

Section II: Schedule of Requirements and Technical Specifications

eSourcing reference: ITB/2020/14779

A Summary of Requirements

UNOPS requirements are the vehicles as the 29 Lots/Categories listed in the table below. Bidders at their own discretion may bid for any Lot, combination of Lots or all the Lots. Bidders may offer either or both sub-categories of i. ex factory and ii. ex stock, and right-hand drive (RHD), left-hand drive (LHD) or both. Quantities are undefined. UNOPS will not be committed to purchase any minimum quantity of the Goods, and purchases will be made only if and when there is an actual requirement.

Motor vehicles

Lot/ Category	Basic Description	Engine Capacity	Wheelbase
Category 1	2WD Sedan/hatchback, small	1000 -1600 cc	2400 - 2599 mm
Category 2	2WD Sedan, large	1595 - 3500 cc	2751 – 3100 mm
Category 3	2WD Station Wagon, small	1000 - 1600 cc	2400 – 2599 mm
Category 4	2WD Station Wagon, large	1595 - 3500 cc	2751 – 3100 mm
Category 5	2/4WD SUV	1290 - 2149 cc	2000 - 2700 mm
Category 6	4WD SUV	2150 - 3200 cc	2300 - 2699 mm
Category 7	4WD SUV	2150 - 3200 cc	2700 - 3100 mm
Category 8	4WD SUV	3201 - 5600 cc	2700 - 3200 mm
Category 9	2WD Pick-Up Single Cab	1790 - 3200 cc	2700 - 3600 mm
Category 10	2WD Pick-Up Double Cab	1790 - 3200 cc	2700 - 3600 mm
Category 11	4WD Pick-Up Single Cab	1790 - 3200 cc	2700 - 3600 mm
Category 12	4WD Pick-Up Double Cab	1790 - 3200 cc	2700 - 3600 mm
Category 13	4WD Pick-Up Single/Double Cab	3201 - 5600 cc.	2700 - 3600 mm
Category 14	2WD Minibus	1850 - 5600 cc	2300 - 4500 mm
Category 15	4WD Minibus	1850 - 5600 cc	2300 - 4500 mm
Category 16	2WD MPV (Multi Purpose Vehicle)	1790 - 3000 cc	2300 - 3200 mm
Category 17	2WD Hybrid Vehicle (HEV)/Plug-in hybrid vehicle (PHEV)	900 - 2500 cc	2000 - 3100 mm
Category 18	2WD Bus, general purpose overland	3490 - 6000 cc	3200 - 6000 mm
Category 19	2/4WD Cargo Van /Cargo Box vehicle	1850 - 5600 cc	2300 - 4500 mm
Category 20	2WD Ambulance Advanced; van/box type	1850 - 5600 cc	2300 - 4500 mm
Category 21	4WD Ambulance, on/off road type	2400 - 5600 cc	2700 - 3200 mm
Category 22	2WD Ambulance; van type	1850 - 5600 cc	2300 - 4500 mm
Category 23	4WD Ambulance, van type	1850 - 5600 cc	2300 - 4500 mm
Category 24	2WD Mobile Clinic; van type	1850 - 5600 cc	2300 - 4500 mm
Category 25	4WD Mobile Clinic; van type	1850 - 5600 cc	2300 - 4500 mm
Category 26	2/4WD Cooler cargo van/Cooler Cargo box vehicle	1850 - 5600 cc	2300 - 4500 mm
Category 27	2WD Sedan/hatchback, mini	900 - 1600 cc	1800 – 2399 mm
Category 28	2WD Sedan/hatchback, medium	1495 - 1800 cc	2600 – 2750 mm
Category 29	2/4WD Electric Vehicle (EV)	N/A	2000 - 3100 mm

Sub-categories, (delivery time):

i) Ex-factory delivery:

Delivery time to FCA point more than 2 weeks for regular vehicles (more than 6 weeks for conversion vehicles e.g. ambulances, mobile clinics and cooler cargo box vehicles).

ii) Ex-stock delivery:

Delivery time to FCA point maximum 2 weeks for regular vehicles (maximum 6 weeks for conversion vehicles e.g. ambulances, mobile clinics and cooler cargo box vehicles).

A stock of minimum 15 vehicles (combination of LHD and RHD) must be available at any time.

B Technical specifications for Goods

UNOPS' MINIMUM specifications are as detailed below. Each Lot must include all standard features and all standard equipment listed. All deviations to UNOPS requirements must be clearly stated by the Bidder for each Lot offered by adding explanations in the relevant field on Form D: Technical Bid Form be submitted with the bid.

Full technical details and prices of all offered items including options and options packages must be entered in UN Web Buy Plus Tender Portal. Quantity discounts and intervals must also be entered.

Standard features for all categories are:

Category	1 Sedan/ hatchback Small 2WD	2 Sedan Large 2WD	3 St. Wagon Small 2WD	4 St. Wagon Large 2WD	5 SUV Short WB 2/4WD
Engine displacement (cc)	1000 - 1600	1595 - 3500	1000 - 1600	1595 - 3500	1290 - 2149
Power, petrol (kW), min.	60	110	60	110	70
Power, diesel (kW), min.	60	110	60	110	70
Power, hybrid system total, (kW)	N/A	N/A	N/A	N/A	N/A
Wheel base (mm)	2400 - 2599	2751 - 3100	2400 - 2599	2751-3100	2000 - 2700
Transmission/Traction	Manual or auto 2WD	Manual or auto 2WD	Manual or auto 2WD	Manual or auto 2WD	Manual or auto 2/4WD
GVW, max, (kg)	2100	3500	2500	3500	3000
No. of seats, incl. driver, min	4	4	4	4	4
No. of doors, min (incl. rear)	4	4	5	5	3

Category	6 SUV Short WB 4WD	7 SUV Semi Long 4WD	8 SUV Long WB 4WD	9 Pick-Up Single Cab 2WD	10 Pick-Up Double Cab 2WD
Engine displacement (cc)	2150 - 3200	2150 - 3200	3201 - 5600	1790 - 3200	1790 - 3200
Power, petrol (kW), min.	70	70	90	70	70
Power, diesel (kW), min.	70	70	90	70	70
Power, hybrid system total, (kW)	N/A	N/A	N/A	N/A	N/A
Wheel base (mm)	2300 - 2699	2700 - 3100	2700 - 3200	2700 - 3600	2700 - 3600
Transmission/Traction	Manual or auto 4WD	Manual or auto 4WD	Manual or auto 4WD	Manual or auto 2WD	Manual or auto 2WD
GVW, max, (kg)	3500	3500	3500	3500	3500
No. of seats, incl. driver, min	5	5	5	2	4
No. of doors, min (incl. rear)	3	3	3	2	4

Category	11 Pick-Up Single Cab 4WD	12 Pick-Up Double Cab 4WD	13 Pick-Up Single/ double Cab 4WD	14 Minibus 2WD	15 Minibus 4WD
Engine displacement (cc)	1790 - 3200	1790 - 3200	3201 - 5600	1850 - 5600	1850 - 5600
Power, petrol (kW), min.	70	70	90	80	80
Power, diesel (kW), min.	70	70	90	65	80
Power, hybrid system total, (kW)	N/A	N/A	N/A	N/A	N/A
Wheel base (mm)	2700 - 3600	2700 - 3600	2700 - 3600	2300 - 4500	2300-4500
Transmission/Traction	Manual or auto 4WD	Manual or auto 4WD	Manual or auto 4WD	Manual or auto 2WD	Manual or auto 4WD
GVW, max, (kg)	3500	3500	3500	4500	4500
No. of seats, incl. driver, min	2	4	2	9	9
No. of doors, min (incl. rear)	2	4	2	4	4

Category	16 MPV	17 Hybrid Vehicle (HEV)/ Plug-in hybrid vehicle (PHEV)	18 Bus	19 Cargo Van /cargo Box vehicle	20 Ambulance Advanced
	2WD	2/4WD	2WD	2/4WD	2/4WD
Engine displacement (cc)	1790 - 3000	900 - 2500	3490 - 6000	1850 - 5600	1850 - 5600
Power, petrol (kW), min.	85	N/A	80	80	80
Power, diesel (kW), min.	85	N/A	80	65	65
Power, hybrid/electric system total, (kW)	N/A	80	N/A	N/A	N/A
Wheel base (mm)	2300 - 3200	2000 - 3100	3200 - 6000	2300-4500	2300 - 4500
Transmission/Traction	Manual or auto 2WD	Manual or auto. 2/4WD	Manual or auto 2WD	Manual or auto 2/4WD	Manual or auto 2/4WD
GVW, max, (kg)	3200	3500	14000	5500	5500
No. of seats, incl. driver, min	7	4	25	2	3
No. of doors, min (incl. rear)	4	2	2	3	3

Category	21	22	23	24	25
	Ambulance On/off road	Ambulance Van type	Ambulance Van type	Mobile Clinic Van type	Mobile Clinic Van type
	4WD	2WD	4WD	2WD	4WD
Engine displacement (cc)	2400 - 5600	1850 - 5600	1850 - 5600	1850 - 5600	1850 - 5600
Power, petrol (kW), min.	90	80	80	80	80
Power, diesel (kW), min.	90	65	80	65	65
Power, hybrid system total, (kW)	N/A	N/A	N/A	N/A	N/A
Wheel base (mm)	2700 - 3200	2300 - 4500	2300 - 4500	2300 - 4500	2300 - 4500
Transmission/Traction	Manual or auto 4WD	Manual or auto 2WD	Manual or auto 4WD	Manual or auto 2WD	Manual or auto 4WD
GVW, max, (kg)	3500	4500	4500	5500	5500
No. of seats, incl. driver, min	3	3	3	3	3
No. of doors, min (incl. rear)	3	3	3	3	3

Category	26	27	28	29
	Cooler Cargo Van/Cargo Box vehicle	Sedan/hatchback mini	Sedan Medium	Electric Vehicle (EV)
	2/4WD	2WD	2WD	2/4WD
Engine displacement (cc)	1850 - 5600	900 - 1600	1495 - 1800	N/A
Power, petrol (kW), min.	80	60	100	N/A
Power, diesel (kW), min.	65	60	100	N/A
Power, hybrid, electric system total, (kW)	N/A	N/A	N/A	80
Wheel base (mm)	2300 - 4500	1800- 2399	2600 - 2750	2000-3100
Transmission/Traction	Manual or auto 2/4WD	Manual or auto 2WD	Manual or auto 2WD	Auto 2/4WD
GVW, max, (kg)	5500	2500	2800	3500
No. of seats, incl. driver, min	2	4	4	4
No. of doors, min (incl. rear)	2	4	4	4

Standard Equipment - MANDATORY for all categories

All vehicles in Lots/Categories 1 - 29 must have the following standard equipment with the vehicle at no additional costs. Colour of vehicles: White is mandatory, additional colours appreciated.

Air bags, min. driver and passenger mandatory, except categories with GVW > 3.500 kg:	Headrests, front	Seat belts, front and rear	Warning triangle
Air condition (non CFC) (A/C) & heater	Lockable fuel tank lid/cap	Spare wheel, full size. Emergency wheel or repair kit with air compressor accepted for cat. 1-4, 17, 27-29	12 V socket at front seats
Fire extinguisher, 1 kg. min.	Owner's manual	Sun visors, 2 pcs.	Charge cable(s). Only for PHEV and EV in category 17 and 29
Door mirrors, left & right	Power steering	Tool kit with jack	Charge station for vehicle. Only for PHEV and EV in category 17 and 29
First aid kit	Radio, AM/FM	Towing eye/hook or other provision for towing of the vehicle, front & rear	Category 1 - 29: All must be homologated/approved for country of destination

Suggested Options (if not standard features) for all categories

Options: It is strongly preferred that a minimum of 4 options with price are listed for each vehicle offered

ABS brakes & Traction Control System	Disc brakes, all wheels	Limited slip differential	Spare parts kit
Accessory meter (multi information display)	Door mirrors, left & right, electric, heated and adjustable	Lockable glove box	Spare tyre locking
Air side bags, curtain bags	Double fuel filter	Lockable wheel nuts	Spare wheel
Air bags, all seats	Electronic Stability Program (ESP)	Metallic paint	Spare wheel cover
Air cleaner with snorkel	Engine under ride protection	Metallic/pearlescent paint	Spare wheel, extra, mounted on rear door, w/ lock
Air conditioner, dual – front and rear (non-CFC)	Flag pole	Mudguards	Special execution for operation under arctic conditions
Alloy wheels	Floor mats	Parts catalogue	Steering, collapsible and tiltable
Antenna, radio linked, w/ automatic up-down	Fog lamps	Parts catalogue, electronically	Stop lamp, high mounted
Anti-theft device (accelerator interlock) or similar	Front grill guard	Pollen & pollution ventilation filter	Sump guard (engine protection)
Anti-theft package	Front grill guard	Power antenna	Sun roof
Assist grips, front and rear	Fuel heater	Power lock	Suspension, heavy duty/off-road package
Automatic transmission (all categories 1-28)	Fuel tank protection	Power windows	Tarpaulin (cat. 9 - 13)
Back buzzer, when reversing	Fuel tank, extra	Radio & CD player	Tarpaulin, w/ window
Battery, heavy duty	Halogen headlamps	Radio preparation package	Towing hitch ball/pintle w/ trailer socket
Body side stripe	Hand lamp & connector	Rear quarter windows	Transfer case protection
Bumper step, rear, chrome/painted	Headlamp buzzer	Rear window washer/wiper	Tubes for tyres
Burglar alarm/immobilizer	Headlamp level adjuster	Rear window, sliding	Tyre options
Catalogue & manual, fee for loading into vehicle	Headlamp wipers and washers	Remote fuel lid opener	Tyres, radial
Central locking	Headrest, front/rear/3 rd row	Roll-over bar	Upholstery, special
Chrome plated door mirrors	Heater, front and rear	Roof rack	Ventilation window, front

Chrome plated grill, fr & rr	HF radio with antenna, 100 channels or equivalent	Roof rails	VHF radio, 255 channel 25W w/remote mount kit or equivalent
Chrome plated grill, front & rear bumpers	High altitude compensator, (HAC) if required	Search light	Winch
Clock	Horn, dual tone	Seating options	Window wiper, front, intermittent, w/ washer
Console box	Hot air intake	Seats, front, heated	Windscreen, coloured/shaded
Cup holder	Jerry can, w/ holder	Side impact protection	Without air conditioner
Curtains	Lamp protection	Side protector moulding	Workshop repair manual
Cushion seat	Leather interior package	Side steps	Extended warranty
Differential lock	Leather steering wheel	Snow chains	Prepaid maintenance services
Tracking systems (GPS etc)	Installation only of tracking systems (GPS etc)		PLEASE ENTER ANY OTHER RELEVANT OPTIONS OF YOUR CHOICE

Ambulance equipment MANDATORY – Standard ambulance version - Categories 21-23

In addition to Standard Equipment, below are listed the minimum requirements for STANDARD ambulances.

Important Notes:

All medical equipment marked ** must be in accordance with:

CE MDD 93/42 and 2007/47 and/or FDA,

IEC/ISO 60601 and 80601 applicable family standards

Manufacturer ISO 13485 and/or ISO 9001,

Any other QA/regulatory ISO standard applicable to the class/category of the product.

Brochures for these items must be provided with your bid.

Extended first aid kit	Light inside patient compartment	Seat for attendant	** Stretcher, main: Roll-in, collapsing ambulance stretcher, wheeled. The stretcher should be supplied with a vehicular fixation system, and with patient immobilisation system and head immobiliser. The stretcher mattress should be waterproof and upholstered with fire proof material.
Flashing beacon - red or blue – to be determined when ordering	Red cross/red crescent, sides, rear & roof	Siren & PA system with microphone	Wipe clean interior panels incl. partition wall with sliding window & linoleum floor
IV – hangers, min. 2			

Suggested Options Standard ambulance version - Categories 21-23 (if not standard features)

Options: It is strongly preferred that a minimum of 4 options with price are listed for each vehicle offered

Important Notes:

All medical equipment marked ** must be in accordance with:

CE MDD 93/42 and 2007/47 and/or FDA,

IEC/ISO 60601 and 80601 applicable family standards

Manufacturer ISO 13485 and/or ISO 9001,

Any other QA/regulatory ISO standard applicable to the class/category of the product.

Brochures for these optional items are to be provided upon request.

For detailed specifications of items marked ** please refer to the section at the end of this document 'Specifications for Ambulance and Mobile Clinic medical equipment Options

12v 2nd light with socket mounted in rear	Frosted glass 2/3 rear compartment	Multi Flashing Beacon bar – colour TBD	Tinted windows (instead of frosted)
Air condition, patient compartment	HF radio with antenna, 100 channels or equivalent	**Oxygen resuscitator, automatic type including oxygen cylinder w/o oxygen	**Trauma kit
Backrest for stretcher	Illuminated Ambulance roof sign	**Oxygen resuscitator, demand type including oxygen cylinder w/o oxygen	VHF radio, 255 channel 25W w/remote mount kit or equivalent
**Defibrillator c/w battery, pads, soft case, SDC card, manual	**Mattress for stretcher	**Portable oxygen therapy kit 2.5L min, cylinder w/o oxygen	Water tank min. 3 litres, wash basin with electric pump and tap, heated water.
Star of Life sign, sides, front and rear	**Medical refrigerator, chest type, 50 litres min.	**Pulse oximeter (SpO2 meter)	Working lamp
**Fitted oxygen pipeline system with cylinder and regulator	Metal locker	**Stretcher, folding (if not standard)	PLEASE ENTER ANY OTHER RELEVANT OPTIONS OF YOUR CHOICE

Ambulance equipment MANDATORY – Advanced version - Category 20

In addition to Ambulance Equipment Mandatory - Standard version, below are listed the minimum requirements for ADVANCED ambulances.

Important Notes:

All medical equipment marked ** must be in accordance with:

CE MDD 93/42 and 2007/47 and/or FDA,

IEC/ISO 60601 and 80601 applicable family standards

Manufacturer ISO 13485 and/or ISO 9001,

Any other QA/regulatory ISO standard applicable to the class/category of the product.

Brochures for these items must be provided with your bid.

5 kg fire extinguisher, min.	First aid kit	Owner's manual for all installed equipment, language TBD	Side flood lamp, min. 1 each side
**Adult splint kit: Components to be included: wrist/forearm splint, full arm splints, full leg splints, universal combo splint, universal rib splint, hard e-collars and carrying case. Adjustable sizes, universal or provided in large and medium/small. Quick application and removal X-ray translucent and preferably also MRI compatible	Fixed oxygen system with wall plug and bottles to be installed into a cupboard with sign 'Oxygen bottles'. Connection norm TBD in case	**Portable oxygen equipment: Portable O2 distribution bar with stand and carry case, 4 or more outlets, connectors according to country of destination standards. Suitable for pressurised O2 inlet up to 50 psi, supplied from a centralised system or a cylinder. Supplied with carry case. Each outlet equipped with pressure regulator and flow regulator (0-12 lpm or higher). Supplied with reusable oxygen masks, cannulas, tubing and preferably with bubbling bottle humidifiers, sufficient for all outlets.	Side LED strobe lamps on side of vehicle, colour TBD, min 3 each side
Air condition, front & rear	Flood working lamp, mounted at rear gate doors.	Power locking doors, all doors, remote controlled	Siren with 'yelp' function & PA system with microphone
Battery charge function from AC grid with socket, to keep batteries always fully charged while garaged	Fog lamps, 2 front and min. 1 rear	**Pulse oximeter (saturometer): Battery powered and supplied with battery charger 110/220 V, 50/60Hz mono-phase electrical source, possibly compatible with DC vehicular power supply. Oxygen saturation measurement range not smaller than 70 to 97% SpO2 and HR measurement. Plethysmographic curves and trendy visualization for monitored parameters. Supplied with adult and paediatric transducers and with carry case	**Spinal board: Rigid board for transport and immobilization of the patient with suspected spinal lesions. Suitable for immobilisation of adult and paediatric patients. Built-in carry handles, patient and stretcher fixation points. Made of rigid polymer, lightweight, shock proof, disinfectable, fluid-resistant and possibly floating.
Beacon lamp, min. single, colour TBD. Mounted at the rear of the roof.	Front mounted strobe lamps integrated in front grill, colour TBD.	**CPR board: Cardiopulmonary resuscitation board. Rigid board, solid surface, made of ABS, acrylic, PP or equivalent material, lightweight. Anatomically designed, with built-in handles.	Spot lamp, inside, with flexible arm

Bench for attendance with storage room underneath	Frosted glass 2/3 rear compartment	Reading lamp in driver cabin	**Stethoscope: Clinical adult and paediatric stethoscope. Pressure-based sound frequency detection, based on membrane integrated in the head.
**Blood pressure unit: Tourniquet blood pressure monitor. Arm cuff, manometer and pump included, for adult and paediatric patients. Diastolic and Systolic pressure measurement.	**Harness type Spider: Harness suitable for rigid immobilisation of the patient over the stretcher or board. Propylene, Nylon or other polymeric straps, heavy duty, washable and disinfectable. At least 3 longitudinal straps and 2 over the shoulders straps. T- o X- straps allowed. X-ray transparent, preferably also MRI compatible.	Rear seat for attendant	**Stretcher, main: Roll-in Self Collapsing Ambulance stretcher, wheeled. Automatic undercarriage operation when taken in and out of ambulance. The stretcher should be supplied with a vehicular fixation system. Supplied with patient immobilisation system and head immobiliser. The stretcher mattress should be waterproof and upholstered with fire proof material. (replacing Standard ambulance stretcher)
**Defibrillator c/w battery, pads, soft case, SDC card, manual: 120-240V, 50/60Hz mono-phase electrical source and possibly compatible with DC vehicular power supply. With rechargeable batteries. Rechargeable batteries. Bi-phasic, minimum energy range 10-200 J. Semi-automated and manual modes, with automatic impedance compensation. ECG synchronized discharges. Supplied with adult and paediatric pads or adaptors. Supplied with carry case	Heater, front & rear	**Resuscitator, manual for adults and children: Resuscitator to ventilate adult and paediatric patients. Resuscitator operated by hand, ventilation with ambient air. Sterilisable in autoclave or suitable for disinfection, easy to disassemble and reassemble. All parts must be manufactured from latex-free, high-strength, long-life material. Compressible self-refilling ventilation bag for adults and for children/infants. Supplied with O2 reservoir bag, non-rebreathing patient valve, with optional pressure limiting valve. Patient connector outside/inside diameter (OD/ID): 22/15mm, inlet valve with nipple for O2 tubing. Supplied with reusable masks for adults, children and infants, and with carry case. Compliant with ISO10651-4.	**Sub stretcher, foldable: Foldable sub-stretcher, light frame, foldable. Suitable for external interventions. With integrated carry handles.
Dual battery with automatic split charge function & DC to AC inverter to match installed standard equipment + 50%	Inside roof rail/hand grabs	**Short spine immobilizer: Harness suitable for rigid spinal and head immobilisation and for extraction of the patient. Propylene, Nylon or other polymeric straps, heavy duty, washable and disinfectable. Supplied with heavy duty buckles and belts. X-ray transparent, preferably also MRI compatible. Supplied with carry case.	Torch, wall mounted charger
Durable vinyl floor or equivalent, easily washable.	IV hooks, min. 3	Reverse warning buzzer	Transverse roof strobe warning light bar, colour TBD. Mounted in front of the roof

Electric sockets, min. 4 x 110/115/120V or 220/230/240V AC, TBD. Actual wall plugs type TBD	Light inside patient compartment, AC, min. 4 x 800 lumen LED	Roof ventilation, 12V, with open/close function	<p>**Trauma kit: Suggested kit composition shall include ((the offered composition may vary and functionally equivalent kits can be evaluated and accepted):</p> <ul style="list-style-type: none"> - airway management kit - burn management kit (sheet, bandages, etc.) - bandages kit (assorted bandages, plasters, dressings, pads, gauze, tapes, elastic bandage, blood stoppers, etc.) - Instruments (surgical instrument set for wound and trauma management) - Tools and consumables (washing/disinfection supplies, gloves, masks, LED hand light, cold packs, etc.)
Emergency blanket	<p>**Manual suction pump: Pump, suction, hand or foot-operated. Double piston or other equivalent system.</p> <p>All parts are manufactured from high-strength, durable material, sterilisable or disinfectable, that does not require specific maintenance or storage conditions.</p> <p>Knock-down construction.</p> <p>Capacity of collection container/s > 500 ml.</p>	Shelves & cupboards, full side wall, with sliding transparent hatches. Min. one cupboard lockable.	Water tank min. 3 litres, wash basin with electric pump and tap, heated water.
<p>**Portable oxygen therapy kit 2.5L min, cylinder w/o oxygen: Oxygen tanks, regulators and outlets shall be available in the standard in use in the country of destination.</p> <p>Adult and paediatric oxygen masks and cannulas to be included in the kit.</p> <p>Supplied with carry bag.</p>	<p>**Monitor – ECG, SpO2, NIBP, Temp., respiration with min. 4 hour battery: Battery powered and supplied with battery charger 110/220 V, 50/60Hz mono-phase electrical source, possibly compatible with DC vehicular power supply.</p> <p>Rechargeable battery back-up with at least 3 hours of autonomy.</p> <p>Monitoring modules: Respiration, ECG, Oxygen Saturation, Non-Invasive Blood Pressure, Temperature.</p> <p>Adults and pediatric patients, with storage of patient data and trends.</p> <p>Display size > 9", LCD or TFT type, with curves and numerical values visualization.</p> <p>Alarms for system status and patient parameters out of range.</p> <p>Respiration module: frequency respiration of at least 0-140 bpm.</p> <p>ECG waveform and HR visualisation and parameters calculation.</p> <p>Oxygen Saturation module: range of at least of 70 to 90% SpO2.</p> <p>Non-invasive Blood Pressure module (NIBP) with Diastolic and Systolic pressure measurement.</p>		Wipe clean interior panels incl. partition wall & floor. Slide able window between driver and patient compartment.

	Temperature module. Supplied with carry case and all required cables and transducers and consumables.		
Female & male plastic wedge	Multi Flashing Beacon bar mounted at front of the roof – colour TBD		

Suggested Options ADVANCED ambulance version - Category 20 (if not standard features)

Options: It is strongly preferred that a minimum of 4 options with price are listed for each vehicle offered

Important Notes:

All medical equipment marked ** must be in accordance with:

CE MDD 93/42 and 2007/47 and/or FDA,

IEC/ISO 60601 and 80601 applicable family standards

Manufacturer ISO 13485 and/or ISO 9001,

Any other QA/regulatory ISO standard applicable to the class/category of the product.

Brochures for these optional items are to be provided upon request.

For detailed specifications of items marked ** please refer to the section at the end of this document 'Specifications for Ambulance and Mobile Clinic medical equipment Options

**Electric suction pump	**Oxygen resuscitator, automatic type including oxygen cylinder w/o oxygen	**Oxygen resuscitator, demand type including oxygen cylinder w/o oxygen	VHF radio, 255 channel 25W w/remote mount kit or equivalent
HF radio with antenna, 100 channels or equivalent	Star of Life sign, sides, front and rear	**Portable oxygen therapy kit 2.5L min, cylinder w/o oxygen	Water can, 20 L min.
High top, providing standing height inside the vehicle, 1.80 m min. (if not Standard)	**Syringe Pump	**Defibrillator with monitor	**Medical refrigerator, chest type, 50 litres min.
Illuminated Ambulance roof sign	**Transport incubator	**Infusion pump	**Transport respiratory ventilator
	Additional LED lights, spots, detachable and moveable		PLEASE ENTER ANY OTHER RELEVANT OPTIONS OF YOUR CHOICE

Mobile Clinic Equipment MANDATORY - Categories 24 -25

In addition to Standard Equipment, below are listed minimum requirements for Mobile Clinic.

5 kg fire extinguisher, min	First aid kit.	Patient comfortable chair (car type), multi adjustable, for one person min.	Staff/examiners chair,, to be secured while driving the vehicle.
Air condition, front & rear while engine is running.	Frosted glass 2/3 in rear compartment or tinted, TBD	Petrol generator set, kVA = 2 x load of standard equipment and in any case be able to meet all installed equipment. With electric start. Min. 25 m heavy duty rubber extension cord. Outside vehicle plug, which can also plug electricity from the external grid. Must be securely stored inside the vehicle during transport and easily lifted in and out. 50/60Hz TBD	Torch, LED, wall mounted with charger
Battery charge function from AC grid with socket, to keep batteries always fully charged while garaged	Hand cleaner dispensers wall mounted and hook for towel	Rear bench seat parallel against wall with backrest and storage in bench box	Water tank min. 3 litres, wash basin with electric pump and tap, heated water.
Drawers, min. 4 and one cupboard under the working table. Min one with lock.	IV hooks, min. 2	Refrigerator, 50 litres capacity min. capable to keep 2 °C at tropical conditions. With lock. To be operated by AC and 12 V DC. With outside temperature display.	Wipe clean interior panels incl. partition wall & floor. Slide able window between driver and patient compartment
Dual battery with automatic split charge function & DC to AC inverter to match installed standard equipment + 50%	Light inside patient compartment, AC, 4 x min. 800 lumen LED	Roof ventilation, 12V, with open/close function	Working table, angled,: Plate 1: min L: 0.80 x W: 0.40 m + plate 2: min. L: 0.40 x W: 0.40 m, both with hard surface like Formica or equivalent
Durable vinyl floor or equivalent, easily washable.	Owner's manual for all installed equipment, language TBD	Spot lamp, inside rear cabin, with flexible arm	
Electric sockets, min. 4 x 110/115/120V or 220/230/240V AC, TBD. Actual wall plugs type TBD			

Suggested Options Mobile Clinic - Categories 24-25 (if not standard features)

Options: It is strongly preferred that a minimum of 4 options with price are listed for each vehicle offered

Important Notes:

All medical equipment marked ** must be in accordance with:

CE MDD 93/42 and 2007/47 and/or FDA,

IEC/ISO 60601 and 80601 applicable family standards

Manufacturer ISO 13485 and/or ISO 9001,

Any other QA/regulatory ISO standard applicable to the class/category of the product.

Brochures for these optional items are to be provided upon request.

For detailed specifications of items marked ** please refer to the section at the end of this document 'Specifications for Ambulance and Mobile Clinic medical equipment Options'

50W P.A system with siren	Lap-top, min 14" screen colour with min. 2 x USB, RGB monitor outlet, CD drive, power supply, battery, Microsoft Windows 7 or newer, CPU min. 3x core, 2.00 MHz, RAM min. 4.0 GB, Hard disk min. 100 GB. Microsoft Office package.	Pedal bin	**Thermometer, digital
Air condition, rear, operating while vehicle engine is stopped	LED beacon fitted to roof	**Portable oxygen therapy kit 2.5L min (Oxygen bottle empty)	**Syringe pump
Awning, roll up, to be mounted on sliding door side of vehicle	Light weight, sturdy, chairs, min 4 and table min. 1 for registration and waiting (under awning)	Power locking doors, all doors, remote controlled (if not STD)	**Thermometer, digital
**Defibrillator with monitor	**Microscope, malaria, TB, parasites etc. detection, min. 62 x. Cool light LED, 220/240V AC. Research grade microscope 30 ° head. Centrifuge machine, min. 200 nos. capillary box, oil, holders, manual.	Printer, laser or LED. Suitable for rough road conditions. Complete with all cables and drivers etc	**Thermometer, infrared
**Defibrillator c/w battery, pads, soft case, SDC card, manual	MOBILE HEALTH CLINIC sign sides, front & rear	**Pulse oximeter (SpO2 meter)	Tinted heat reflective film for windows in rear compartment, instead of frosted 2/3 as std.
**Electric suction pump	Monitor – ECG, SpO2, NIBP, Temp., respiration with min. 4 hour battery.	Red cross/red crescent, sides, rear & roof	Trailer hook, hitch ball or Nato type, with 7-pin electric socket
**Fetal Doppler	Mounted examination light, LED	Refrigerator temperature logging system with software	** Transport respiratory ventilator
Fixed oxygen system with wall plug and bottles to be installed into a cupboard with sign 'Oxygen bottles'. Connection norm TBD in case	**Mounted sphygmomanometer for adults and children	Reverse warning buzzer	**Ultrasound scanner with monitor. With USB, probe connectors, SVGA and video outputs
	**Mounted examination couch (instead of patient chair)	Roof rack	Urinal, female
Flashing beacon - red or blue – TBD when ordering	Multi Flashing Beacon Lamp – colour TBD	Roof rack with lockable box, water tight.	Urinal, male
**Glucometer	Needle cutter to destroy needles (prevent re-use)	Roof-mounted 12 volt electric ventilator	VHF radio, 255 channel 25W w/remote mount kit or equivalent
**Gynaecological chair, instead of standard patient chair	**Ophthalmoscope	**Scale, adult	Water can, 20 L min.
**Haemoglobin reader	**Otoscope	**Scale, baby, infants	**Weight measuring scale
Hand-paper towel dispenser	**Oxygen resuscitator, automatic type including oxygen cylinder w/o oxygen	Sewage disposal system and tanks	Wheelchair access ramps

Heater, front & rear	**Oxygen resuscitator, demand type including oxygen cylinder w/o oxygen	Sharps box for used needles & syringes	Wheel chair, heavy duty, collapsible
HF radio with antenna, 100 channels or equivalent	Patient stepper	**Stretcher, main, with washable mattress and tilt able head, fixing belts and automatic undercarriage operation when taken in and out of vehicle. Locking system to floor. Instead of patient chair	**White blood cell monitor
High top, providing standing height inside the vehicle, 1.80 m min. (if not Standard)	Additional LED lights, spots, detachable and moveable	**Stethoscope	Working lamp with min. 5 m cord, min 800 lumen, LED
**Infusion pump	**Portable oxygen equipment	**Syringe pump	PLEASE ENTER ANY OTHER RELEVANT OPTIONS OF YOUR CHOICE

Cargo Van/Cargo Box - Cooler Cargo Van/Cooler Cargo box MANDATORY Equipment - Categories 19 & 26

In addition to Standard Equipment, below are listed minimum requirements for Cargo Van/Cargo Box - Cooler Cargo Van/Cooler Cargo box.

Van or closed cargo box, dust proof, made from steel, aluminium or composite material, with min. rear gate, with lock	Light in cargo room	Sturdy floor made from hardwood, stainless steel or aluminium	Cargo fixing eyes/hooks along sides, inside cargo room
Cooler version only: Refrigeration cooler unit in cargo room, driven by the vehicle engine or stand alone function. Must be insulated to maintain 2 C degrees or below at tropical conditions.	Cooler version only: Food grade material on all surfaces. Easily washable. Sealed in all corners and to the floor.		

Suggested Options Cargo Van/Cargo Box - Cooler Cargo Van/Cooler Cargo box categories 19, 26 (If not already standard features)

Options: It is strongly preferred that a minimum of 4 options with price are listed for each vehicle offered

Refrigeration cooler unit, stand alone function, independent of vehicle engine	Rear gate lift, hydraulic or electric, state lift capacity and dimensions	Side gate, left or right, with lock	
Freezer unit, stand alone function, independent of vehicle engine. Van/Box must be insulated to min. 3 Star Freezing to keep - 18 C degree (0 F degree) or below at tropical conditions	Working light outside at rear gate	Side gate, left and right, with lock	PLEASE ENTER ANY OTHER RELEVANT OPTIONS OF YOUR CHOICE

Police vehicle optional package - Categories 1-16, 19, 27-28

Bidders are encouraged to offer police vehicle optional packages for vehicles in any or all of the above mentioned Categories. Below please find the minimum requirements for the Police vehicle package. This optional package should be entered under "Options" under each vehicle for which you wish to offer the Police vehicle package. In addition to the Police vehicle package, if desired please add more police vehicle equipment individually under "Options."

Electric siren with PA system including microphone & speaker	Possibility for locking rear side passenger doors to make them only to be opened from outside.	Remote controlled roof mounted search lamp	Roof mounted multi flash bar, with a) red flashlight, b) blue multi flash light, c) combined red and blue multi flash light. Actual colour to be determined when ordering
Hand lamp, with bracket and charge function, placed inside at the front of the cabin	Rear side windows to be prevented from opening.	Police communication radio	PLEASE ENTER ANY OTHER RELEVANT OPTIONS OF YOUR CHOICE

Specifications for Ambulance and Mobile Clinic medical equipment Options

Below detailed specifications are related to options in Ambulances, Advanced Ambulances and Mobile Clinics.

Important Notes:

All medical equipment must be in accordance with:

CE MDD 93/42 and 2007/47 and/or FDA,

IEC/ISO 60601 and 80601 applicable family standards

Manufacturer ISO 13485 and/or ISO 9001,

Any other QA/regulatory ISO standard applicable to the class/category of the product.

Description	Minimum specifications
Adult splint kit	Components to be included: wrist/forearm splint, full arm splints, full leg splints, universal combo splint, universal rib splint, hard e-collars and carrying case. Adjustable sizes, universal or provided in large and medium/small. Quick application and removal X-ray translucent and preferably also MRI compatible
AED defibrillator	AED compact defibrillator with CPR support feature and metronome. Immediate operation, easy-to-use device, step-by-step guide on the device and durable plastic-enclosed manual. Suitable for adult and paediatric patients, supplied with adult and paediatric adhesive pads. Automatic ECG (VT/VF) detection through the pads and switch between AED and CPR modes.. Bi-phasic energy waveform, minimum energy output 130 J for adults, 70 J for children. Internal safety discharge feature (if shock is not delivered). Splash and shock resistant. Replaceable internal battery, non-rechargeable, autonomy >100 shocks at maximum energy. Shelf life > 4 years stand-by operation. Supplied with carry case, sets of pads and quick reference guide.
Autoclave	Autoclave with microprocessor control. 120 to 240V, 50/60Hz mono-phase electrical source. Built-in electrical steam generator and air compressor (if required). Sterilization chamber stainless steel, capacity not less than 50 lt. Control panel with working parameters, equipment status and alarms. Suitable for solids, glassware, liquid and for; vacuum test and Bowie-Dick or validation test. Adjustable temperature, working range not smaller than from 115° up to 121°C. Safety systems, at least: thermostat, pressure switch, valves. Safety door lock during sterilization.
Blood gas analyser	Point of care Blood Gas Analyser, benchtop. 120-240V, 50/60Hz mono-phase electrical source. Fully automatic, auto-calibrating, no sample pre-treatment. Simultaneous measure of at least the following parameters: PO2, PCO2, pH, Na+, K+, Cl-, Ca++, Hct, tHb, SO2.
Blood pressure unit	Tourniquet blood pressure monitor. Arm cuff, manometer and pump included, for adult and paediatric patients. Diastolic and Systolic pressure measurement.
CPR board	Cardiopulmonary resuscitation board. Rigid board, solid surface, made of ABS, acrylic, PP or equivalent material, lightweight. Anatomically designed, with built-in handles.
CPAP ventilator, portable	110/220 V, 50/60Hz mono-phase electrical source with rechargeable battery with at least 4 hours autonomy, desirable vehicular DC power supply source. Portable CPAP ventilator for adult and pediatric patients. Suitable for NIV ventilation modes, including CPAP, preferably BIPAP, Pressure and Volume controlled, Assisted Spontaneous Ventilation Integrated leakage compensation system. Safety pressure release valve. Patient parameters and system alarms. Supplied with reusable valves and patient circuits, carry case, manual and all required accessories
Defibrillator c/w battery, pads, soft case, SDC card, manual	120-240V, 50/60Hz mono-phase electrical source and possibly compatible with DC vehicular power supply. With rechargeable batteries.

	<p>Bi-phasic, minimum energy range 10-200 J.</p> <p>Semi-automated and manual modes, with automatic impedance compensation.</p> <p>ECG synchronized discharges.</p> <p>Supplied with adult and paediatric pads or adaptors.</p> <p>Supplied with carry case.</p>
Defibrillator with monitor	<p>120-240V, 50/60Hz mono-phase electrical source and possibly compatible with DC vehicular power supply.</p> <p>With rechargeable batteries.</p> <p>Bi-phasic, minimum energy range 10-200 J.</p> <p>Semi-automated and manual modes, with automatic impedance compensation.</p> <p>ECG and patient vital parameters monitoring (preferably also SpO2 and NIBP).</p> <p>ECG synchronized discharges.</p> <p>Supplied with adult and paediatric pads or adaptors.</p> <p>Supplied with carry case.</p> <p>Supplied with all required accessories, cables and transducers.</p>
ECG monitor	<p>120 to 240 V, 50/60Hz mono-phase electrical source, with battery charger and integrated battery.</p> <p>Up to 12 electrographic standard leads measuring with simultaneous acquisition.</p> <p>At least 6" LCD or TFT color display.</p> <p>Equipment compatible with patients with pacemakers.</p> <p>Protection against defibrillation.</p> <p>Automatic internal data storing.</p> <p>Equipment provided with interpretative ECG software.</p> <p>Integrated printer and selectable printing paper speed.</p> <p>Availability of AHA and IEC standard cables (color coding).</p>
Electric suction pump	<p>120-240V, 50/60Hz mono-phase electrical source, preferably battery powered and possibly compatible with DC vehicular power supply.</p> <p>Oil-free vacuum pump and motor.</p> <p>All parts coming into contact with contamination media must be easily cleanable.</p> <p>Continuous vacuum adjustment or provided with suitable number of steps for adult and paediatric patients and various types of treatment.</p> <p>With vacuum meter.</p> <p>Fitted with disposable bacterial filter.</p> <p>Supplied with jar/s and a set of disposable filters.</p>
Fetal Doppler	<p>Foetal HR detector.</p> <p>LCD display.</p> <p>Built-in speaker and audio output.</p> <p>FHR measuring range 50~200 bpm.</p> <p>Optionally supplied with doppler probe, working mode Pulse wave Doppler, 1 Mhz.</p>
Glucometer	<p>Point-of care hand-held glucometer.</p> <p>Battery powered, 110 to 240 V, 50/60Hz mono-phase battery charger.</p> <p>Whole blood analysis.</p> <p>Sample type: fresh capillary whole blood.</p> <p>OR</p> <p>Tabletop glucometer, 110 to 240 V, 50/60Hz mono-phase.</p>
Gynaecological chair, instead of standard patient chair	<p>Gynecological chair, suitable for gynecology and obstetrics.</p> <p>Adjustable backrest, armrests, leg/lower section and articulated leg supports.</p> <p>Chair and leg supports provided with mattress/cushions/padding.</p> <p>The mattress and the cushions should be waterproof, anti bacterial and anallergic, latex free, upholstered with fire proof material.</p>
Haemoglobin reader	<p>Point of care Hb reader.</p> <p>Capillary, venous or arterial whole blood sample. Optical reading.</p>
Harness type Spider	<p>Harness suitable for rigid immobilisation of the patient over the stretcher or board.</p> <p>Propylene, Nylon or other polymeric straps, heavy duty, washable and disinfectable.</p> <p>At least 3 longitudinal straps and 2 over the shoulders straps. T- o X- straps allowed.</p> <p>X-ray transparent, preferably also MRI compatible.</p>
Infusion pump	<p>120-240V, 50/60Hz mono-phase electrical source, rechargeable batteries, autonomy > 4 hours.</p> <p>LCD display.</p> <p>Syringe programmable infusion pump.</p> <p>Visual and audio alarms, including infusion errors.</p> <p>Standard and bolus modes.</p>

	<p>Infusion flow rate range not smaller than 0,1 to 1000 ml/h.</p> <p>Suitable syringe sizes: 5, 10, 20, 30, 50 /60 ml. (Automatic syringe size recognition)</p> <p>IPX4 splashes waterproof equipment.</p>
Intubation set	<p>The intubation set shall include the following items (or functionally equivalent sets/items):</p> <ul style="list-style-type: none"> - Mc-intosh laryngoscope set, fiberoptic, metallic handle with batteries, detachable reusable blades (stainless steel) sizes 4/3/2/1/0; LED or Halogen (if Halogen supplied with n. 5 spare bulbs). - forceps set, Magill, for infant, children, adults - set of endotracheal tubes, various sizes for infant, children, adults. - reamers and mouth opener. - set of suction catheters, various sizes for infant, children, adults. <p>Surgical instruments made of stainless steel AISI 316 L / AISI 304 as per applicable.</p>
Isolation capsule for the stretcher	<p>Patient isolation capsule, suitable for adult and pediatric patients.</p> <p>Battery operated, capacity > 5 hours, with 110-240 V AC battery charger and preferably vehicular DC power supply.</p> <p>Compatible with the emergency stretcher, suitable for use and easy folding/unfolding, supplied with capsule fixation system.</p> <p>Integrated air blower system with HEPA filtration (at least of 99% for 0.3 µm) to create an internal negative air pressure.</p> <p>Rigid plastic frame, ABS or equivalent, Isolation chamber made of non-toxic and transparent plastic polyurethane (PU), polyethylene (PE) or equivalent material.</p> <p>Integrated sealing zipper, at least three pairs of access ports with integrated airtight protective gloves, at least two utility ports with integrated lock, Oxygen supply port.</p> <p>Collapsible unit for easy storage, supplied with carry bag.</p> <p>Built-in carrying handles.</p> <p>All parts and surfaces shall be able to be disinfected and sterilized.</p>
Laryngoscope set	<p>Mc-intosh laryngoscope set, fiberoptic, metallic handle with batteries, detachable reusable blades (stainless steel) sizes 4/3/2/1/0; LED or Halogen (if Halogen supplied with n. 5 spare bulbs).</p>
Mattress for stretcher	<p>The stretcher mattress should be heavy duty, waterproof and upholstered with fire proof material.</p>
Manual suction pump	<p>Pump, suction, hand or foot-operated.</p> <p>Double piston or other equivalent system.</p> <p>All parts are manufactured from high-strength, durable material, sterilisable or disinfectable, that does not require specific maintenance or storage conditions.</p> <p>Knock-down construction.</p> <p>Capacity of collection container/s > 500 ml.</p>
Medical refrigerator, chest type, 50 litres min.	<p>110/220 V, 50/60Hz mono-phase electrical source and possibly compatible with DC vehicular power supply.</p> <p>Refrigerator temperature range non smaller than from +2° to +8°C.</p> <p>Volume not less than 50 l.</p> <p>Supplied with internal shelves/separators.</p>
Microscope, malaria, TB, parasites etc. detection, min. 62 x. Cool light LED, 220/240V AC. Research grade microscope 30 ° head. Centrifuge machine, min. 200 nos. capillary box, oil, holders, manual.	<p>Binocular microscope suitable for microbiology and general application.</p> <p>Power supply: 220 – 240 VAC, 50 – 60 Hz.</p> <p>Adjustable binocular observation tube (interpupillary distance and head movements)</p> <p>LED light source.</p> <p>Stage adjustment and 2-ratio gearbox.</p> <p>Substage transmission illuminator, Köhler type.</p> <p>Nosepiece with at least 3 revolving positions.</p> <p>Abbe type substage condenser, adjustable.</p> <p>Availability of a catalogue of condensers for universal use, bright field, dark field and phase contrast studies.</p> <p>Supplied with a minimum set set of 4 objectives (indicative parameters): 10x, NA 0.25; 20x, NA 0.40; 40x – 60x; oil immersion 100x, NA 1.2 – 1.3.</p> <p>Preferably with optional fluorescent attachment, multiple cube turret.</p>
Mounted sphygmomanometer for adults and children	<p>Pole or wall mounted tourniquet sphygmomanometer.</p> <p>With clock-style manometer, easy to read.</p> <p>Arm cuffs and pump included, for adult and paediatric patients.</p> <p>Diastolic and Systolic pressure measurement.</p>
Monitor – ECG, SpO2, NIBP, Temp., respiration with min. 4 hour battery.	<p>Battery powered and supplied with battery charger 110/220 V, 50/60Hz mono-phase electrical source, possibly compatible with DC vehicular power supply.</p> <p>Rechargeable battery back-up with at least 3 hours of autonomy.</p> <p>Monitoring modules: Respiration, ECG, Oxygen Saturation, Non-Invasive Blood Pressure, Temperature.</p> <p>Adults and pediatric patients, with storage of patient data and trends.</p>

	<p>Display size > 9", LCD or TFT type, with curves and numerical values visualization.</p> <p>Alarms for system status and patient parameters out of range.</p> <p>Respiration module: frequency respiration of at least 0-140 bpm.</p> <p>ECG waveform and HR visualisation and parameters calculation.</p> <p>Oxygen Saturation module: range of at least of 70 to 90% SpO2.</p> <p>Non-invasive Blood Pressure module (NIBP) with Diastolic and Systolic pressure measurement.</p> <p>Temperature module.</p> <p>Supplied with carry case and all required cables and transducers and consumables.</p>
Ophthalmoscope	<p>Handheld ophthalmoscope, battery powered.</p> <p>LED or Halogen lamp (if Halogen supplied with n. 2 spare lamps).</p> <p>Multiple apertures, diopter lenses range at least -20 D to +20 D.</p> <p>Supplied with carry case and accessories.</p>
Otoscope	<p>Handheld otoscope, battery powered.</p> <p>LED or Halogen lamp (if Halogen supplied with n. 2 spare lamps).</p> <p>Supplied with a set of adult/paediatric ear specula and instrument specula.</p> <p>Supplied with carry case and accessories.</p>
Oxygen resuscitator, automatic type including oxygen cylinder w/o oxygen	<p>Gas-driven automated resuscitator.</p> <p>Suitable for adult and paediatric patients.</p> <p>Suitable for pressurised O2 inlet up to 50 psi, supplied from a centralised system or a cylinder.</p> <p>Ventilation with ambient air.</p> <p>Manual and automated operation.</p> <p>With at least tidal volume and frequency combined or independent control.</p> <p>Integrated patient demand system, synchronized with spontaneous breathing efforts.</p> <p>Adjustable FiO2 at least 50-90 % or wider range.</p> <p>Equipped with relief valve and patient valve.</p> <p>Supplied with reusable masks for adults, children and infants, and with carry case.</p> <p>Oxygen tanks, regulators and outlets shall be available in the standard in use in the country of destination.</p>
Oxygen resuscitator, demand type including oxygen cylinder w/o oxygen	<p>Gas-driven demand resuscitator.</p> <p>Suitable for adult and paediatric patients.</p> <p>Suitable for pressurised O2 inlet up to 50 psi, supplied from a centralised system or a cylinder.</p> <p>Ventilation with ambient air.</p> <p>Integrated patient demand system, synchronized with spontaneous breathing efforts.</p> <p>FiO2 up to 100%.</p> <p>Equipped with patient valve.</p> <p>Supplied with reusable masks for adults, children and infants, and with carry case.</p> <p>Oxygen tanks, regulators and outlets shall be available in the standard in use in the country of destination.</p>
Portable oxygen equipment	<p>Portable O2 distribution bar with stand and carry case, 4 or more outlets, connectors according to country of destination standards.</p> <p>Suitable for pressurised O2 inlet up to 50 psi, supplied from a centralised system or a cylinder.</p> <p>Supplied with carry case.</p> <p>Each outlet equipped with pressure regulator and flow regulator (0-12 lpm or higher).</p> <p>Supplied with reusable oxygen masks, cannulas, tubing and preferably with bubbling bottle humidifiers, sufficient for all outlets.</p>
Portable oxygen therapy kit 2.5L min, cylinder w/o oxygen	<p>Oxygen tanks, regulators and outlets shall be available in the standard in use in the country of destination.</p> <p>Adult and paediatric oxygen masks and cannulas to be included in the kit.</p> <p>Supplied with carry bag.</p>
Pulse oximeter (SpO2 meter)	<p>Battery powered and supplied with battery charger 110/220 V, 50/60Hz mono-phase electrical source, possibly compatible with DC vehicular power supply.</p> <p>Oxygen saturation measurement range not smaller than 70 to 97% SpO2 and HR measurement.</p> <p>Plethysmographic curves and trendy visualization for monitored parameters.</p> <p>Supplied with adult and paediatric transducers and with carry case.</p>
Resuscitator, manual for adults and children	<p>Resuscitator to ventilate adult and paediatric patients.</p> <p>Resuscitator operated by hand, ventilation with ambient air.</p> <p>Sterilisable in autoclave or suitable for disinfection, easy to disassemble and reassemble.</p> <p>All parts must be manufactured from latex-free, high-strength, long-life material.</p> <p>Compressible self-refilling ventilation bag for adults and for children/infants.</p> <p>Supplied with O2 reservoir bag, non-rebreathing patient valve, with optional pressure limiting valve.</p> <p>Patient connector outside/inside diameter (OD/ID): 22/15mm, inlet valve with nipple for O2 tubing.</p> <p>Supplied with reusable masks for adults, children and infants, and with carry case.</p>

	Compliant with ISO10651-4.
Scale, adult	Adults/children patient clinical scale, mechanical OR electrical.
Scale, baby, infants	Babies/infant clinical scale, mechanical OR electrical.
Short spine immobilizer	Harness suitable for rigid spinal and head immobilisation and for extraction of the patient. Polypropylene, Nylon or other polymeric straps, heavy duty, washable and disinfectable. Supplied with heavy duty buckles and belts. X-ray transparent, preferably also MRI compatible. Supplied with carry case.
Spinal board	Rigid board for transport and immobilization of the patient with suspected spinal lesions. Suitable for immobilisation of adult and paediatric patients. Built-in carry handles, patient and stretcher fixation points. Made of rigid polymer, lightweight, shock proof, disinfectable, fluid-resistant and possibly floating.
Stretcher, folding (if not standard)	Certified for ambulance use. Roll-in Self Collapsing Ambulance stretcher. The stretcher should be supplied with a vehicular fixation system. Should have at least three strap-type patient restraining devices (chest, hip, and knee).
Stretcher, main, with washable mattress and tilt able head, fixing belts and automatic undercarriage operation when taken in and out of ambulance. Head immobilizer. Locking system to floor.	Roll-in Self Collapsing Ambulance stretcher, wheeled. Automatic undercarriage operation when taken in and out of ambulance. The stretcher should be supplied with a vehicular fixation system. Supplied with patient immobilisation system and head immobiliser. The stretcher mattress should be waterproof and upholstered with fire proof material.
Stethoscope	Clinical adult and paediatric stethoscope. Pressure-based sound frequency detection, based on membrane integrated in the head. Dual side head.
Sub stretcher, foldable	Foldable sub-stretcher, light frame, foldable. Suitable for external interventions. With integrated carry handles.
Syringe pump	120-240V, 50/60Hz mono-phase electrical source, rechargeable batteries, autonomy > 4 hours. LCD display. Visual and audio alarms, including infusion errors. Volumetric programmable infusion pump. Air bubble and occlusion detector, line clamping device. Infusion flow rate range not smaller than 0,1 to 999 ml/h. Keep Vein Open (KVO) function. IPX1 grade against vertically falling drops of water.
Thermometer, digital	Clinical thermometer, electronic and digital, glass and mercury free. Celsius and Fahrenheit temperature scales, temperature measurement minimum range 34 – 42 °C, accuracy ± 0.1 °C. Liquid crystal display. Suitable for cleaning and disinfection Battery powered. Compliant to EN 12470-3
Thermometer, infrared	Infrared (IR) non-contact clinical thermometer. Optimal indicative measuring distance range > 3 cm. Handheld design with ergonomic pistol type grip or similar design Backlit LCD display. Temperature measurement range 30 – 42 °C / 86 – 108 °F, graduation 0.1 °C / 0.3 °F, minimum accuracy 0.2 °C. Battery-powered, preferably AA or AAA commercial batteries.
Tracheostomy set	The set of instruments and consumables for tracheostomy shall include the following items (or functionally equivalent sets/items): <ul style="list-style-type: none"> - Suction and tracheal cannulas, various sizes. - Tongue depressor. - Tracheal dilator. - Dissection, sponge, tissue, haemostatic forceps, various sizes. - Forceps or equivalent separators, various sizes.

	<ul style="list-style-type: none"> - Needle holders, retractors, scalpel handles, scissors, clamps, raspatories. - Kidney bowl. <p>Surgical instruments made of stainless steel AISI 316 L / AISI 304 as per applicable.</p>
Transport incubator	<p>Infant transport incubator, suitable for transport, vehicular and extra-vehicular use.</p> <p>110/220 V, 50/60Hz mono-phase electrical source with rechargeable battery with at least 4 hours autonomy, desirable vehicular DC power supply source.</p> <p>Microprocessor controlled, with control panel and display with working parameters, patient and system errors.</p> <p>Adjustable internal temperature and humidity.</p> <p>Preferably with patient temperature and other vital parameters monitoring.</p> <p>Hood with access and instrument ports, lockable.</p> <p>Supplied with patient immobilisation and incubator fixation systems.</p> <p>Supplied with anallergic, anti bacterial, waterproof and fireproof/fire retardant mattress.</p> <p>Supplied with manual and all required accessories.</p>
Transport ventilator	<p>110/220 V, 50/60Hz mono-phase electrical source with rechargeable battery with at least 4 hours autonomy, desirable vehicular DC power supply source.</p> <p>Suitable for invasive and non-invasive ventilation of adult and paediatric patients.</p> <p>Integrated turbine or piston based mechanical ventilator.</p> <p>Integrated air/oxygen mixer and FiO2 control with integrated alarms.</p> <p>Controlled and assisted ventilation modes, preferably at least the following: pressure controlled, volume controlled, CPAP, preferably BIPAP, PPEP, NIV, pressure-volume controlled, SIMV.</p> <p>Display patient data with curves, trends and alphanumeric forms visualization.</p> <p>Monitoring of at least: I/E time, O2 concentration, Flow, volume, pressure and functional lung parameters.</p> <p>Integrated leakage compensation system.</p> <p>Safety pressure release valve.</p> <p>Patient parameters and system alarms.</p> <p>Suitable and certified for emergency vehicular and extra-vehicular interventions.</p> <p>Shock and weather proof carry case.</p> <p>Supplied with reusable valves and patient circuits, manual and all required accessories.</p>
Trauma kit	<p>Suggested kit composition shall include ((the offered composition may vary and functionally equivalent kits can be evaluated and accepted):</p> <ul style="list-style-type: none"> - airway management kit - burn management kit (sheet, bandages, etc.) - bandages kit (assorted bandages, plasters, dressings, pads, gauze, tapes, elastic bandage, blood stoppers, etc.) - Instruments (surgical instrument set for wound and trauma management) - Tools and consumables (washing/disinfection supplies, gloves, masks, LED hand light, cold packs, etc.)
Ultrasound scanner with monitor. With USB, probe connectors, SVGA and video outputs	<p>Laptop style portable US Scanner.</p> <p>120-240V, 50/60Hz mono-phase electrical source, battery charger, mains and battery operated.</p> <p>Protective shockproof carry case for the Scanner and at least two probes.</p> <p>Monitor LCD/TFT of at least 13".</p> <p>USB ports, network and WiFi connectivity, fully DICOM compatible.</p> <p>Zoom, freeze, cine functions.</p> <p>Modes, at least: B, M, PW (Pulsed wave Doppler), CW (Continuous wave Doppler).</p> <p>Anatomical, cardiac, vascular, gynecological, obstetrical, small parts, peripheral, abdominal software configurations.</p> <p>Included probes: n. 1 Convex multifrequency, approx. 3.5 Mhz central frequency, n. 1 Linear multifrequency, approx. central frequency 6.5 Mhz.</p>
Weight measuring scale	<p>Adults/children patient clinical scale with height measurement, mechanical or electrical.</p>
White blood cell monitor	<p>White blood cells point of care counter.</p> <p>Suitable for capillary and venous samples.</p> <p>Total blood cells count.</p> <p>OR</p> <p>Differential blood cell count (neutrophils, lymphocytes, monocytes, eosinophils and basophils).</p>

C Spare Parts Kits Proposal

A standard spare parts kit with expendables should be developed; one kit for each offered model within the 29 UN standard categories (petrol and diesel). This tentative proposal shall be reviewed and further developed by manufacturer's spare part specialists.

Please provide a detailed spare parts list along with your bid for each spare parts kit offered. Following is a tentative selection of parts and expendables for 2 years of normal use:

ENGINE (for all categories except for category 29 - EV)

- Air filter (2 pcs.)
- T-belt (1 pc) (where applicable)
- Belt drive (1 set)
- V Belts (2 pcs.) (where applicable)
- Fuel filter (5 pcs.)
- Gasket & seal kit (1 set)
- Oil filter (10 pcs.)
- Spark plug assembly (2 sets) (where applicable)
- Glow plugs (where applicable)
- Thermostat (1 pc.)
- Clutch disc assembly (1 set)
- Oil seals (1 set)

SUSPENSION

- Shock absorbers, front (2 pcs.)
- Shock absorbers, rear (2 pcs.)

BRAKES

- Brake pad kit for entire vehicle (2 sets)
- Brake shoe kit for entire vehicle, (2 sets) (where applicable)
- Brake piston kit (2 sets)

COOLING/HEATING (for all categories except for category 29 - EV)

- Radiator hose kit (2 pcs.)
- Water pump (1 pc.)
- Hose clips (10 pcs.)
- Hose bottom (1 pc.)
- Hose top (1 pc.)

ELECTRICS

- Headlamp sealed beam (2 pcs.) (where applicable)
- Bulbs (2 sets)
- Fuses (2 sets)
- Wiper blades (2 sets)

D Warranty and Local After Sales Representation

The minimum Warranty required for all offered vehicles is: 12 months or 20,000km, whichever occurs first.

Note: The minimum Warranty for all offered PHEV and EV Batteries is 7 years/100,000 km whichever occurs first, to maintain a minimum of 70% of full battery capacity.

Bidders shall demonstrate having a worldwide distributor network with an authorised presence and full warranty and after sale service in a minimum of 50 countries (except for EV & PHEV vehicles where minimum is 10 countries), and shall submit a list of distributors with names and contact details. The nominated local distributor shall be responsible for warranty and repair of the base vehicle and any conversions, and all additional equipment provided with each vehicle (including in ambulances, mobile clinics, cargo/cooler cargo van/box vehicle etc). Failure to demonstrate the required extent of worldwide coverage with full warranty and after sales service may exclude the make from further evaluation.

The Bidder shall enter in the UN Web Buy Plus Tender portal details of all countries where warranty is available, and all countries where the bidder or manufacturer of the base equipment has local representation for after sales service.

E Delivery requirements

Suppliers must quote delivered to FCA named main seaport (Incoterms 2020) as per the predefined seaports on the UN Web Buy Plus Tender portal per Country of Supply.

F Other

Quantity Discounts

Bidders are requested to confirm whether they offer quantity discounts by answering the question in the E-sourcing Questionnaire and, if applicable, state for which Lots. Bidders offering quantity discounts are requested to enter the discount and quantity intervals in the UN Web Buy Plus Tender Portal. Clients will make a best value for money assessment at the time of selection of the equipment through the comparison of available offers in the UN Web Buy Plus catalogue and these discounts will be taken into account

Options

This Schedule of Requirements includes suggested options. Bidders are encouraged to offer an exhaustive list of options by entering them in the UN Web Buy Plus Tender Portal.

Ex factory vehicles

All ex-factory vehicles are intended to be straight from the production line. In case of ex-stock delivery, the age of the vehicle must be maximum 12 months old counted from date of manufacture and until date of FCA delivery.

Ex stock vehicles

Where bidding for ex-stock motor vehicles, the supplier must maintain a stock of minimum 15 vehicles (mixed models) at any time. Stock vehicles shall be maximum 12 months old counted from date of manufacture and until date of FCA delivery.

Spare Parts:

The Bidder must ensure the availability of spare parts for a period of at least five (5) years from date of delivery.

Inspection and Tests:

UNOPS or its representative is entitled to inspect and/or test any or all of the Goods to confirm conformity to the Contract prior to dispatch from the manufacturer's premises. Such inspection and clearance will not prejudice the right of the consignee to inspect and test the Goods on receipt at destination. If the Goods fail to meet UNOPS' specifications, the supplier shall take immediate steps to remedy the deficiency or replace the defective Goods to the satisfaction of the Purchaser.

Replacement model versions:

In the event an LTA is signed and during the term of this LTA a direct replacement model is introduced by the vehicle manufacturer, the successful bidder shall submit all relevant details including pricing information for UNOPS's consideration and approval. UNOPS is not obliged to accept any offer for replacement models.

Deviation model versions:

Many countries still have not implemented any emission control legislation and allow vehicles with General Specifications (Euro 0 or equivalent) to be imported on their national territory. However a growing number of countries are in the process of adopting such emission control legislations, which limit or will limit their importation to vehicles solely responding to Euro 2, 3, 4, 5 and 6 norms or equivalent.

As part of its policy to support green procurement initiatives, UNOPS encourages bidders to not only offer vehicles responding to Euro 0 norm or equivalent norm but also to include in their offers model versions ("Deviation models") which are compliant to Euro norms 2, 3, 4, 5 and 6 or equivalent.

Green Vehicles - Environmental impact

In light of UNOPS' goal to progressively integrate green aspects in its procurement practice, UNOPS would greatly appreciate certain data concerning environmental impact in this tender for each of the model versions offered by the bidder.

- a. Fuel consumption
- b. CO2 emissions
- c. Fuel type & quality - for petrol vehicles (unleaded/leaded, octane level)
- d. Emission control equipment (catalytic converters, oxidation catalysts or any engine technology that results in reduced emissions etc, with reference to the Euro norm level 2-5 emission control system)

UNOPS urges bidders to cooperate on this initiative - the data will be visible to clients of UN Web Buy Plus.

Products from Developing Countries

Bidders are encouraged to offer products from Developing Countries and Countries with Economies in Transition (http://www.un.org/en/development/desa/policy/wesp/wesp_current/2014wesp_country_classification.pdf).

Latin American countries:

UNOPS wishes bidders to pay special attention to deliveries to Latin American countries, which is a large potential market for suppliers. Please observe that many Latin American countries have restrictions on Field Motor Vehicles to be imported.

Other Regions:

UNOPS is also receiving an increased number of requests for Asia and Eastern Europe and bidders are also encouraged to offer models for these regions.

Freight dimensions, weight and volume:

When entering data in the UN Web Buy Plus Tender portal, suppliers must provide shipping data such as dimensions and weight for each and every model version offered. In the event of an order where UNOPS utilizes its own freight forwarder, awarded suppliers will be required to cover additional freight costs should actual weight/volume exceed the initial bid statement.