BIDS AND AWARDS COMMITTEE
SUPPLEMENTAL BID BULLETIN NO. 018-2018

November 16, 2018

The Philippine Sports Commission, through its Bids and Awards Committee, wishes to inform all prospective bidders participating in the public bidding of the project titled **"Supply, Delivery and Installation of Endless Pool and Breath by Breath Analyzer- Lot 6"** the following clarifications and additions:

1. We made modifications, revisions and changes on the technical specifications for the above-mentioned project to, wit:

   Supply, Delivery and Installation of Endless Pool and Breath by Breath Analyzer- Lot 6"

Technical Specifications:
1 Lot Supply and Installation of Endless Pool and Breath by Breath Analyzer each must consists of:

A. 2 units Elite Endless Pool
Pool Swimming Machine
• Its 7.5-hp pump with dual hydraulic motors drives two custom-designed propellers, moving more than double the water volume of our Original Endless Pool.
• The propellers' extra distance from the outlet grill (itself a spacious 24"x18") lets the current straighten, so you enjoy an ultra-smooth swim.
• 8' x 14' to 10' x 16' swimming area
• 39" standard water depth, 45" & 51" optional
• Modular steel construction
• 7.5-hp, two-motor, two-propeller swim current generator with wireless remote control
• 24" x 18" water outlet grill
• Reinforced acrylic water flow and conditioning system
• Three 59" x 18" stainless steel VGB compliant suction grills
• Poolside digital systems control
• High-efficiency circulating pump
• Skimmer filter (removable-cartridge type)
• 4-kW electric heater
• 220-volt, 50-amp power requirement
• Backstroke mirror
• Floor mirror for competitive swimmers

B. 2 units Breath by Breath Gas Analyzer

CARDIO PULMONARY EXERCISE TEST SYSTEM (Stationary) 1 unit
Specifications
• Description: Cardio Pulmonary Exercise Tests System
• Application : Resting ECG Stress-test ECG
Cardiopulmonary Exercise Tests

Spirometry Indirect Calorimetry
• Measuring method : Breath-by-breath
• Construction : PC Based system with a dedicated trolley
Calibration syringe mounted to the trolley
Dedicated mount for a gas cylinder (2 l, 5 l, 10 l)
• Patient tubing Free of any electrical cables and connectors

• Flow sensor: without any moving parts
¬ Single use or disinfectable
¬ Flow measurement range : ±l/s
¬ Accuracy of the flow measurement : ±% or 50 ml/s
¬ Resistance : 60 Pa/l/s @ 15 l/s
¬ Volume measurement range : 15 l
¬ Accuracy of the volume measurement : ±% or 50 ml

• CO2 sensor : NDIR: Non-dispersive Infra Red
¬ Range : 0-10%
¬ Accuracy : 0,05 %
¬ Response time: T90 : 130 ms
¬ Measuring the environmental CO2

• O2 sensor : Electro-chemical cell
¬ Range: 0-100%
¬ Accuracy : 0,05%
¬ Response time T90 : 130 ms

• ECG Resting and stress ECG
¬ Leads : 12 Standard
¬ Digital resolution : 3,9 uV
¬ A/D Conversion : 13 bits
¬ Sampling Frequency : 2000 Hz
¬ Frequency response : 0,05 Hz - 170 Hz

• Measured and calculated parameters:
¬ load
¬ Metabolic equivalent of task
¬ Minute Ventilation
¬ Tidal Volume
¬ Breath Frequency
¬ Oxygen consumption
¬ Maximal oxygen consumption
¬ maximal oxygen consumption per body weight
¬ Carbon dioxide production
¬ Maximal carbon dioxide production
¬ Oxygen Uptake Efficiency Slope
¬ Respiratory exchange ratio
¬ Resting Energy Expenditure

¬ Exercise Energy Expenditure
¬ Heart Rate
¬ O2 concentration
¬ CO2 concentration
¬ End-tidal oxygen tension
¬ End-tidal carbon dioxide tension
¬ Forced Vital capacity
¬ Slow vital Capacity
¬ Maximum Voluntary Ventilation
¬ Exercise Inspiratory Capacity
¬ Exercise End-expiratory Lung Volume
¬ ST segment Level
¬ Double product

• EVALUATIONS:
¬ Determination of Anaerobic Threshold : Methods : RER=1, V-slope, Ventilatory Equivalents
¬ Interpretation of Aerobic Capacity
¬ Pre-post measurements
¬ Blood gases analysis
¬ Calorimetry - Fat burning and Energy Expenditure
¬ Calorimetry - Fat burning and Energy Expenditure
¬ Calorimetry - Fat burning and Energy Expenditure
¬ Facility to display spatial orientation of ST segment deviations
¬ With evaluation of sudden cardiac death according to Seattle criteria

CARDIO PULMONARY EXERCISE TEST SYSTEM (Portable) 1 unit

MOBILE SPIROERGOMETRY SYSTEM

- ultralight, mobile Breath-by-Breath system (580 g)
- telemetric range of over 1,000 m (bi-directional telemetry with Bluetooth® technology)
- chest and back carrying system
- convenient control via Smart Control, laptop or as stand-alone
- 6-hour battery life
- 400 hours data storage
- constant dynamic flow control
- free definable audio signals

Technical Data

O2 Sensor
· type: chemical fuel cell
· range: 0-100 %
· accuracy: < 0.1 Vol %
· T90: < 100 ms
· calibration: every 14 days

CO2 Sensor
· type: NDIR

· range: 0-13 %
· accuracy: < 0.1 Vol %
· T90: < 100 ms
· calibration: 1x per month

Pressure Sensor
· range: 300-1,100 mbar

Volume Turbine, Reusable
· flow: ≤ 20,1 l/s
· accuracy: 50 ml or +/- 2 % ·
resistance: ≤ 0,1 kPa/l/s @ 20 l/s
· calibration: 1x daily

Volume Turbine, Disposable
· flow: ≤ 14 l/s
· accuracy: +/- 3 %
· resistance: ≤ 0.06 kPa/l/s @ 14 l/s
· calibration: not neccessary

Heart Rate
· smart BT | 3-lead ECG (optional)
12-lead ECG (optional)

Telemetry
· range: > 1,000 m
· PC interface: USB 2.0 with
Long Range Bluetooth receiver or Bluetooth USB adapter

Operating Conditions
· temperature: -10 ° to +40 °C
· ambient pressure: 500 to 1,050 mbar
· at atmospheres: ≤ 25 % O2
· relative humidity: 0 to 100 % (non condensing)

Physical Specifications
· dimension (LxWxH): 2x (120 x 110 x 45 mm) · weight: 580 g (without battery)

Electrical Specifications
· PC interface: Bluetooth 2.1
· power supply: battery with 6 hours operating time

Quality Management
· EN ISO 9001, EN ISO 13485

Conformity · guideline 93/42/EWG + 2007/47/EG
· EN ISO 60601-1; 60601-1-2; 10993-1; 15223-1; 1041; 62304; 62366; 23747; 26782

System Requirements Operating System · Windows 7, 8, 10 (32 or 64 Bit) Windows Server 2008, 2012 (64 Bit), 2016 (64 Bit)

2. STRESS DEVICE TREADMILL

- DIMENSIONS : length - Width: 205 - 80 cm Height: 112 cm
- WEIGHT : 163 kg.
- RUNNING BELT : 50 - 142 CM
- Height from floor : 22 cm
- MAX. PERMISSIBLE LOAD : 200 kg
- SPEED RANGE : 0-20 km/h
- SPEED INCREMENTS : 0,1 km/h
- INCLINE RANGE : 0 -25%
- INCLINE INCREMENTS : 0,5%
- SPEED MOTOR : Asynchronous 3 phases 1,5 HP, AC
- ELEVATION MOTOR : 90 Watt DC
- VOLTAGE SUPPLY : 230 v 50 Hz

3. STRESS DEVICE - ERGOMETER

Technical Specification ERGOMETER

- Display : 128x64
- 20-990 watts power
- controlled mainly from PC or ECG
- User predefined stress program
- Saddle height - continuously adjustable for body heights : 120 cm – 210 cm
- dual mode adjustment of handlebars : height : 90 - 126 cm / angle of inclination: 360°.

4. ERGO SOFTWARE

- Automatic BP measurement support
- ST - settings - J point position modification
- Profile creation
- Stress-test protocol editor
- Signal freeze and review
- Trends of HR, ST, BP and load
- Automatic and manual Load control
- Electrode application indicator
- QT module
- Arrhytmia detection & analysis
- Risk scoring
- ST maps
- Maximum load prediction
- Switch to ramp function
- Calliper for manual interval measurements
- ST analysis tool

Delivery Schedule: Delivery and supply with-in 60 days upon issuance of Notice to Proceed

Please be informed and be guided accordingly.

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