بسم الله الرحمن الرحيم

SPECIFICATIONS FOR B.A CARRIER VEHICLE EQUIPPED WITH AIR COMPRESSOR

Item No.	12 Date: 29 / 8 / 2011
SCOPE	The purpose of the vehicle is to carry a 25 complete set B.A in addition to 25 spare cylinders in special containers .
DESCRIPTION	- To be used for charging breathing air cylinders on site . -Left hand drive 4x4. - Single cabin with seating capacity of 3 people including the driver.

-Technical offers should explain each item required in our form below in details (Comply, provided, refer to ….etc) comments are not acceptable at all.

-Technical offers will be studied according to the answers and comments, which have to be filled in our specification form below.

- **Technical offer should include product catalogue.**

	Required Specification	Tender's Specification			
1	**DIMENSION AND WEIGHT** a. Overall length: To be mentioned.	Detail	Brand Name	Model No.	Origin
	b. Overall width: To be mentioned.				
	c. Overall height: To be mentioned.				
	d. Wheelbase : To be mentioned.				
	e. Ground clearance: To be mentioned.				
	f. Gross vehicle weight (G.V.W) : To be mentioned .				
2	**CHASSIS** a. Mode of drive: 4x4.				
	b. Steering: left hand drive, power assisted.				
	c. Engine 1) Type:Diesel engine				
	2) power output: not less than (220) hp @ suitablerpm (Engine performance chart to be submited).				
	3) Stroke and no.of cylinders:4cycle,6cylinders or more.				
	4) Engine governor All speed type or two-stage switch over type.				
	5) Cooling system: water-cooled with heat exchanger				
	6) Air Cleaner: Oil path or Dry paper element.				
	d. Transmission 1) Type : manual shift				
	2) Gearbox:Not less than (6) forward and (1) reverse with synchromesh and constant mesh gear. ▪ differential lock on the rear axle.				
	3) PTO : to be specified .				

	e. Cabin 1) Type: Single Cabin. 2) Fabrication: all steel welded with 2 doors with windows. 3) Tilt: power assisted tilt system. 4) Seating capacity: 3 people (including the driver). 5) Safety belts: for all people. 6) sun visor 7) Two rear view mirrors, curb mirror and front view mirror (all mirrors supplied with defrost system) 8) battery cut-off switch 9) Warning light for engaging the PTO				
	f. Suspension: leaf spring.				
	g. Shock absorber: telescopic, hydraulic or air hydraulic acting type for front axle.				
	h. Brakes 1) Service: combined air&hydraulic or full-air. 2) Engine brake (Exhaust brake) 3) Parking brake: pneumatically. 4)ABS system				
	i. Electrical System: 1-Battery and its capacity : to be mentioned. 2-Alternator (V/A), output power : to be mentioned.				
	j. Tires: (on / off road) 1) Size , brand name and manufacturing date: to be mentioned. 2) Spare: Qty (1) mounted, to be loaded and unloaded easily with suitable mechanism without obstruction for working on vehicle.				
	k. Fuel : 1) Kind: Diesel. 2) Jordanian diesel standards compatibility 3) Tank Capacity: to be mentioned.				

	l. Gradability: To be mentioned.				
	the chassis should be described in details and an approved standard reference should be mentioned like CE approval test or similar				
3	**Super Structure(Bodywork)**				
	1) The body frame should be fabricated from corrosion resistant material (should be specified in details including grade and thickness).				
	2) The bodywork should be designed to be suitable for carry complete 25 sets of B. A. and 25 spare cylinders in suitable locations and fixing mechanism				
	3) The bodywork should be designed to have enough space for users.				
	4) The bodywork should have: a- suitable fixed table to be used as : - a small office for writing and documentary Purposes - storage for portable air lab.& any other accessories. b- comfortable chair with fixing mechanism in driving mode				
	5) The bodywork should have two doors out side openning 180˚with fixing mechanism (one on the side & the other on the rear) with sliding ladder for each door.				
	6) special hang-up side door(for air generator maintinance & ventilation purposes) located beside the air generator.				

	7) external ladder for light mast maintenance with the following aspects: a- non-slippry steps b- made of light anti corrosion material c- located at the nearest roof part to the light mast (the roof part mentioned should be suitable for walking in area and strengthen)				
	8) Two windows for natural ventilation				
	9) Interrior design drawings of body work should be submitted (including the air generator unit, light mast base, control panel, foldable table and chair, BA apparatus, spare cylinders, doors, and other accessories)				

4	**EQUIPMENT :**				
	A-Complete 25 B.A apparatus with the following aspects: 1- (200 –300) bar cylinder and valve assembly :- a. Made of high quality material. b. Water capacity of 6 liters c. Light weight , to be mentioned) d -Cylinder valve fitted with a safety-locking device				
	2- Full face piece assembly : A mask and balanced demand valve of positive pressure type, inserted valve of plug-in type.				
	3- Pressure reducing regulator of two stage type.				

	4-Harness and back frame assembly for supporting the equipment on the body of wearer, and consists of : a- Easily adjustable wide padded shoulder straps; and waist belt. b-Individually pivoting shoulder and waist strap give maximum ease of movement and weight distribution. c-Ergonomically shaped “open type” carrying frame for extra comfort and ventilation				
	5- Plug-in manifold regulator and flexible hose for content gauge and warning whistle (any other safety devices should be mentioned)				
	6-Genral for B.A: a- Approved to(NFPA 1981,2007 edition), Any other international standards to be mentioned b- All design features of SCBA assembly should be specified in details. c- With all catalogs and user manual both printed and on a (CD) . d- Catalogs for maintenance and spare parts for each component should be provided. e- operation and maintenance training courses to be provided f- Supplier should guarantee of supplying spare parts of minimum10 years from time of production (list of spare parts should be provided)				

	B- (25) spare cylinders.				
	C- AIR GENERATOR UNIT : The air generator unit should be fixed to the body work of the vehicle and have the following specifications :				
	a-The filling station should be driven by an electric generator which driven by vehicle's PTO - **NOTE: ability to operate the filling station from electrical home source(3 phase, 50Hz) in emergency conditions(in case of stationed electric generator failure) taken the safety in consideration**				
	b- start up power consumption (in KVA): to be specified taking in to consideration the performance reduction for the electric generator if ambient temperature exceeds (40ºC) .				
	c- running power consumption (in KVA) : to be specified				
	d- It should suit any wellknown international standards				
	e- It should accomplish safety during work .				
	f- Design features should be indicated in details.				
	g- Control panel shuold be fitted with all necessary gauges and buttons, and should be marked with easy undarstandable symbols .				
	h- Working pressure of 200/300 bar.				
	i- Minimum output of 500 l/min .				
	j- It should be able to fill (6) BA cylinders simultaneously, (4) filling valves for 300 bar cylinders and (2) filling valves for 200 bar cylinders. -safety consideration to be speciefiid in details. -all needed accessorioes, adapters, and hoses should be submitted.				
	k-Portable air lab. (To test air pollution) .				

	l- It should be provided with systems for air filtering , neutralization ,drying and automatic condensation.				
	m- Not to exceed the permissible level of noise according to a worldwide acceptable standard (noise level @ (1) meter to be mentioned) **NOTE:Air generator unit should be closed type (taken in consideration the commpressor ventelation**)				
	n-The air generator should be provided with anti vibration system to prevent vibration during filling operation .(to be specified)				

	D- A stationed electric generator with the following aspects : a-capacity:not less than (25 KVA)& not to exceed (40 KVA) {output power should be able to carry out all full electrical loads considering the safety factor & the performance reduction if the temperature exceeds(40ºC) } . b- Driven via PTO. c- controlled by special control panel wich consists of : 1- main circuit breaker 3 phases(MCCB) 2- Earth leakage circuit breaker 3- frequency meter 4- voltmeter(phase to phase, phase to neutral) 5- ammeters (for each phase) 6- working- hour meter(to be mounted outside the panel not inside, in order to be shown by the operator). 7- Sockets for single-phase (220 v) Qty (3) 8- Sockets for three-phase (380 v) Qty (2) 9- Emergency stop button 10-rpm control switch(to set the frequency on 50 Hz) 11-Any necessary and safety devices to be specified 12- Illumination for control panel. 13- Warning light for engaging the PTO 14- Electrical socket to be used for providing electricity from commercial source (220 / 380 v) source 15- Air pressure gauge for the tower . d- easy to reach to the electric generator from the body work floor (for maintenance purposes).(the method to be specified)				

	E- Light mast : a. Pneumatically raised telescoping light mast driven by a separate air copmpressor powered from the stationed electric generator(air compressor should be specified in detailes). b. made of light anti corrosion material c. minimum height of 6m from the ground . d. 360° rotation, hand actuated. e. Adjustable weather proof searching lights(minimum capacity of 1000 W each). Qty.(2) f. Controlled by both wire & wireless control units. for controlling the tower movements and luminance with circuit breaker for each halogen lamp. Including automatic transport positioner (ATP) system for each control unit, so that we can both switch the searchlights off, and transport the towers to their positions. g. Extending& retracting time : to be specified (minimum time is preferable taking in consider the safety of the mast)				
6	**ATTACHMENTS**				
	a. Red multi-flash beacon light (cone type) Q'ty (2)				
	b. Electric siren with public address system with different tunes				
	c. Fog Light in the front (yellow) Q'ty (2)				
7	**GENERAL & ACCESSORIES**				
	a-Approved standard reference should be ubmitted like CE , or similar.				
	b-Mobile radio installation requirements : 1. suitable location on console 2. dimensions (H* W* D) : (60 * 185 * 75) dash and desk models (radio + control head)				

	3. electrical source 12V-DC/ 15 A. Antenna Tetra Combined and GPS GMAE4248 A model (380- 430 MHz), fixed over the cabin with GPS, RF cables as a connection from the antenna to the mobile radio.				
	c-Standard body tool set to be specified in details Q'ty (1) set				
	d-Wheel stopper with spades. Q'ty (2)				
	e- Floor mats .				
	f- Warnning hazard triangle .				
	g-Dry chemical powder extinguishers 1- Dry chemical powder extinguisher (6kg)QTY.(1) inside driver cabin 2- CO2 extinguisher (6 kg) QTY.(1) inside body work with suitable base.				
	h-Tire chain Q'ty 1 set				
	i-Vehicle color: red with high intensity reflective strip around the vehicle.				
	j-Spare parts, use and, maintenance catalogs Qty (1) CD for spare parts if available)				
	k-Protection guards for head light, beacon, stop light & any other lights need protection.				
	l-Any other ideas and equipment suggested and specified will be appreciated with separate optional price.				
	m-Providing a list of recommended spare parts for the chassis and superstructure.				
	n-Supplier should guarantee supplying of spare parts (Min. of 10 years for time of production).				
	o- Supplier should provide training course for the chassis, equipment, and devices to our engineers and technicians on operation, maintenance and troubleshootings (practical and theoritical).				

	p- supplier should provide international approval certifecations for all equipments (air generator. B A , light mast, electric generator, ….etc).				
8	**CAR GPS (NAVIGATION) with the following aspects :**				
	a-Display size : 5"				
	b-Display type : WQVGA color TFTwith backlight				
	c-Battery: rechargeable lithium-ion Battery (life :up to 4 hrs)				
	d-Battery charging system as follow: a- 240 ac/dc charger. b- charging through vehicle electricity				
	e-High-sensitivity receiver				
	f-Base map : cover all Jordan				
	g-Ability to add maps				
	h-Compatible with NAVTEQ maps				
	i-Internal memory				
	j-Recording feature (to be described in details)				
	k-Accepts data cards : SDTM card Data card to be supplied (minimum of 2 GB)				
	l-Waypoints / favorites / location :1000 or more				
	m-Voice prompts, (e.g. "turn right in 500 m.") (internal and external speakers)				
	n-2D , 3D , and picture in picture navigation views				
	o-Auto re-route(fast off–route and detour recalculation)				
	p-Choice of route setup (faster time ,shorter distance ,off road)				
	q-Route avoidance (avoid highways, tolls etc.)				
	r-Speed limit indicator (displays speed limit for most major roads)				
	s-Where Am I? (find closest hospitals , police & gas stations, nearest address and intersections)				

	t-Qwerty or ABC keyboard (layout)				
	u-Arabic language				
	v-Custom POIs (ability to additional points of interest)				
	w-Photo navigation (navigation to geotagged photos)				
	x-World travel clock , currency and unit converter , calculator				
	y-Picture viewer				
	z-Lock function (anti- theft feature)				
	aa-Touch screen				
	ab-USB port				
	ac-The system must be installed in a suitable location in the console.				
	ad-All Necessary accessories for optimum installation and operation should be supplied				
	ae-Update the maps and software yearly , for minimum of five years				
	af-Full catalogues				
	ag-The supplier should hold an operation and technical training course				
	ah-Minimum of three years warranty				