



Corrigendum No.2 to the Tender Dossier

Strengthening Public Revenues

EC/BIH/12/021; EuropeAid/133400/DH/SUP/BA

Following changes in the **Annex II, Technical Specifications and Annex III, Technical offer** have been made, as listed below:

1) Lot No. 1 – Servers and other IT equipment; Item 1.10.1. POINT TO MULTI – POINT (PtMP) EQUIPMENT

Text from the column Quantity:

25 pairs (25 base stations + 25 CPE)

is deleted and replaced with the following text:

25

2) Lot No. 1 – Servers and other IT equipment; Item 1.10.1. POINT TO MULTI – POINT (PtMP) EQUIPMENT

Text:

POINT TO MULTI – POINT (PtMP) EQUIPMENT:

Base station: 3.6 GHz:

uplink: 3,600 – 3,700 MHz

downlink: 3,700 – 3,800 MHz

3,600 – 3,700 MHz

CPE: 3.6 GHz: uplink: 3,600 – 3,700 MHz

downlink: 3,700 – 3,800 MHz

3,600 – 3,700 MHz

Radio Access Method: FDD, full duplex

Modulation:

OFDM 256 FFT, with adaptive sub - carrier modulation

BPSK, QPSK, QAM 16, QAM 64

Non-line-of-sight (NLOS)

working functionality: Yes

Channel bandwidth: 3.5 MHz; 1.75 MHz; 7 MHz; Software-configurable

Duplexing Scheme:

AU (Access Unit): full duplex

SU (Subscriber Unit): half duplex

Central frequency resolution: 125 KHz

Antenna (CPE): 18 dBi, 20°, vertical and horizontal polarization, according with standard TSI EN 302 085 V1.1.2 TS3

Maximum output power (antenna Port):

AU (Access Unit): min. 28 dBm (+/- 1dBm)

SU (Subscriber Unit): min. 20 dBm (+/- 1dBm)

Sensibility (typical values):

For highest modulation (QAM 64) @ 3.5/1.75/7 MHz: -82/-85/-79 dBm

For lowest modulation (BPSK)@ 3.5/1.75/7 MHz:

-100/-103/-97 dBm

Data communication:

Data: IEEE 802.3 CSMA/CD,

Air Interface: IEEE 802.16a,

VLAN supported: IEEE 802.1q,

Traffic classification: Layer 2 IEEE 802.1p,

IP DiffServ CodePoints DSCP

Indoor unit module:

Ethernet interface: one (1) IEEE 802.3 Ethernet 10/100 Base-T (RJ 45)

MAC addresses supported: 512

Connection - outdoor unit: Cat 5E Ethernet cable

Power supplying: (-40.5 V to 60 V over 3 W 3 - power connector)with signal control toward outdoor unit

Reception status indication: From outdoor unit

Configuration and management:

- Local Management via Ethernet Port:
Telnet, Built-in web server configuration (using PC or PDA with http browser)
- Remote management: via Base Station
- Software upgrade:
using TFTP over Base Station
using TFTP over Ethernet Port
Configuration upload/download:
using TFTP over Base Station
using TFTP over Ethernet Port

Temperature range:

Outdoor Unit:-40°C to 55°C

Indoor Unit: 0°C to 40°C

NOTE: SDH CPE device with integrated Indoor/Outdoor unit could be offered as unique device for outdoor installation if all functionality defined above is included.

The proposed system must include minimum warranty from the manufacturer at a period of 1 year for all hardware and software

is deleted and replaced with the following text:

POINT TO MULTI – POINT (PtMP) EQUIPMENT:

CPE (Customer Premise Unit): 3600 MHz – 3800 MHz

Radio Access Method: TDD, symmetrical and asymmetrical UL/DL (Uplink/Downlink) transport must be available

Modulation: OFDM, with adaptive sub - carrier modulation BPSK, QPSK, QAM 16, QAM 64

Max net aggregate capacity: min. 20Mbps

Channel bandwidth: 5 MHz; 10 MHz; 20 MHz;

Central frequency resolution: 250 KHz

IDU- ODU communication: PoE (Power Over Ethernet) supported

Indoor unit module:

- Ethernet interface: 1xRJ-45 port, min.10/100BaseT
- VLAN: IEEE 802.1Q and IEEE 802.1ad (QinQ) QoS
- Connection - outdoor unit: Cat 5E Ethernet cable
- Power supplying: (-40.5 V to 60 V over 3 w 3 power connector) with signal control toward outdoor unit.

Max distance: min. 40 km

Non-line-of-sight (NLOS)

working functionality: Yes

CPE (Customer Premise Unit) units must have support for aggregated Ethernet of minimum 20 Mbps for certain locations.

CPE units must be available in one of following form:

- with integrated ODU and flat panel antenna,
- with external directional antenna (connected to ODU via coaxial cable)

Integrated antennas must have minimal gain of 20 dBi, polarization V/H

Following directional antennas for CPE ODU in external form must be available:

- Flat panel antenna 1,2 feet, 21 dBi gain, 3.3-3.8 GHz, polarization V/H
 - Parabolic (dish) antenna 2 feet, 25 dBi gain, 3.3-3.8 GHz, polarization V/H
- CPE units must have ability of defining identification of belonging BS (Base Station). Optionally, CPE units must support mode of operation for automatic connectivity to the best available BS.

The proposed CPE units must include minimum warranty from the manufacturer at a period of one (1) year for all hardware and software.

3) Lot No. 1 – Servers and other IT equipment; Item 1.10.3. Operational configuration, integration and customization of items 1.10.1 and 1.10.2

The following text is **added**:

In order to accomplish configuration, integration and customization service (1.10.3.) it is necessary for equipment under item 1.10.1. to be adjusted in a way to assure full compatibility of offered equipment to existing IDDEEA's wireless network access infrastructure including frequency range (stated under requirements 1.10.1., describing Base station) and technical criteria (stated under requirements 1.10.1.).

4) Lot No. 1 – Servers and other IT equipment; Item 1.5.

Text:

1x HN689E HP 3Y 4h 13x5 P6300 Encl HW Supp

is deleted and replaced with the following text:

HP 3yr Foundation Care 24x7 with Next Business Day Response

5) Lot No. 1 – Servers and other IT equipment; Item 1.8 L2 Switch 24 port

The following text is **deleted**:

Switching bandwidth: min 32Gbps

6) Lot No. 1 – Servers and other IT equipment; Item 1.9 L2 Switch 8 port

The following text is **deleted**:

Switching bandwidth: min 10Gbps

7) Lot No. 3 – Laptop; Item 3.1 Notebooks – Type A #1

The following text is **added**:

The better/new generation of laptop is acceptable.

8) Lot No. 3 – Laptop; Item 3.2 Notebooks – Type B #1

The following text is **added**:

The better/new generation of laptop is acceptable.

9) Lot No. 1 – Servers and other IT equipment; Item 1.3 Server #3 and Item 1.33 Server #3a

The following text is **deleted**:

PCI-E/X Slot: 2 x PCI-X

10) Lot No. 1 – Servers and other IT equipment; Item 1.29 Web Security Appliance with Software

Text:

- Dynamic vectoring and Streaming (DVS) engine

is deleted and replaced with the following text:

- Talos security intelligence

11) Lot No. 1 – Servers and other IT equipment; Item 1.31 Security Gateway – Virtual (bundle) #2

Text:

- Should to be supported virtual environment: Software described in item 1.8

is deleted and replaced with the following text:

- Should to be supported virtual environment: Software described in item 1.7

12) Lot No. 1 – Servers and other IT equipment; Item 1.29 Web Security Appliance with Software

When it comes to the software license for Item 1.29 Web Security Appliance that must be provided in the offer and included in the price of the offer, requirement “unlimited duration” is not applicable.

13) point 5. Working Conditions and Safety Requirements

Text specified under Point 5.1:

temperature range of 10°C – 40°C

is deleted and replaced with the following text:

temperature range of 10°C – 35°C

13) Lot No. 1 – Servers and other IT equipment; Item No 1.4 Server #4, Memory protection

The following text is **deleted**:

Lockstep mode

14) Lot No. 1 – Servers and other IT equipment; Item no. 1.12. L3 Router #2, Interfaces:

Text :

USB: 2 x 4 pin USB Type A

is deleted and replaced with the following text:

USB: min. 1x4 pin USB type A

15) Lot No. 1 – Servers and other IT equipment; Item 1.3 Server #3, Network

Text:

Integrated Quad (4) Port Multifunctional Gigabit Server Adapter TCP / IP Offload Engine, and has a support for Accelerated iSCSI min 2".

is deleted and replaced with the following text:

Minimum 2 network controllers: Integrated Quad (4) Port Multifunctional Gigabit Server Adapter TCP / IP Offload Engine, and has a support for Accelerated iSCSI.

16) Lot No. 1 – Servers and other IT equipment; Item no. 1.6. Communication rack

Text:

max height: 2000 mm

is deleted and replaced with the following text:

max height: 2000 mm (+/- 5% variation)

17) Lot No. 1 – Servers and other IT equipment; Item no. 1.13. External HDD

Text:

eSATA

is deleted and replaced with the following text:

SATA

18) Lot No. 1 – Servers and other IT equipment; Item no. 1.16 Storage Type B

- Support up to 120 SSD HDD min.

is deleted and replaced with the following text:

- Support up to 120 SSD HDD min. or SSD and HDD with higher capacity as solution.

19) Lot No. 1 – Servers and other IT equipment; Item no. 1.21. Rack #2, Dimensions

Text:

1100 mm (min.)

is deleted and replaced with the following text:

1000 mm (min.)

20) Lot No. 1 – Servers and other IT equipment; Item no. 1.24. Rack #3, Dimensions

Text:

1100 mm (min.)

is deleted and replaced with the following text:

1000 mm (min.)

21) Lot No. 1 – Servers and other IT equipment; Item no. 4.1. UPS - RACK 1500VA

Text:

Online Efficiency 93% min.

is deleted and replaced with the following text:

Online Efficiency 85% min.

22) Lot No. 1 – Servers and other IT equipment; Item No 1.4 Server #4, Memory protection

Text:

Network: HP Ethernet 1Gb 4-port 331T Adapter

is deleted and replaced with the following text:

Ethernet 1Gb 4-port 331T Adapter

These changes apply to the whole tender dossier. All other terms and conditions of the Tender Dossier as amended by the Corrigendum No.1 remain unchanged. The above alterations and /or corrections to the Tender Dossier are integral part of the Tender Dossier.