# Section 3: Schedule of Requirements and Technical Specifications

# Upgrade Health facilities in Bekaa

## 1. BACKGROUND

With the influx of an unprecedented number of refugees from Syria into Lebanon, signs of tension and conflict between the Lebanese and the Syrian communities are increasing in many regions, influenced by relative social and economic conditions and driven by increased competition for scarce social services. Citizens and municipalities have little capacity and guidance to deal with the implications of the situation.

The increased load on the already stretched capacity of health services is contributing to social stress and frustration, as many poor Lebanese are reluctant to face the long lines of refugees cuing up every morning at Public Health Care Centers. As well, the existing standard of health services in the Bekaa is under tremendous pressure due to a manifold increase in the caseload owing to massive refugee influx in the area.

The intervention will aim at supporting Primary Health Care Centers (PHCC), public hospitals and dispensaries of Zahle, Rashaya, Hermel, and Baalbek to upgrade their current facilities and enhance the provision of health services and medicines to the inhabitants of the area, including both refugees and members of the host communities. Upgrading the health facilities will be through the provision of modern equipment and supplies.

#### 2. OBJECTIVES

Based on the assessed needs, the technical specifications were developed for medical equipment to be procured and supplied to the Primary Health Care Centers (PHCC), public hospitals and dispensaries of Zahle, Rashaya, Hermel, and Baalbek. The awarded company shall ensure the delivery of the procured equipment to the indicated health facilities and will be mandated to provide the training required to utilize the supplied material in an optimal manner.

#### 3. SCOPE OF WORKS

Provision of different medical equipment complying with the following technical specifications:

Ite	Name of	Qua	Technical Specifications and Standards	Nber of item
<i>m</i> #	Goods	ntity		& Location
1	Incubators	2	Baby incubator infant care equipment built according to advanced technology and innovative design and meets most of the requirements in Neonatal Intensive Care Unit (NICU). It provides utmost care, safety and comfort to the newborn. The incubator has a patient skin and inner air control system; through the control panel the desired temperature can be set up and mattress and baby temperature can be measured. Microprocessor, servo-controlled temperature system , Led control panel Alarm functions : Power failure, Over temperature, Temperature deviations, Temperature sensor failure, Fan failure >37°C temperature setting A keypad lock helps to prevent accidental changes of the setting Temperature deviations and over temperature can be managed on the control panel directly The bed inclination is adjustable Humidity is continuously adjusted Integrated timer to record therapy time Extra thermal cut-off function for more safety. STANDARD CONFIGURATION Transparent hood with six hand ports, two lateral access doors, Infant bed and mattress, Water collecting system, I.V. pole, Mounted on trolley 4 castors, 2 w/brake TECHNICAL DATA Power Supply: 110/220V a.c. 50/60Hz Power input: 420 VA	Zahleh Public Hospital
2	Respirator for newborn	2	Respirator Newborn with built-in 5" respiratory monitor for adult, children and new born patients. Standard accessories: O2 tube, Air tube, Power Supply cable 220V/12v, O2 transducer, Silicone patient circuit, adults nebulizer set, Antibacterial filter 22mm and User's manual, trolley with tray. Stainless steel supporting arm with two articulations complete and 30x10 rail support. Vapour 2 Electronic Humidifier Monopak water column, temperature probe	Zahleh Public Hospital
3	Monitor for the ICN department	1	Monitor: ECG, SPO 2, Blood Pressure and Thermometer	Zahleh Public Hospital
4	Scialitiques for the maternity department	2	Mobile LED around 80000 Lux. Touchless ON/OFF Color Temperature 5500°C No bulb replacement Electrical input: 100-240V 50-60Hz	Zahleh Public Hospital

5	Autoclave 200L	1	AUTOMATIC CONTROL AUTOCLAVE auto-clave The "LOW WATER" indicated by "add water lamp" and stop all functions at the same time, when water in the steam generator, is not enough. The chamber is supported by heavy tubular stainless stand with stainless steel floor flanges for level adjustment. The autoclave designed with double chambers, and the chambers are separated with steam generator. So the dry function would be perfect. Pre-heating by jacket can not only keep the chamber temperature in balance, but also offer the perfect dry function and the best sterilization function. Specifications: Chamber size: S/S 304 500mm (10") x1000 mm(D) . Overall: 800(W) x 1800(H) x 1350(D)mm. Capacity approx. 200 liter. Heating power: 9kw 50/60 Hz. Design temperature: 140°C. Safety devices: water level control & protection, safety valve, electronic circuit safety system, emergency exhaust valve. Supplied with one tray	Rashaya Public Hospital
6	Blood Gas Analyser	1	Basic Blood Gas Analyzer Sample Type: Whole Blood, serum, plasma, dialysate - Sample Volume: 120 ML Syringe; 60 ML Capillary - Display: 7.2 inch full color LCD, Touch Panel - Calibration: Automatic, programmable 1 and 2 point calibration Data Storage: 10,000 Data Printer: Line Thermal Touch sensitive Panel: 12.1 inch & movable touch panel display	Rashaya Public Hospital
7	Portable Ventilator	1	VENTILATOR PORTABLE EMERGENCY SUITABLE FOR THE RESPIRATORY TREATMENT OF ADULTS, CHILDREN AND NEW BORN.	Rashaya Public Hospital
8	Ultrasound	1	Multipurpose Ultrasound unit Real time 1152 channel 2D gray – scanned imaging with multi-beam receiving - 128 Channel Digital Beam forming with: o Dynamic pixel based Focus for clear imaging of Dynamic Aperture of Dynamic Apodization - Synthetic Aperture Control - Full Spectrum Imaging TM - Motion mode (M-mode) - Tissue Harmonic Imaging - Pulse Inversion Harmonic Imaging - Extreme High Dynamic Range Enhanced spatial resolution and contrast, for diagnosis details and accuracy Cine for 511 frames with play back possibility - 15" monitor with non-interlaced display 32-bit operating system for memory protection Image filling 15000-20000 images - Various Measurement Packages Applications: General, Abdomen, Obstetrics, Fetal Heart, Gynecology, Renal, Urology, Breast, Small Parts. Vascular, Pediatric, MSK, Cardiac, Neonatal - HPRF - Standby mode (Hibernation mode) - Post gain control To be supplied with Convex probe, Vaginal Probe, B/W Video printer and mobile trolley	LRC Hermel (MoPH Network)

9	ECG	3	ElectroCardioGraph 12 channels, Color Touchscreen Display: Facilitates one-button operation, guiding you through a test in seconds. On-Screen Instructions: Saves valuable time and ensures accurate data capture by highlighting poor signals and connections. Programmable Report Formats: Prints reports in the format that works best for your facility with high-resolution thermal printer (3x4 OR 2x6) Weighing around	1 ECG to LRC Hermel (MoPH Network) 1 ECG to Hermel
			2 kg, and easily transported. With following specifications: Thermal chart paper speeds: 10, 25, 50 mm/s Frequency range: 0.3 to 150 Hz Digital sampling rate: > 1,000 samples/second/channel Power requirement: Universal AC	Public Hospital 1 ECG to
			power supply ~110–240 V, 50/60 Hz, 1.5 A with built-in rechargeable battery Internal ECG Storage: Up to 25 ECGs Mode of operation: Continuous Dimensions around L x H x W: 33 cm x 8 cm x 19 cm	MoSA SDC Maaraboun (Sub-center for Talia)
10	Medical supplies	1 of each	<ul> <li>Blood Pressure measurement machine Shock Resistant (No spring system) with clip on Cuffs</li> <li>Stethoscope dual head</li> </ul>	LRC Hermel (MoPH Network)
11	Ultrasound	2	Multipurpose Ultrasound unit Real time 1152 channel 2D gray – scanned imaging with multi-beam receiving - 128 Channel Digital Beam forming with: o Dynamic pixel based Focus for clear imaging o Dynamic Aperture o Dynamic Apodization - Synthetic Aperture Control - Full Spectrum ImagingTM - Motion mode (M-mode) - Tissue Harmonic Imaging - Pulse Inversion Harmonic Imaging - Extreme High Dynamic Range Enhanced spatial resolution and contrast, for diagnosis details and accuracy Cine for 511 frames with play back possibility - 15" monitor with non-interlaced display 32-bit operating system for memory protection Image filling 15000-20000 images - Various Measurement Packages Applications: General, Abdomen, Obstetrics, Fetal Heart, Gynecology, Renal, Urology, Breast, Small Parts. Vascular, Pediatric, MSK, Cardiac, Neonatal - HPRF - Standby mode (Hibernation mode) - Post gain control To be supplied with Convex probe, Vaginal Probe, B/W Video printer and mobile trolley	<ol> <li>Ultrasound to MoSA SDC Maaraboun (Sub-center for Talia)</li> <li>Ultrasound to MoSA Talia SDC in Baalback</li> </ol>

12 Ultrasound	1	Multipurpose Ultrasound unit Real time 1152 channel 3D – scanned imaging with multi-beam receiving - 128 Channel Digital Beam forming with: o Dynamic pixel based Focus for clear imaging o Dynamic Aperture o Dynamic Apodization - Synthetic Aperture Control - Full Spectrum ImagingTM - Motion mode (M-mode) - Tissue Harmonic Imaging - Pulse Inversion Harmonic Imaging - Extreme High Dynamic Range Enhanced spatial resolution and contrast, for diagnosis details and accuracy Cine for 511 frames with play back possibility - 15" monitor with non-interlaced display 32-bit operating system for memory protection Image filling 15000-20000 images - Various Measurement Packages Applications: General, Abdomen, Obstetrics, Fetal Heart, Gynecology, Renal,	Hermel Public Hospital
		Urology, Breast, Small Parts. Vascular, Pediatric, MSK, Cardiac, Neonatal - HPRF - Standby mode (Hibernation mode) - Post gain control To be supplied with Convex probe, Vaginal	
		Probe, B/W Video printer and mobile trolley	
13 Syringe Pumps	6	SYRINGE PUMP Complies with IEC 60601, high safety designation with dual CPUs. High brightness LCD display and user-friendly operation interface. Automatically identify size for syringes of 10 mL, 20mL, 30mL and 50/60 mL. Unique anti- reverse function on motor to prevent upstream. 10 usual syringe brands could be preset and easily calibrate for others. Pressure detection device with 8 sensitivities setting, dynamically display pressure value. Pressure release function when occlusion occurs within the syringe. Drug weight mode available. Bolus mode available. TECHNICAL SPECIFICATION Syringe Mode: Micro and continuous injection Syringes: 10mL, 20mL, 30mL, 50/60mL syringes, self-identified automatically Syringe Brands: 10 usual syringe brands preset, and easily calibrate for others Flow rate range: 10mL syringe: 0.1 ~ 300 mL/h, 20mL syringe: 0.1 ~ 400 mL/h, 30mL syringe: 0.1 ~ 600 mL/h, 50mL syringe: 0.1 ~ 1200 mL/hIncrement: 0,1 mL/h Flow rate accuracy: ? ± 2% Volume Limit: 0,1~ 9999,9 mL and empty mode available Volume Infused Display: 0,1~ 9999,9 mL Purge rate: 10mL syringe: 300 mL/h, 20mL syringe: 400 mL/h, 30mL syringe: 0.1 ~ 300 mL/h, 50mL syringe: 0.1 ~ 400 mL/h, 30mL syringe: 0.1 ~ 300 mL/h, 50mL syringe: 0.1 ~ 1200 L/h Audio and Visual Alarms: AC power disconnected, Syringe barrel clasp, Plunger head position, Injection finished, End of injection pre alarm, Empty syringe, Occlusion, Low battery, Battery Run out, Battery damaged, No operation, System failed Display: Blue LCD with high brightness Communication port: RS-232 (for nurse call) Power source: AC: 100V-240V, 50Hz/60Hz, ? 25 VA Battery: Rechargeable Ni-MH battery: DC9,6V, 2000 mAh, life: ? 4 hours at 5mL/h, remaining battery displayed charging time: 16hours OPERATING CONDITIONS	Hermel Public Hospital

14	ICU Monitor	6	OPERATING CONDITIONS temperature: 5°C – 40°C relative humidity: 20 – 90% atmospheric pressure: 70-106 Kpa STORAGE CONDITIONS temperature: -20°C-55°C relative humidity: 10%-90% CLASSIFICATION Class II, CF, IPX4 Monitor with ECG, NIBP, SPO2 and Temperature	Hermel Public Hospital
15	Chariot ped	1	<i>Leather like flame retardant top and epoxy finish structure pediatric examination couch</i>	MoSA Talia SDC in Baalback
16	Provision of few medical supplies (exp: speculum)	2	<ul> <li>Kelly art Forceps 14cm</li> <li>Adson Forceps 12cm</li> <li>Standard dressing Forceps 14cm</li> <li>hysterometric (sims uterine sound)</li> <li>Grave Vaginal Speculum large, Medium and Small</li> <li>Pozzi Forceps</li> <li>Gel for Echo</li> <li>Sponge Forceps</li> <li>Otoscope with built-in throat illuminator</li> <li>Diabetes screening machine</li> <li>Blood pressure machine shock resistant (no spring system) with clip on cuff</li> <li>Sterilizer Hot Air all stainless steel in and out fully digitally controlled with volume at least 30 liters</li> <li>Pissette 250ml quantity of 2</li> <li>Full-Surgical Wounds Stitched</li> <li>Balance for kids digital weighing up to 20 kg, 10g precision</li> </ul>	1 set to MoSA Talia SDC in Baalback 1 set to MoSA SDC Maaraboun (Sub-center for Talia)
17	locker for medication	7	Locker made of metal epoxy finish and glass (two doors) with locks (Width: 90 cm and height around 180cm)	4 lockers to MoSA Talia SDC in Baalback 3 lockers to MoSA SDC Maaraboun (Sub-center for Talia)

# 4. DELIVERY PLACE AND DEADLINE

The contracting company is expected to deliver the items within **One Month** effective from contract signature date. The requested items will be delivered to Public hospitals of Rashaya, Zahleh and Hermel, to the Social Development Centers of Talia and Maaraboun in Baalback and to the LRC Hermel.

## 5. AFTER-SALES SERVICES

- Warranty on Parts and Labor for minimum period of **One** year is required
- Technical Support
- Provision of Service Unit when pulled out for maintenance/ repair

Further to the Schedule of Requirements in the preceding Table, Bidders are requested to take note of the following additional requirements, conditions, and related services pertaining to the fulfillment of the requirements:

Delivery Term	☑ DAP, Delivery at Place, Customs free
[INCOTERMS 2010]	
Exact Address of Delivery/Installation Location	Public hospitals of Rashaya, Zahleh and Hermel, Social Development Centers of Talia and Maaraboun in Baalback and LRC Hermel, Lebanon
Mode of Transport Preferred	🖾 AIR 🛛 🖾 LAND
UNDP Preferred Freight Forwarder, if any Distribution of shipping	Not Applicable Not Applicable
documents (if using freight forwarder)	
Delivery Date	The overall term of execution of this purchase order is spread over one (1) month, effective from purchase order signature date.
Customs, if needed, clearing shall be done by:	⊠ UNDP
Ex-factory / Pre-shipment inspection	Not Applicable
Inspection upon delivery	Refer to Section 3 – Schedule of Requirements and Technical Specifications
Testing Requirements	Refer to Section 3 – Schedule of Requirements and Technical Specifications
Commissioning	Refer to Section 3 – Schedule of Requirements and Technical Specifications
Technical Support Requirements	Refer to Section 3 – Schedule of Requirements and Technical Specifications
Payment Terms	The payment currency is USD, and the payment will be made as follows:
	One Hundred (100) percent of the Goods Value shall be paid to the Supplier Upon:
	<ul> <li>Complete delivery &amp; Installation of the medical equipment at the designated sites</li> <li>Equipment Passing Inspection Test and fully compliant with specs requirement</li> <li>Training on Operation and Maintenance</li> <li>Receipt of official invoice and submission of the details of</li> </ul>
	shipping, detailed delivery sheets, Operation Manuals and

	other documents to be furnished by the Supplier; and
	Within thirty (30) calendar days after the date of the satisfactory certificate of completion for the respective delivery issued by the UNDP assigned entity.
Conditions for Release of	☑ Inspection upon arrival at destination
Payment	☑ Testing upon installation
	Iraining on Operation and Maintenance
	☑ Written Acceptance of Goods based on full compliance with
	ITB requirements
After-sale services required	oxtimes Warranty on parts and services for a minimum period of 12
	months
	🖾 Technical Support
	Provision of Service Unit when pulled out for maintenance/
	repair
All documentations, including	🖂 English
catalogs, instructions and	
operating manuals, shall be in	
this language	