table:

Lot No	Design	Delivery Period ¹	Testing Period ²	Provisional Acceptance
	(Calendar Days)	(Calendar Days)	(Calendar Days)	(Calendar Days)
1	30	180	60	30
2	N/A	120	60	30
3	N/A	30	N/A	30
4	N/A	60	N/A	30

New text

The periods for the execution of the project shall be followed consequently and is summarized in the following table:

Lot No	Design	Delivery Period ³	Testing Period ⁴	Provisional Acceptance
	(Calendar Days)	(Calendar Days)	(Calendar Days)	(Calendar Days)
1	30	180	60	30
2	N/A	120	60	30
3	N/A	90	N/A	30
4	N/A	120	N/A	30

¹ **Installation, putting into operation, calibration and training** where applicable shall be completed within the **delivery** period for all lots

² The functionality of the system including all software will be checked within test period after the delivery period shall be completed for both Lot-1 and Lot-2.

³ **Installation, putting into operation, calibration and training** where applicable shall be completed within the **delivery** period for all lots

⁴ The functionality of the system including all software will be checked within test period after the delivery period shall be completed for both Lot-1 and Lot-2.

Article 19 – Deadline for submission of tenders

Current text

Tenders must be received at the offices of the CFCU at the above address before **19 September 2005** at **12.00** hours local time.

Any tender received after this deadline will not be considered.

New text

Tenders must be received at the offices of the CFCU at the above address before **26 September 2005** at **12.00** hours local time.

Any tender received after this deadline will not be considered.

Article 20 – Tender opening session

Current text

14.00 Hours (local) on **19 September 2005** at the CFCU office at the address Ehlibeyt Mahallesi 6. Sokak No:16/8 Ekşioğlu İş Merkezi Kat 4 06520 Balgat/Ankara, TURKEY

New text

14.00 Hours (local) on **26 September 2005** at the CFCU office at the address Ehlibeyt Mahallesi 6. Sokak No:16/8 Ekşioğlu İş Merkezi Kat 4 06520 Balgat/Ankara, TURKEY

TENDER DOSSIER

INSTRUCTIONS TO TENDERERS

Fourth paragraph

Current text

We look forward to receiving your tender and the accompanying tender guarantee at the address specified in the Instructions to Tenderers before 19 September 2005, at 12:00 Hrs (local). If you decide not to submit a tender, we would be grateful if you could inform us in writing, stating the reasons for your decision.

New text

We look forward to receiving your tender and the accompanying tender guarantee at the address specified in the Instructions to Tenderers before 26 September 2005, at 12:00 Hrs

(local). If you decide not to submit a tender, we would be grateful if you could inform us in writing, stating the reasons for your decision.

Article 1.1

Current text

Lot-3

Delivery shall be completed within 30 calendar days from the contract signature by both parties; **provisional acceptance** shall take place within 30 calendar days after the delivery period.

Lot-4

Delivery shall be completed within 60 calendar days from the contract signature by both parties; **provisional acceptance** shall take place within 30 calendar days after the delivery period.

The periods for the execution of the project shall be followed consequently and are summarized in the following table:

Lot No	Design	Delivery Period ⁵	Testing Period ⁶	Provisional Acceptance
	(Calendar Days)	(Calendar Days)	(Calendar Days)	(Calendar Days)
1	30	180	60	30
2	N/A	120	60	30
3	N/A	30	N/A	30
4	N/A	60	N/A	30

New text

Lot-3

Delivery shall be completed within 90 calendar days from the contract signature by both parties; **provisional acceptance** shall take place within 30 calendar days after the delivery period.

Lot-4

Delivery shall be completed within 120 calendar days from the contract signature by both parties; **provisional acceptance** shall take place within 30 calendar days after the delivery period.

⁵ **Installation, putting into operation, calibration and training** where applicable shall be completed within the **delivery** period for all lots

⁶ The functionality of the system including all software will be checked within test period after the delivery period shall be completed for both Lot-1 and Lot-2.

The periods for the execution of the project shall be followed consequently and are summarized in the following table:

Lot No	Design	Delivery Period ⁷	Testing Period ⁸	Provisional Acceptance
	(Calendar Days)	(Calendar Days)	(Calendar Days)	(Calendar Days)
1	30	180	60	30
2	N/A	120	60	30
3	N/A	90	N/A	30
4	N/A	120	N/A	30

Article 2 – Timetable

Current text

	DATE	TIME*
Deadline for request for any clarifications from the Contracting Authority	29.August.2005	16:00 Hrs
Clarification meeting / site visit (if any)	N/A	N/A
Last date on which clarifications are issued by the Contracting Authority	08.September.2005	-
Deadline for submission of tenders	19.September.2005	12:00 Hrs
Tender opening session	19.September.2005	14:00 Hrs
Notification of award to the successful tenderer	17.October.2005 [⊗]	-
Signature of the contract	17.November.2005 [⊗]	-

* All times are in the time zone of the country of the Contracting Authority

⊗ Provisional date

New text

	DATE	TIME*
Deadline for request for any clarifications from the Contracting Authority	05.September.2005	16:00 Hrs
Clarification meeting / site visit (if any)	N/A	N/A
Last date on which clarifications are issued by the Contracting Authority	15.September.2005	-

⁷ Installation, putting into operation, calibration and training where applicable shall be completed within the **delivery** period for all lots

⁸ The functionality of the system including all software will be checked within test period after the delivery period shall be completed for both Lot-1 and Lot-2.

Deadline for submission of tenders	26.September.2005	12:00 Hrs
Tender opening session	26.September.2005	14:00 Hrs
Notification of award to the successful tenderer	24.October.2005 ^{es}	-
Signature of the contract	24.November.2005 ^{es}	-

Article 10 – Submission of Tenders

Current text

10.3 All tenders must be received at CFCU, Ankara -Turkey, before the deadline date and time, 19 September 2005, 12.00 hrs (local), by registered letter with acknowledgement of receipt or hand-delivered against receipt.

New text

10.4 All tenders must be received at CFCU, Ankara -Turkey, before the deadline date and time, **26 September 2005, 12.00 hrs (local)**, by registered letter with acknowledgement of receipt or hand-delivered against receipt.

Article 19 – Opening of Tenders

Current text

19.2 The tenders will be opened in public session on **19 September 2005 at 14:00 Hrs** (local) at Ehlibeyt Mahallesi 6.Sokak No:16/8 Ekşioğlu İş Merkezi Kat 4 06520 Balgat Ankara - Turkey by the committee appointed for the purpose. The committee will draw up minutes of the meeting, which shall be available on request.

New text

19.2 The tenders will be opened in public session on **26 September 2005 at 14:00 Hrs** (local) at Ehlibeyt Mahallesi 6.Sokak No:16/8 Ekşioğlu İş Merkezi Kat 4 06520 Balgat Ankara - Turkey by the committee appointed for the purpose. The committee will draw up minutes of the meeting, which shall be available on request.

DRAFT CONTRACT

Article 1.1

Current text

Lot-3

Delivery shall be completed within 30 calendar days from the contract signature by both parties; **provisional acceptance** shall take place within 30 calendar days after the delivery period.

Lot-4

Delivery shall be completed within 60 calendar days from the contract signature by both parties; **provisional acceptance** shall take place within 30 calendar days after the delivery period.

The periods for the execution of the project shall be followed consequently and are summarized in the following table:

Lot No	Design	Delivery Period ⁹	Testing Period ¹⁰	Provisional Acceptance
	(Calendar Days)	(Calendar Days)	(Calendar Days)	(Calendar Days)
1	30	180	60	30
2	N/A	120	60	30
3	N/A	30	N/A	30
4	N/A	60	N/A	30

New text

Lot-3

Delivery shall be completed within 90 calendar days from the contract signature by both parties; **provisional acceptance** shall take place within 30 calendar days after the delivery period.

Lot-4

Delivery shall be completed within 120 calendar days from the contract signature by both parties; **provisional acceptance** shall take place within 30 calendar days after the delivery period.

The periods for the execution of the project shall be followed consequently and are summarized in the following table:

Lot No	Design	Delivery Period ¹¹	Testing Period ¹²	Provisional Acceptance
	(Calendar Days)	(Calendar Days)	(Calendar Days)	(Calendar Days)

⁹ **Installation, putting into operation, calibration and training** where applicable shall be completed within the **delivery** period for all lots

¹⁰ The functionality of the system including all software will be checked within test period after the delivery period shall be completed for both Lot-1 and Lot-2.

¹¹ **Installation, putting into operation, calibration and training** where applicable shall be completed within the **delivery** period for all lots

¹² The functionality of the system including all software will be checked within test period after the delivery period shall be completed for both Lot-1 and Lot-2.

1	30	180	60	30
2	N/A	120	60	30
3	N/A	90	N/A	30
4	N/A	120	N/A	30

Article 1.4

Current text

The place of acceptance of the supplies shall be at the addresses specified in Attachment A to the Annex II – Technical Specifications; the time limits for delivery, installation, putting into operation, calibration and training where applicable of supplies shall be 210 calendar days for lot-1 (30 calendar days design period); 120 calendar days for lot-2, 30 calendar days for lot-3 and 60 calendar days for lot-4 from the contract signature by both parties and the Incoterm¹³ applicable shall be DDP. The delivery period shall run from the date of the signature of the contract by both Parties. There shall be a testing period, 60 calendar days for lot-1 and lot-2 after the delivery period shall be completed. Provisional Acceptance procedure shall be within 30 calendar days after the delivery, installation, putting into operation, calibration, training and testing where applicable of the supplies is completed.

New text

The place of acceptance of the supplies shall be at the addresses specified in Attachment A to the Annex II – Technical Specifications; the time limits for delivery, installation, putting into operation, calibration and training where applicable of supplies shall be 210 calendar days for lot-1 (30 calendar days design period); 120 calendar days for lot-2, 90 calendar days for lot-3 and 120 calendar days for lot-4 from the contract signature by both parties and the Incoterm¹⁴ applicable shall be DDP. The delivery period shall run from the date of the signature of the contract by both Parties. There shall be a testing period, 60 calendar days for lot-1 and lot-2 after the delivery period shall be completed. Provisional Acceptance procedure shall be within 30 calendar days after the delivery, installation, putting into operation, calibration, training and testing where applicable of the supplies is completed.

SPECIAL CONDITIONS

Article 13 Performance programme (timetable)

Current text

The following performance programme shall be applied:

2. The delivery, installation, putting into operation, calibration and training of supplies where applicable must be completed within 180 calendar days for lot-1

¹³ Incoterms 2000 published by the International Chamber of Commerce

¹⁴ Incoterms 2000 published by the International Chamber of Commerce

after the design period completed; 120 calendar days for lot-2, 30 calendar days for lot-3 and 60 calendar days for lot-4 starting from the date of signing the Contract by both parties, at the locations specified in point 1.7 of the Technical Specifications

New text

The following performance programme shall be applied:

2. The delivery, installation, putting into operation, calibration and training of supplies where applicable must be completed within 180 calendar days for lot-1 after the design period completed; 120 calendar days for lot-2, 90 calendar days for lot-3 and 120 calendar days for lot-4 starting from the date of signing the Contract by both parties, at the locations specified in point 1.7 of the Technical Specifications

ANNEX II – TECHNICAL SPECIFICATIONS

Article 1.4 – General training requirements

General training requirements for lot-1

Current text

Number of staff	Total duration	Necessary experts	Training subjects	Training place
10	30 (Working days)	Training by experts from the manufacturer (experienced with managing network) and Contractor	<ul style="list-style-type: none"> • Safety (this should underline all practically-oriented training) e.g. in handling heavy cylinders of toxic and/or inflammable gases; in installing and using mains powered equipment; • Theory and principles of the air quality monitoring system, • Installation, configuration, commissioning, and testing of equipment and software at the levels of stations, • Routine operation of the network, including <ul style="list-style-type: none"> ○ Daily and manual calibrations/checks, alarms, function checks, multi-point calibrations, linearity checks, converter efficiency checks, ○ Calibration of transfer standards against to primary standards in the central laboratory, ○ Calibration of the monitors at the stations against to transfer standard. ○ Gas phase titration method for converter 	RSCH or in the places where the equipment are installed or in the places that the Contractor shall propose and RSCH shall approve.

			<p>efficiency checks.</p> <ul style="list-style-type: none"> ○ Data management (database, back-up, data transfer, data handling, data evaluation, data validation, data ratification etc), ○ Handling of meteorological sensors and data, ● Measurement uncertainty at the stations and the laboratory and sources of errors, ● Development of standard operating procedures and manuals, ● Quality control, quality assurance and audit procedures at the stations and in the laboratory, ● Statistical treatment of data, ● Graphical presentations, using the software supplied, ● Development of internet presentations, ● Use of public information systems, ● Trouble shooting, ● Planned and emergency (breakdown) maintenance and minor and major repairs to the equipment and software, (aspects relating to specific equipment such as monitors and samplers must be manufacturer's approved or delivered courses), ● Software development and upgrading. 	
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New text

Number of staff	Total duration	Necessary experts	Training subjects	Training place
4	32 (Working days)	Training by experts from the manufacturer (experienced with managing network) and Contractor	<ul style="list-style-type: none"> ● Safety (this should underline all practically-oriented training) e.g. in handling heavy cylinders of toxic and/or inflammable gases; in installing and using mains powered equipment; ● Theory and principles of the air quality monitoring system, ● Installation, configuration, commissioning, and testing of equipment and software at the levels of stations, ● Routine operation of the network, including <ul style="list-style-type: none"> ○ Daily and manual calibrations/checks, alarms, function checks, multi-point 	RSCH or in the places where the equipment are installed or in the places that the Contractor shall propose and RSCH

			<p>calibrations, linearity checks, converter efficiency checks,</p> <ul style="list-style-type: none"> ○ Calibration of transfer standards against to primary standards in the central laboratory, ○ Calibration of the monitors at the stations against to transfer standard. ○ Gas phase titration method for converter efficiency checks. ○ Handling of meteorological sensors and data, • Measurement uncertainty at the stations and the laboratory and sources of errors, • Development of standard operating procedures and manuals, • Quality control, quality assurance and audit procedures at the stations and in the laboratory, • Statistical treatment of data, • Graphical presentations, using the software supplied, • Development of internet presentations, • Use of public information systems, • Trouble shooting, • Planned and emergency (breakdown) maintenance and minor and major repairs to the equipment and software, (aspects relating to specific equipment such as monitors and samplers must be manufacturer's approved or delivered courses), 	shall approve.
2	15 (working days)	Training by experts from the manufacturer (experienced with managing network) and Contractor	<ul style="list-style-type: none"> • This training is required for technical persons. Scope of this training will be software maintenance and database management. 	

Article 1.4 – General training requirements for lot-2

Current text

Number of staff	Total duration	Necessary experts	Training subjects	Training place
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4	20 (Working days)	Training by experts from the Contractor	<ul style="list-style-type: none"> • Theory and principles of the equipment, • Installation, configuration, commissioning, and testing of equipment and software. • Operation of the equipment • Calibrations/checks, alarms, functional checks, etc. • Software • Method applications • Safety • Development of standard operating procedures and manuals, • Quality control, quality assurance and audit procedures, • Statistical treatment of data, • Graphical presentations, using the software supplied, • Troubleshooting, • Planned and emergency (breakdown) maintenance and minor and major repairs to the equipment and software, (aspects relating to specific equipment must be manufacturer's approved or delivered courses), • Data handling, data evaluation and data validation 	RSCH or in the places where the equipment are installed or in the places that the Contractor shall propose and RSCH shall approve.
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New text

Number of staff	Total duration	Necessary experts	Training subjects	Training place
4	17 (Working days)	Training by experts from the Contractor	<ul style="list-style-type: none"> • Theory and principles of the equipment, • Installation, configuration, commissioning, and testing of equipment and software. • Operation of the equipment • Calibrations/checks, alarms, functional checks, etc. • Software • Method applications • Safety • Development of standard operating 	RSCH or in the places where the equipment are installed or in the places that the Contractor shall propose

			procedures and manuals, <ul style="list-style-type: none"> • Quality control, quality assurance and audit procedures, • Statistical treatment of data, • Graphical presentations, using the software supplied, • Troubleshooting, • Planned and emergency (breakdown) maintenance and minor and major repairs to the equipment and software, (aspects relating to specific equipment must be manufacturer's approved or delivered courses), • Data handling, data evaluation and data validation 	and RSCH shall approve.
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1.7. Delivery and Installation of the Equipment

Current text

Lot-3

Delivery shall be completed within 30 calendar days from the contract signature by both parties; **provisional acceptance** shall take place within 30 calendar days after the delivery period.

Lot-4

Delivery shall be completed within 60 calendar days from the contract signature by both parties; **provisional acceptance** shall take place within 30 calendar days after the delivery period.

New text

Lot-3

Delivery shall be completed within 90 calendar days from the contract signature by both parties; **provisional acceptance** shall take place within 30 calendar days after the delivery period.

Lot-4

Delivery shall be completed within 120 calendar days from the contract signature by both parties; **provisional acceptance** shall take place within 30 calendar days after the delivery period.

Item 1.1 – Shelters for stations

Current text

Housing Requirements	Container	Roof: Rainproof. Design of roof to avoid entrance of rain, snow and humidity must be documented in the tenderer's proposal (including wall/roof joints and, Additional aluminium-sheet for water and sun protection)
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New text

Housing Requirements	Container	Roof: Rainproof. Design of roof to avoid entrance of rain, snow and humidity must be documented in the tenderer's proposal (including wall/roof joints and, Additional aluminium-sheet or equivalent for water and sun protection)
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Item 1.4 – SO₂ Monitor

Current text

Unit	µg/m ³ , ppb, ppm
Permeation Oven	Temperature : 305-540 °C (adjustable)

New text

Unit	ppb and microgram/m ³
Permeation Oven	Temperature : 30-40 °C

Item 1.5 – NO, NO₂, NO_x Monitor

Current text

Unit	µg/m ³ , ppb, ppm
Permeation Oven	Temperature : 305-540 °C (adjustable)

New text

Unit	ppb and microgram/m ³
Permeation Oven	Temperature : 30-40 °C

Item 1.7 – O₃ Monitor

Current text

Unit	µg/m ³ , ppm
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New text

Unit	ppb and microgram/m ³
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Item 1.8 – PM₁₀ Monitor

Current text

Operation principle	Beta-ray absorption
Filter type	Glass fibre tape
Calibration	Manually with PM ₁₀ mass foil calibration kit and/or automatically with a reference membrane in the measurement path
Beta ray source	C14, <100 µCi
Period of unattended operation	Minimum 14 days by using automatic filter change

New text

Operation principle	Beta-ray absorption, oscillating microbalance or other equivalent methods
Filter type	Glass fibre tape, teflon coated glass fibre (Pallflex) or other relevant equivalent fibres
Calibration	For beta radiation, manually with PM ₁₀ mass foil calibration kit and/or automatically with a reference membrane in the measurement path. For oscillating microbalance, with pre-weighed calibration filters. For other equivalent methods, other relevant calibration materials
Beta ray source	For beta radiation, C14, <100 µCi. For oscillating microbalance, not applicable
Period of unattended operation	Minimum 14 days (for beta radiation) by using automatic filter change

Item 1.9 – PM_{2.5} Monitor

Current text

Operation principle	Beta-ray absorption
Filter type	Glass fibre tape
Calibration	Manually with PM _{2.5} mass foil calibration kit and/or automatically with a reference membrane in the measurement path
Beta ray source	C14, <100 µCi
Period of unattended operation	Minimum 14 days by using automatic filter change

New text

Operation principle	Beta-ray absorption, oscillating microbalance or other equivalent methods
Filter type	Glass fibre tape, teflon coated glass fibre (Pallflex) or other relevant equivalent fibres

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. For other equivalent methods, other relevant calibration materials
Beta ray source	For beta radiation, C14, <100 µCi. For oscillating microbalance, not applicable
Period of unattended operation	Minimum 14 days (for beta radiation) by using automatic filter change operation

Item 1.13 – Set of Calibration Unit for RSCH

Current text

General	<p>The tenderer must offer a high precision calibration system for RSCH for SO₂, NO_x, O₃ and CO. The system must be complete with a set of all necessary connections to cylinders etc, built-in pump and ozone generator, mixing chamber, mass flow controllers and flow meters, using Central primary zero air and gas standards.</p> <ul style="list-style-type: none"> • Linearity control and multi-point calibrations on RSCH' s own monitors; • Converter efficiency checks of NO_x monitors (gas phase titration of NO with ozone) • Calibration of audit gas and zero air cylinders; and initial calibration of station calibration gases.
	NO_x Dilution with GPT

New text

General	<p>The tenderer must offer a high precision calibration system for RSCH for SO₂, NO_x, O₃ and CO. The system must be complete with a set of all necessary connections to cylinders etc, built-in pump and ozone generator, mixing chamber, mass flow controllers and flow meters, using Central primary zero air and gas standards.</p> <ul style="list-style-type: none"> • Linearity control and multi-point calibrations on RSCH' s own monitors; • Converter efficiency checks of NO_x monitors (gas phase titration of NO with ozone) • Calibration of audit gas and zero air cylinders; and initial calibration of station calibration gases. • Calibration gases will be generated simultaneously, but it should be possible to select single gases at a time.
	NO_x Dilution with GPT (GPT reactions will be controlled by software)
Mass Flow Controllers	Should be separate for each channel for each component

Item 1.14 – Set of Transfer Standards for Calibration (Portable)

Current text

General	The RSCH should contain all items necessary for transfer standards for the calibration of the monitoring instruments of the monitoring sites according to the requests of the EC Directives, ISO norms.	
	The portable calibrator will be used for the purpose of linearity and multipoint calibrations, using each station's zero air generator and transfer gas cylinders and permeation tubes as sources.	
	It must have a built-in pump and ozone generator, a mixing chamber, mass flow controllers and flow meters.	
	For control of the converter efficiency in NO _x monitors, a gas phase titration facility must be included in the portable calibrators.	
	Permeation tubes and ovens are additionally required for the portable calibrators.	
	The materials of construction must be inert.	
	Portable calibrator must be supplied with a complete set of all necessary connections to cylinders, monitors etc.	
	The Supplier shall recommend and deliver all necessary calibration gases with two -stage pressure reducers and permeation tubes for proper calibration of the monitors offered.	
	The assay of the calibration gas cylinders and permeation tubes must be an NIST/EPA approved gas manufacturer's CRM.	
NO _x Transfer Standard	Principle	NO – dilution with GPT – system for converter efficiency check at the stations.

New text

General	The RSCH should contain all items necessary for transfer standards for the calibration of the monitoring instruments of the monitoring sites according to the requests of the EC Directives, ISO norms.	
	The portable calibrator will be used for the purpose of linearity and multipoint calibrations, using each station's zero air generator and transfer gas cylinders and permeation tubes as sources.	
	It must have a built-in pump and ozone generator, a mixing chamber, mass flow controllers and flow meters.	
	For control of the converter efficiency in NO _x monitors, a gas phase titration facility must be included in the portable calibrators.	
	Permeation tubes and ovens are additionally required for the portable calibrators.	
	The materials of construction must be inert.	
	Portable calibrator must be supplied with a complete set of all necessary connections to cylinders, monitors etc.	
	The Supplier shall recommend and deliver all necessary calibration gases with two -stage pressure reducers and permeation tubes for proper calibration of the monitors offered.	

	The assay of the calibration gas cylinders and permeation tubes must be an NIST/EPA approved gas manufacturer's CRM.	
	Set of transfer standards for calibration will be a separate unit for each gas.	
NO _x Transfer Standard	Principle	NO – dilution with GPT – system for converter efficiency check at the stations. (Gpt reactions will be controlled by software)

Item 1.21 Station Computer for Data Acquisition

Current text

Software	Windows XP PRO SP2 Turkish (with eight (8) user licences) MS Office 2003 Professional Turkish (with eight (8) user licences) Full antivirus package with at least two (2) years updates (with eight (8) user licences)
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New text

Software	Windows XP PRO SP2 Turkish or equivalent in terms of functionality (with eight (8) user licences) MS Office 2003 Turkish or equivalent in terms of functionality (with eight (8) user licences) Full antivirus package with at least two (2) years updates (with eight (8) user licences)
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1.22. Laptop Computer for Maintenance

Current text

Software	Windows XP PRO SP2 Turkish (with three (3) user licences) MS Office 2003 Professional Turkish (with three (3) user licences) Full antivirus package with at least two (2) years updates (three (3) user licences)
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New text

Software	Windows XP PRO SP2 Turkish or equivalent in terms of functionality (with three (3) user licences) MS Office 2003 Turkish or equivalent in terms of functionality (with three (3) user licences) Full antivirus package with at least two (2) years updates (three (3) user licences)
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1.23. Powerful Server Computer for Central Dispatching Unit (CDU)

Current text

Software	Windows 2003 Server Antivirus package with 2 years updates Backup Software
Backup Solution	100/200GB DAT

New text

Software	Windows 2003 Server or equivalent in terms of functionality Antivirus package with 2 years updates Backup Software
Backup Solution	100/200GB DLT type or equivalent

Item 1.24 – Powerful Terminal Server Computer for Communication and Networking

Current text

Backup Solution	100/200GB DAT
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New text

Backup Solution	N/A
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Item 1.25 – Powerful Internet Server Computer for CDU

Current text

Backup Solution	100/200GB DAT
Software	Windows 2003 Server Antivirus package with 2 years updates

New text

Backup Solution	N/A
Software	Windows 2003 Server or equivalent in terms of functionality Antivirus package with 2 years updates

1.26. Computer for Parameterization and Network Monitoring for CDU

Current text

Software	Windows XP PRO SP2 MS Office 2003 Professional Turkish Adobe Acrobat 7.0 Professional Full anti Virus Package with 2 year updates.
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New text

Software	Windows XP PRO SP2 or equivalent in terms of functionality MS Office 2003 Turkish or equivalent in terms of functionality Adobe Acrobat 7.0 Professional Full anti Virus Package with 2 year updates.
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1.27. Computer for Data Handling and Reporting for CDU

Current text

Software	Windows XP PRO SP2 (with two (2) user licences) MS Office 2003 Professional Turkish (with two (2) user licences) Full antivirus package with at least two (2) years updates (three (3) user licences)
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New text

Software	Windows XP PRO SP2 or equivalent in terms of functionality (with two (2) user licences) MS Office 2003 Turkish or equivalent in terms of functionality (with two (2) user licences) Full antivirus package with at least two (2) years updates (three (3) user licences)
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1.28. Firewall-Computer with 3 network cards for CDU

Current text

Software	Windows 2003 Server Full antivirus package with at least two (2) years updates See also item 1.29
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New text

Software	Windows 2003 Server or equivalent in terms of functionality Full antivirus package with at least two (2) years updates See also item 1.29
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1.30 – Local Area Network (LAN) [including 2 LAN switches (each 24 ports)]

Current text

General	All cabling and plugs to provide connectivity of all client PCs in RSCH with the server in the CDU in RSCH.
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	<p>Minimum CAT 5 cabling</p> <p>Fibre optic between LAN switches of different floors</p> <p>10/100 network interface cards</p> <p>Cabling has to be prepared for 100 MB communication.</p>
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New text

General	<p>All cabling and plugs to provide connectivity of all client PCs in RSCH with the server in the CDU in RSCH.</p>
	<p>Minimum CAT 5 cabling</p> <p>Fibre optic between LAN switches of different floors</p> <p>10/100 network interface cards</p> <p>Cabling has to be prepared for 100 MB communication.</p>
	<p>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)</p>
	<p>24 outlets is required in one floor</p>

1.30 – GPRS Modems

Current text

General	<p>Modem is required which allows all the required data transfer (transmission, and reception) to occur via GPRS between (a) monitoring stations (b) RSCH, CDU and (c) public display units</p> <p>Compatible with Avea, Turkcell, Telsim</p>
	<p>The tenderer should take into account, when designing the air quality monitoring network's interfaces for data communication, the fact that it is currently planned to use, in the future, satellite data transfers from regional monitoring centres to Central Laboratory and elsewhere. This possible satellite communication path should be investigated and a plan to upgrade the central dispatching unit to allow future satellite communication must be provided.</p>
	<p>Because the future option for satellite communication has not yet been fully defined, no supply of hardware (such as a modem) solely dedicated to this communication path is included in this present tender dossier.</p>

	However, software supplied should allow efficient links to the likely software of the future satellite communication path.
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New text

General	Modem is required which allows all the required data transfer (transmission, and reception) to occur via GPRS between (a) monitoring stations (b) RSCH, CDU and (c) public display units Compatible with Avea, Turkcell, Telsim
	The tenderer should take into account, when designing the air quality monitoring network's interfaces for data communication, the fact that it is currently planned to use, in the future, satellite data transfers from regional monitoring centres to Central Laboratory and elsewhere. This possible satellite communication path should be investigated and a plan to upgrade the central dispatching unit to allow future satellite communication must be provided.
	Because the future option for satellite communication has not yet been fully defined, no supply of hardware (such as a modem) solely dedicated to this communication path is included in this present tender dossier.
	However, software supplied should allow efficient links to the likely software of the future satellite communication path.
	The beneficiary will use a private GPRS network within a phone company. The beneficiary will sign a contract with the GPRS service

1.32. Public Information Display Boards (Outdoor units)

Current text

Specifications	Title of the Institution, web site address, pollutant names and their units, the words of date, hour and outdoor temperature will be permanent text. The name of the locations, the number of dates, hour and minutes, temperatures, pollutant concentrations shall be of variable text. Each page shall be for one location. Display shall be scrolling to the other locations (for 8 stations) within certain times. The panel shall, using numeric figures, display the average measurement of the pollutants measured on-line together with their corresponding EU limit value. .
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New text

Specifications	Title of the Institution, web site address, pollutant names and their units (SO2 (hourly-microgram/m3), NO2 (hourly-microgram/m3), O3
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	<p>(hourly-microgram/m3), CO (hourly-miligram/m3), PM10 (daily-microgram/m3), PM2.5 (daily-microgram/m3)), the words of date, hour and outdoor temperature will be permanent text. The name of the locations, the number of dates, hour and minutes, temperatures, pollutant concentrations shall be of variable text. Each page shall be for one location. Display shall be scrolling to the other locations (for 8 stations) within certain times.</p> <p>The panel shall, using numeric figures, display the average measurement of the pollutants measured on-line together with their corresponding EU limit value. .</p>
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1.33. Public Information Display Boards (Indoor units)

Current text

Training	<p>General Training Requirements (Annex II, Section 1.4) apply at the site of installation</p> <p>at the least 4 members of the Beneficiary’s laboratory staff</p> <p>directly after installation</p> <p>at least 1 day</p>
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New text

Training	<p>General Training Requirements (Annex II, Section 1.4) apply</p> <p>Training for general, preventive and corrective maintenance at the site of installation</p> <p>at the least 4 members of the Beneficiary’s laboratory staff</p> <p>directly after installation</p> <p>at least 1 day</p>
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1.34. Set of Data Acquisition and Management Software

Current text

General	<p>The software shall be PC based and run on Windows with use of a SQL database or equivalent.</p>
	<p>All of the computers in the project should have the same version of operating system. The computers shall have the latest version of MS Windows, MS Office and Norton Antivirus and Utilities. Any commercial software used –common purpose or specialized, should be delivered with appropriate license(s) in the name of the Beneficiary.</p>

	<p>Any custom developed software should as far as possible have been professionally developed, be user friendly and reliable in operation. In order to retain the system integrity a special attention should be paid to the handling of exceptional situations (link congestion and failures, software hang-up in interconnected stations, power fails, etc.). This software should be at the maximum compatible (by formats, protocols etc.) with commercial general- purpose software for word-processing, spreadsheet, database, GIS and data exchange purposes.</p> <p>The warranty over the system should cover the correction of any fault, which may occur in the custom software.</p>
<p>Data acquisition and control</p>	<p>Receive and collect, compile and store data from all sensors of the monitoring station</p> <p>Build hourly mean values (hmv) of all sensors</p> <p>Build one minute mean values (mmv) if requested</p> <p>Monitor the container status and errors</p> <p>Monitor the instrument status and operation control (device status and errors etc.)</p> <p>Scaling the measured values with pre-set factors</p> <p>For each hmv and mmv a validation information must be generated</p> <p>Plausibility checks (signal range, limit check, etc.)</p> <p>Control the cyclic function check of monitoring instruments within pre-set time periods</p> <p>Saving the function check values</p> <p>Possibility to initiate a function control and other commands</p> <p>Collecting and saving averaged values and other information for a time period of 30 days at minimum</p> <p>Output of collected data and other information by communication with a portable computer</p> <p>bi-directional communication</p> <p>PC should have the same operating system as the other PCs in the central unit (RSCH).</p>
<p>Data Monitoring</p>	<ul style="list-style-type: none"> • Status of data transmission from the station (last connection, last transmitted measuring value, last time stamp for results exceeding relevant limit/threshold values) • Status of data distribution (to public information panels, internet, other partners in the network) • Display of time series of last 48 hours for each parameter in each monitoring station • Display of messages (system messages as well as alarms), up to last 1000 entries. • Display actual limit violations (for example: highlighted or blinking station node). on a static or dynamic map. • Analysis wind polar, wind rose, pollution rose, percentile, air pollution index, histogram etc. • Area maps, dynamic display tabular

	<ul style="list-style-type: none"> • Supplied option for GIS oriented display with on line data supporting raster (TIF images) and vectorial maps • Limit overpass alarms via SMS, fax, e-mail and voice information system • Bi-directional system for on-line QA Control, on-line Quality assurance checking of incoming data (low/high limit for specific period, peak and continues values testing) • The operator of the network should have the option of requesting explicitly instantaneous data from the monitoring sites (spontaneous call). The status of the call should be displayed. • The system should provide the possibility, that up to two monitoring stations within the same network are monitored simultaneously for "instantaneous air quality data" and "instantaneous status" for a pre settable and limited time interval.
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New text

General	The software shall be PC based with use of a RDBMS or equivalent.
	<p>All of the computers in the project should have the same version of operating system. Any commercial software used –common purpose or specialized, should be the latest version and should be delivered with appropriate license(s) in the name of the Beneficiary.</p> <p>Any custom developed software should as far as possible have been professionally developed, be user friendly and reliable in operation. In order to retain the system integrity a special attention should be paid to the handling of exceptional situations (link congestion and failures, software hang-up in interconnected stations, power fails, etc.). This software should be at the maximum compatible (by formats, protocols etc.) with commercial general- purpose software for word-processing, spreadsheet, database, graphics, GIS and data exchange purposes.</p> <p>The warranty over the system should cover the correction of any fault, which may occur in the custom software.</p>
Data acquisition and control	Receive and collect, compile and store data from all sensors of the monitoring station
	Build hourly mean values (hmv) of all sensors
	Build one minute mean values (mmv) if requested
	Monitor the container status and errors
	Monitor the instrument status and operation control (device status and errors etc.)
	Scaling the measured values with pre-set factors
	For each hmv and mmv a validation information must be generated
	Plausibility checks (signal range, limit check, etc.)
	Control the cyclic function check of monitoring instruments within pre-set time periods
	Saving the function check values
	Possibility to initiate a function control and other commands

	Collecting and saving averaged values and other information for a time period of 30 days at minimum
	Output of collected data and other information by communication with a portable computer
	bi-directional communication
Data Monitoring	<ul style="list-style-type: none"> • Status of data transmission from the station (last connection, last transmitted measuring value, last time stamp for results exceeding relevant limit/threshold values) • Status of data distribution (to public information panels, internet, other partners in the network) • Display of time series of last 48 hours for each parameter in each monitoring station • Display of messages (system messages as well as alarms), up to last 1000 entries. • Display actual limit violations (for example: highlighted or blinking station node). on a static or dynamic map. • Analysis wind polar, wind rose, pollution rose, percentile, air pollution index, histogram etc. • Area maps, dynamic display tabular • Supplied option for GIS oriented display with on line data supporting raster (TIF images) and vectorial maps • Limit overpass alarms via SMS, fax, e-mail and warning sound for extreme cases. • Bi-directional system for on-line QA Control, on-line Quality assurance checking of incoming data (low/high limit for specific period, peak and continues values testing) • The operator of the network should have the option of requesting explicitly instantaneous data from the monitoring sites (spontaneous call). The status of the call should be displayed. • The system should provide the possibility, that up to two monitoring stations within the same network are monitored simultaneously for "instantaneous air quality data" and "instantaneous status" for a pre settable and limited time interval.

2.1. Thermal Desorber - Gas Chromatography with PID and FID Detectors

Current text

Computer Workstation	Software	Windows XP PRO SP2 Turkish MS Office 2003 Professional Turkish Full antivirus package with 2 years updates
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New text

Computer Workstation	Software	Windows XP PRO SP2 Turkish or equivalent in terms of functionality MS Office 2003 Turkish or equivalent in terms of functionality Full antivirus package with 2 years updates
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2.4 – Balance Room with Controlled Temperature and Humidity Provision

Current text

Specifications	Adapting of the floor and ceiling (e.g. epoxy painting or covering with anti-static material)
	Adapting of the walls (e.g. ceiling, epoxy painting or covering with anti-static material)
	Adapting of the doors.
	New laying of wires and tubes
	Electrical installations (electrical circuit) (Should operate from 220 ±10% V, 50 Hz power supply)
	There should be positive pressure inside the room.

New text

Specifications	Adapting of the floor and ceiling (e.g. epoxy painting or covering with anti-static material)
	Adapting of the walls (e.g. ceiling, epoxy painting or covering with anti-static material)
	Adapting of the doors.
	New laying of wires and tubes
	Electrical installations (electrical circuit) (Should operate from 220 ±10% V, 50 Hz power supply)
	There should be positive pressure inside the room.
	Painting shall be water proof
	Entrance Door shall be good isolated
	The filter specifications should consider the fact that this room will be used for the weighing of very small particulate matter concentrations (for PM ₁₀ and PM _{2.5}) any influence of the air conditioning system through the particles from this machine should be reduced.