



Corrigendum No.3 to the Tender Dossier  
Supply of equipment for the development of hydrological flood forecasting system for Sava River  
Basin in Bosnia and Herzegovina (Phase 1, Bosna River)

Publication reference: EuropeAid/138452/SUP/BA; Tender no: EC/BIH/16/018

The Tender Dossier is corrected as follows:

**ANNEX II + III: TECHNICAL SPECIFICATIONS + TECHNICAL OFFER**

➤ **Technical specifications, General requirements**

**Item 1.3.8.2 Installation of Power generator, Page 6/61:**

In requirement: "Generator installation, configuration and putting into operation in HMI should include:"

The following point is added:

*"All necessary items to be able to connect to local electricity network."*

**Item 1.4.6. Warranty and Maintenance Services, page 10/61:**

The following requirement:

"If any component of the system which is necessary for running of the system turns out to be defective during the warranty period, the Contractor is obliged to troubleshoot the problem and/or replace this component with another one possessing the same technical characteristics and quality not later than 24 hours following the receipt of the notification (sent by Contracting Authority) of the Contractor about the failure of the equipment and/or software without any additional expenses to the Contracting Authority. " is deleted and now reads:

*"For Lot 1 and 2: If any component of the system which is necessary for running of the system turns out to be defective during the warranty period, the Contractor is obliged to troubleshoot the problem and/or replace this component with another one possessing the same technical characteristics and quality not later than 24 hours (including weekends and holidays) following the receipt of the notification (sent by Contracting Authority) to the Contractor about the failure of the equipment and/or software without any additional expenses to the Contracting Authority. "*

**Item 1.4.8 Warranty and Maintenance Services, page 11/61:**

The following requirement: "... (To ensure the prompt elimination of the potential defects, certificates shall be provided to demonstrate availability of the service centres in BIH for all the supplied equipment) is deleted and now reads:

*"...(To ensure the prompt elimination of the potential defects, the tenderers shall demonstrate availability of the service centres in BIH for all the supplied equipment as part of a Description of the warranty conditions requested according to point 11 of the Instructions to Tenderers.)"*

➤ **LOT 1: IT and Supporting Equipment**

**Item 1.1. APPLICATION SERVER – 3 pcs**

a) In the requirement: "RAID Controller:" the following point is added:

*"• RAID controllers have to have flash backed write cache (FBWC) protection."*

b) In the requirement: "Internal storage" to the following point: "• Minimum 512 GB internal storage (hot pluggable HDD);" the following text is added:

*"SATA, SAS or SSD, at least 10K, RAID 1"*

**Item 1.2. DATABASE SERVER – 6 pcs**

a) In the requirement: "RAID Controller:" the following point is added:

*"• RAID controllers have to have flash backed write cache (FBWC) protection."*

b) In the requirement: "Processor:" the following point:

"• Included max. 2 (two) CPUs with minimum Average CPU Mark of 7,000 according to <http://www.cpubenchmark.net> (dual CPU evaluation)" is deleted and now reads:

*"• CPU with minimum Average CPU Mark of 11,000 according to <http://www.cpubenchmark.net> (dual CPU evaluation)".*

**Item 1.4. NETWORK SWITCH – 2 pcs**

a) The requirement: "• Min 4 OSPF ports;" is deleted and now reads:

*"• Min 4 QSFP (Quad Small Form-factor Pluggable) ports;"*

b) In the requirement: "Interfaces: " to the following point "•The switch must have min. 24 x 1/10 Gbps Ethernet interface supporting both SFP and SFP+ modules."

the following text is added: "*(min 12x1 Gbps + min. 12x10 Gbps)"*

**Item 1.5. DESKTOP WORKSTATION (All-in-one) – 7 pcs**

The requirement: "At least one PCI e Mini card Slot or Equivalent" is deleted and now reads:

*"At least one PCI e Mini card Slot or M2 slot or Equivalent".*

**Item 1.7. RUGGED LAPTOP – water resistant laptop – 3pcs**

a) In the requirement: "Ports:" the following point: "• Memory card reader; Express Card 54 mm or PCMCIA; M.2 slots (2 internal); Optional DVD+/-RW" is deleted and now reads:

*"• Memory card reader; Express Card 54 mm or PCMCIA; or SATA or better; Optional DVD+/-RW"*

b) The requirement: "IEC 60529 ingress protection: IP-65 (dust-tight, protected against pressurized water)" is deleted and now reads:

*"IEC 60529 ingress protection: IP-65 (dust-tight, protected against pressurized water), or any other official standard or which the bidder is able to formally prove its compatibility with IP 65"*

### **Item 1.9. POWER GENERATOR – 1 pc**

a) The following text is added:

*"Generator in item 1.9. is to be delivered with housing for outdoor instalments. This generator is to be used as back-up option in case of power failure and transfer panels and necessary automation system is needed to be offered. Starter motor is required. Automatic transfer switch is required."*

b) In the requirement: "Engine:" the following point: "**• Total Output Power: max. 30 kW**" is deleted and now reads:

*"Power generator is capable to produce at least 30 KW total output power"*

c) In the requirement: "Alternator must have following characteristics:" the following point:

**• Prime Power: max. 25 kW** is deleted and now reads:

*"• power generator is capable to produce at least 25 KW total prime power"*

d) In the requirement: "Alternator must have following characteristics:" the following point:

**• Efficiency: min. 90 %** is deleted and now reads:

*"• Efficiency: min. 85 %"*

### **Item 1.10. POWER GENERATOR – movable – 1 pce**

a) The requirement: "Total weight (dry): max. 75 kg" is deleted and now reads:

*"Total weight (dry): up to 115 kg"*

b) The following requirement is added: "*Starter motor is required.*"

## **➤ LOT 3 – Land-field Work Equipment**

### **Item 3.1. DIGITAL CURRENT METER– 2 pcs**

a) The requirement: "Automatically calculating discharge" is deleted and now reads:

*"Automatic calculation of discharge, integrated water level measurement is mandatory."*

b) The following requirements are added:

*"3 wading rods 1.0 m length with markers on 1 cm are required, and they must be able to connect each other."*

*"Min. 4 m / max. 6 m cable is required"*

### **Item 3.2. ACOUSTIC DOPPLER CURRENT PROFILER FOR SHALLOW WATER – 2 pcs**

a) In the requirement: "Boat:" the following point: "**• Size (L x W x H) up to 1350 mm x 750 mm x 120 mm;**" is deleted and now reads:

*• Size (L x W x H) up to 1350 mm x 750 mm x 180 mm;"*

b) In the requirement: "Boat:" the following requirements are added:

*"The boat must be stabile on the higher flow velocity, up to 5 m/s."*

*"To support two regimes of measurement: stationary and moving boat."*

### **Item 3.4. INFLATABLE BOAT – 2 pcs**

The requirement: "Type: Inflatable boat" is deleted and now reads:

*"Type: Inflatable boat with demountable hull"*

#### ➤ **LOT 4 – Meteorological and Hydrological Stations**

##### **Item 4.1. Precipitation gauge station - 11 pcs**

a) In the requirement: "Cabinet characteristics:" the following point: "• Dimensions (W x H x D): max. 700 mm x 550 mm x 250 mm;" is deleted and now reads:

*"• Dimensions (W x D x H): max. 700 mm x 550 mm x 250 mm, tolerance up to + 10% is allowed."*

b) In the requirement: "All-weather precipitation gauge sensor that uses superior weight-based technology to measure the amount and intensity of rain, snow, and hail." the following point: "Ring heating: min. 35 Watt;" is deleted and now reads:

*"• Ring heating: min. 20 Watt;"*

##### **Item 4.2. Complex Meteorological station - 9 pcs**

a) In the requirement: "All-weather precipitation gauge that uses superior weight-based technology to measure the amount and intensity of rain, snow, and hail." the following point is added: "• Ring heating: min. 20 Watt;"

b) *In the* requirement: "Control cabinet characteristics the following point is added: "• Control cabinet and solar panels for complex meteorological station have to be mounted on 10m pole."

c) In the requirement: "Weather Sensor for measuring of air temperature, relative humidity, air pressure, wind direction and wind speed." the following point "• Open communication protocol: UMB-ASCII,UMB-Binary,SDI-12, MODBUS;" is deleted and now reads:

*"• Open communication protocol: SDI-12, MODBUS;"*

d) In the requirement: "Weather Sensor for measuring of air temperature, relative humidity, air pressure, wind direction and wind speed." the following point: "• Operating temperature: -50 to 60°C;" is deleted and now reads:

*"• Operating temperature: min range from -40 to +60, or wider;"*

##### **Item 4.3. Groundwater Level Measuring Station – 3 pcs**

a) In the requirement: "Sensor technical specifications",

- Water level measurement:
  - Measuring ranges: at least 0 to 100 m;"

The following point is added: "○ cable 2 X 40 m is required"

b) The following requirements are added:

*"The sensors are to be mounted in observation well. Protective caps for tubes have to be offered."*

c) In the requirement: "Sensor technical specifications:, • Temperature measurement (optional):"

The following point: "o Measuring range: -25 °C ... +70 °C;" is deleted and now reads:

*"o Measuring range: min -5 °C ... +60 °C or wider;"*

#### **Item 4.4. Hydrological Station – 10 pcs**

a) The following text is added:

*In regard to item 4.4. Hydrological stations to be supplied for the FHMI, as per Appendix III, please see below data:*

*HS Reljevo: 35 m required cable lengths*

*HS Bila – most: 25 m required cable lengths*

*HS Zenica – nova: 50 m required cable lengths*

*HS Sarajevo: 15 m required cable lengths*

*HS Tuzla – most: 25 m required cable lengths*

*HS Kiseljak – most: 30 m required cable lengths*

*In regard to item 4.4. Hydrological stations to be supplied for the RHMS RS, as per Appendix III, please see below data:*

*HS Teslić : 35 m required cable lengths*

*HS Stanić rijeka: 35 m required cable lengths*

*HS Derventa 35 m required cable lengths*

*In regard to item 4.4. Hydrological station to be supplied for the DB, as per Appendix III: HS Skakava Donja - most: 20 m required cable lengths*

c) The requirement: "Staff gauge must be shock-resistant and weatherproof, with total width of up to 150 mm." is deleted and now reads:

*"Staff gauge must be shock-resistant and weatherproof, with total width of min.140mm – max.180 mm. Type: standard, enamelled."*

The following requirement is added: *"Staff gauges have to be installed on U-shaped poles."*

**These changes apply to the whole tender dossier. All other terms and conditions of the Tender Dossier remain unchanged. The above changes to the Tender Dossier are integral part of the Tender Dossier.**