CORRIGENDUM N0-1

"Inter Facility Medical Ambulance Services in Assam"

Department of H&FW, Govt. of Assam

Considering the discussion in the pre bid meeting following amendments are hereby effected in the RFP document for "Inter Facility Medical Ambulances Services" project vide notice no NRHM/102/IFT/976/16438 dated 3.10.12.

SI No	Tender document Reference	Content in The Tender Document	Amendment Provision
		 1.2 Eligibility The bids will be analysed based on the following eligibility criteria- a) Single Entity/ Consortium of Organizations/Institutions registered /incorporated in accordance with the applicable law. b) Having 3 years experience in management and operation of such services with a minimum fleet of 100 vehicles supported by control room and Call Centre set up by the bidder. Certificates from the organizations to which services provided are to be submitted. c) Having experience in computer telephony integration with the ability to log calls with Geographical Information System with GPRS integrated Ambulance monitoring system and own software components. d) Average annual turnover of the last 3 financial years, not less than Rs 20.00 Cr. e) An affidavit to the effect that bidder has not been 	 1.2 Eligibility The bids will be analysed based on the following eligibility criteria- a) Single Entity/ Consortium of Organizations/Institutions registered /incorporated in accordance with the applicable law. b) Having 3 years experience in management and operation of such services with a minimum fleet of 100 vehicles supported by a centralized, may be help line number control room and Call Centre set up by the bidder. Certificates from the organizations to which services provided are to be submitted. c) The Emergency ambulance services should have been dealing with at least 100 ambulances, enabled through GPS/GPRS and on-line tracking/AVLT, for min three years, in a single state/geography. Preferred will be given Experience in providing non-emergency ambulance service. d) Having 3 years experience in computer telephony integration with the ability to log calls with Geographical Information System with GPRS integrated Ambulance monitoring system and own
		 blacklisted in the past by any of the State. Governments across the country and that they will not form any coalition with other bidder(s). f) Should have ability to train the personnel to be employed for implementation of the project. Note: In case of consortium, there should be a formal agreement between the partners accepting severe and joint responsibility for implementing of the project, 	 e) Average annual turnover of the last 3 financial years, not less than Rs 20.00 Cr. f) An affidavit to the effect that bidder has not been blacklisted in the past by any of the State. Governments across the country and

		reference of the Lead Partner and percentage of holding of each partner in the consortium. The maximum permissible partners in the consortium are 4 (four). For the purpose of minimum eligibility criteria, experience and turn over etc. of the partners having more than 20 % holdings in the consortium will be added.	 that they will not form any coalition with other bidder(s). g) Should have ability to train the personnel to be employed for implementation of the project. Note: In case of consortium, there should be a formal agreement between the partners accepting severe and joint responsibility for implementing of the project, reference of the Lead Partner. The maximum permissible partners in the consortium are 4 (four). The agreement/MoU need to be registered as per the law of India.
2	1.4 Packing, Sealing and Marking of Proposal (b)	All three envelopes i.e. envelope for Part-A, Part-B and Part-B must be packed in a separate sealed outer cover and clearly super scribed with the following	All three envelopes i.e. envelope for Part-A, Part-B and Part-C must be packed in a separate sealed outer cover and clearly super scribed with the following:
3	1.4.(b) III. PART C (Financial Proposal) Point no-2	The Agency shall be paid on per ambulance basis. The Financial Proposal shall clearly indicate cost per Ambulance.	The Agency shall be paid on per ambulance basis. The Financial Proposal shall clearly indicate cost per Ambulance per month.
4	2.5 Operation of Control Room	Operation of Control Room	 The Agency is responsible to supply the software which should comply with regards to below stated guidelines: 1. Multi-lingual Screens: 24 X 7 Control Room Application System Screens shall be of multi-lingual (with local language must) capacity so that to support the agent to handle & process the call request / case with ease of use. This capability of the system will also make the training / transition of new agents to get on to the job in a time-effective manner thus providing the scope of smooth operations. 2. Automatic Identification of Duplicate Call Requests: The proposed system shall be intelligent enough to identify and alert the agent with duplicate call requests which results in the optimized utilization of resources. 3. Tracking the location on GIS Maps: The proposed

	system shall use the GIS Maps for the provision of the ability to plot the captured location details on the Maps.
	4. Identification & Assignment of ambulance on GIS Maps:
	The proposed system shall be capable enough to identify the
	nearest resources around the incident / requested location with
	the status & speciality of resource. Assignment of the resource
	by click-away option shall be made available for the time
	optimized & ease to use operations.
	5. Assessment of Case severity using triage protocols:
	The proposed system shall have inbuilt medical triage protocols
	for prioritizing the case severity so that the response shall be
	provided accordingly. The severity that was identified shall be
	communicated to ambulance staff for the purpose of definitive
	pre-hospital care.
	6. Appointment facility: The proposed system shall have a
	capability of scheduling of the appointments (request for
	transport) especially for pregnant women, infants, patients
	undergoing operations, etc. This facility will avoid the last minute
	emergencies and also makes the beneficiary / patient to be rest
	assured of transport.
	7. Seamless Integration with stakeholders: The proposed
	solution shall have the tight integration with various
	stakeholders like hospitals (public & private), clinics,
	ASHA/village health workers, medical facilities, etc. in means
	like data, communication, knowledge sharing, transactions,
	acknowledgement so that the healthcare components will be
	involved & utilized to the extent necessary.
	8. Role based reporting interface: The proposed solution
	shall have the capability for generating the reports and
	dissipating them in a periodical manner via different mechanism
	like through emails or secure web based login.
	9. Identification of appropriate care providers: The
	proposed solution shall be capable to locate the closest

	appropriate hospital with the capability to provide definitive care.
	10. Standard Protocols for Pregnant & Infant Monitoring:
	The proposed solution shall be enabled with standard protocols
	for pregnant & infant monitoring which shall be used to guide
	the EMT in the ambulance in provision of pre-hospital care.
	11. Hospital Registration & Accreditation Facility: The
	Proposed solution shall have the facility where the hospitals /
	health & medical facilities can be registered with all the
	infrastructure / speciality /contact details so that the information
	is available while handling the case and also up-gradation of
	database will be made possible.
	12. Linkage with external agencies: The proposed solution
	shall be capable of transacting (Data and voice) with external
	agencies like 108, 104, 100, etc. so that to initiate the response
	in case of any necessary situations.
	13. Integrated with Medical Information Databank: The
	proposed solution shall be enabled with the Medical Information
	Databank module so that the beneficiary / patient can request
	for information to choose the nearest appropriate facility.
	14. Integrated Feedback Mechanism cum Complaint
	Logger: The Proposed solution shall be enabled with process to
	capture the post feedback from the beneficiaries on the service
	availed and also on the facility served which makes the service
	to understand the outcomes & satisfaction levels. This
	functionality shall also be integrated with Complaint Logger with
	escalation mechanism to achieve the service fulfilment and to
	overcome the hidden challenges.
	15. SMS/Email Integration for Automatic Generation of
	Alerts: The proposed solution shall be capable enough to utilize
	the available media like SMS, Email, etc. to generate and send
	the alerts to the beneficiaries / patients in various instances like
	while availing the service, post service delivery, information
	sharing, pregnancy & infant care details, govt. schemes

1	
	information etc.
	16. GPS Technology for Ambulance: The proposed solution
	shall include the equipping of all ambulances with Global
	Positioning System receivers and with two active mobile
	telephone connections and both connections shall be through
	two different service providers.
	17. Voice and Data Communication with Ambulance: The
	proposed solution shall communicate with ambulance by means
	of voice as well data. The data includes the destination name,
	landmark and other relevant information shall flash on the
	monitor kept on each of the ambulance for the purpose.
	18. Mobile Application: The proposed solution shall enable
	each ambulance with Mobile Application such that attendant
	(Driver / EMT) can update the status of the case assigned by
	using the mobile application and the same shall be
	automatically updated centrally without human intervention.
	19. Daily Factsheet: The proposed solution shall be able to
	generate and send the factsheet on daily basis to respective
	officials without fail. The said factsheet shall consists of daily
	reports w.r.t calls , cases, etc
	20. Operation & Performance of Control Center:
	a. The proposed system, both hardware and software, is
	designed for 24/7/365 operation with 99.9% availability.
	b. The proposed system has a maximum response time to
	any activity at peak periods (query, backup, etc.) of two (2)
	seconds.
	c. The proposed CAD system has a maximum response
	time of five (5) seconds for search/display of records - name,
	vehicle, etc. (respondents will provide minimum
	hardware/software specifications (client and server) required to
	meet/maintain this response time criteria.)
	d. The proposed solution is built on a high availability
	model with full physical automatic redundancy and no single

2.5 Agency's Responsibilities(c)	Call Response: On receiving call of any nature the control room shall communicate with the ambulance to the caller and take the patient to the referral health facility depending on the severity of the patient's condition. The concerned health facility is also to be informed in advance to keep them prepared for immediate emergency care within that critical/golden hour. The agency shall be responsible to maintain the average rresponse time 20 Mnt for Urban, 25 Mnts for Semi Urban and 30 Mnts for Rural.	 point of failure. e. The proposed solution is configured in a manner so that the failure of any single component shall not cause a system failure. f. The proposed solution will automatically make frequent (min. daily) data backups without impacting speed or capability of the system. g. The proposed solution will handle dates across both decades and centuries. h. All of the modules in the proposed solution are of a uniform design with all menus, forms; data entry screens designed using consistent principles. i. Proposed system permissions are role-based with the ability for system administrators to create/modify these roles along with assigning users to these roles Call Response: On receiving call of any nature the control room shall communicate with the ambulance to the caller and take the patient to the referral health facility depending on the severity of the patient's condition. The concerned health facility is also to be informed in advance to keep them prepared for immediate emergency care within that critical/golden hour. The agency shall be responsible to maintain the average response time of 30 minutes as a key performance parameter.
2.5 Agency's Responsibilities 2(j) others		Minimum Qualification for various core positions:. EMT- Preferably graduate with Biology in HSSLC/HSSLC (Biology) with Diploma in Nursing/D.Pharma/DMLT/BMLT/ B.Pharma/ANM. Pilot (Ambulance Drivers)-Qualification: 10th Pass. Experience: Min 5 years in driving field is required. Heavy Vehicle driving license with badge number is required. Call Centre –Executive =Qualification: Any Graduation with good communication skill.

5	Existing 250 no of Ambulance	Existing 250 no of Ambulance . Existing 250 no of Ambulances in the different health institutions will be up graded and included in this scheme. These ambulances are Sumo Ambulances, BS-III Type of TATA Motor.	 (i) Existing 250 no of Ambulance. Existing 250 no of Ambulances in the different health institutions will be up graded and included in this scheme. These ambulances are Sumo Ambulances, BS-III Type of TATA Motor. All of old ambulances will be under running condition. The average km run by this Ambulances is between 40,000 km to 70,000 km. Replacement of old 250 Ambulances will be made after running minimum 1.20 Lakhs Km. Bidder may inspect the said vehicle and accordingly quote the repair and maintenance cost. No further fabrication is required on this Ambulances. This
6	2.6 Government of Assam's Responsibilities (j)		ambulances will be used as IFT within District Only. Replacements of Ambulances(new 200) after 3 years or 1.5 Lakhs Km whichever earlier.
7	2.6 Government of Assam's Responsibilities (k)		Develop curriculum and training modules as required for state health staff to improve emergency response at health facilities at the request of the government.
8	2.11 Financing of the Project:(b)	The payment against all capital expenditure incurred by agency shall be released in a phased manner to ensure the financial stake of the agency in the project. Government shall release 80% of the capital cost upon signing of the agreement. The balance 20 % shall be paid 6 months after declaration of such capital asset as property of GOA.	The payment against all capital expenditure incurred by agency shall be released in a phased manner to ensure the financial stake of the agency in the project. Government shall release 80% of the capital cost upon the procurement and commissioning of assets and upon declaration of such capital assets as the properties of the State Govt. The balance 20 % at the rate of 5% per annum in the subsequent four years.
9	2.13 Earnest Money Deposit (EMD) and Security Deposit(a).	The bidder shall submit Earnest Money Deposit (EMD) amounting to Rs.50 lakhs in the form of Banker's cheques/ Demand Draft.	The bidder shall submit Earnest Money Deposit (EMD) amounting to Rs.50 Lakhs in the form of Banker's cheques/ Demand Draft/Bank Guarantee.

10	2.13 Earnest Money Deposit (EMD) and Security Deposit(c).		The EMD shall be kept valid through the proposal validity period and would be required to be extended if so required by the H & FW Department.
11	2.13 Earnest Money Deposit (EMD) and Security Deposit (f).	The bidder whose proposal is accepted and award issued shall have to submit Security Deposit of an amount of Rs. 3.00 Crores in the form of a Bank Guarantee from a Nationalized Bank.	The bidder whose proposal is accepted and award issued shall have to submit Security Deposit of an amount of Rs. 1.00 Crores in the form of a Bank Guarantee from a Nationalized Bank.
12	2.14 Operational Parameter and Penalty Clauses.(a)	The Agency shall complete the first phase of implementation and start providing Emergency Medical Ambulance Services the manner specified herein within 6 months of the signing of the contract unless otherwise an extended period is allowed by the Steering Committee in writing.	The Agency shall complete the first phase of implementation and start providing Ambulance Services the manner specified herein within 270 days of the signing of the contract unless otherwise an extended period is allowed by the Steering Committee in writing. Details of implementation of ambulances. Days Implementation of Ambulances 90 days 50 old+ 50 new 150 days 75 old + 50 new 210 days 75 old + 50 new 270 days 50 old + 50 new
13	2.14 Operational Parameter and Penalty Clauses.(b)	The Agency (Service Provider) shall ensure that an average performance level of 3 Trips/Day/Ambulance is achieved from 6th month onwards of the deployment of ambulances during each phase. In case this level of service is not achieved a proportionate deductions from the claims will be effected.	The Agency (Service Provider) shall ensure that an average performance level of 1Trips/Day/Ambulance is achieved from 6th month onwards of the deployment of ambulances during each phase. In case this level of service is not achieved a proportionate deductions from the claims will be effected. For the purpose of calculation of the reduction, the respective number of trips shall be calculated; quarterly and deduction made will be equal to the operational cost of the number of trips by which respective number of trips for all the ambulances in the quarter fall short.
14	2.15 Performance Standards and Standard Operating Procedures 2.15.1 Performance Standards for Ambulances		 2.15.1 Service and Performance Standards for Ambulances (to be made as a part of the contract) – By Service Provider. 1. All trips made by the services are without user 2. The response call centre would link all the ambulances and patient transport systems and emergency medical centres and police and fire departments in the district/state. 3. At least one driver and one paramedical are available on board during any trip. 4. Driver and Paramedic to Ambulance ratio to be at least 2.5:1. i.e. 2.5 drivers and 2.5 paramedics per Ambulance.

	Training of paramedic to be certified/accredited by an Authorized
	Agency. Training institution, training syllabus and trainers also to be certified
	by authorized agency.
	6. A two-way communication system would be available in each
	vehicle.
	7. A functional GPS (Global Positioning System) would be available
	in each vehicle with provision for central monitoring.
	8. Daily Ambulance maintenance protocol sheet filled could be
	noticed with supervisor checking the sheet at least one in 15 days. (The
	Maintenance sheet will include: Vehicle maintenance like brake-oil level, air
	filter, Wheel air pressure, coolant, oxygen level, fuel level, siren, lights,
	charging of rechargeable equipments, and availability of Drugs,
	Consumables and Equipment check sheet).
	9. Drugs, consumable and equipment would be available in vehicle
	as per a list specified by the state. Standard patient transport care protocols
	would also be available.
	10. Standard Operating Protocols for Call Centre dispatch of vehicle,
	stabilization, care on the way, refusal to shift patients, transport in between
	facilities and drop back, etc. to be signed and finalized by both service
	provider and contracting government authority.
	11. The ambulance service should maintain record of all calls received,
	and those who were responded to, the time to dispatch the ambulance, the
	time to pick up and the time to reach the site of emergency care and
	provisional diagnosis made, care provided en route and hospital where
	patient dropped, as well as accredited hospitals who did not accept the
	patient.
	12. Ambulance services would provide information to government on
	the agreed set of indicators – annual and monthly.
	13. Compliance to regulatory requirements: Vehicle Registration,
	Pollution Control, Driver License and payment of applicable tax, if any.
	14. Grievance redressal system in place and advertised on Ambulance
	itself.
	15. The ambulance has to reach the site of requirement within the
	response time as specified under Para 2.5 (d) of receiving such call at the
	Response Center in 80% of the cases. It is clarified that non-response to
	hoax calls, repeat calls, crank calls or calls that did not provide an address
	for the Patient will not be taken into account while determining adherence to
	Response Time standards by the Operator. Response Time standards shall
	apply to all ambulance requests requiring a response as determined by the
	Response Center (ERC) using call screening and dispatch protocols

15	2.16 Monitoring and Evaluation	 (a) Commissioner & Secretary Department of Health and FW, Govt of Assam and Mission Director NRHM and quarterly by State Level Steering Committee will review the performance monthly. (b) The Jt Director of Health Services will oversee the activity within their respective districts and review performances in District Health Societies meetings. c) The services and records of the service shall be subject to inspection by designated officer(s) of the Department. 	 approved by the Department and only such calls shall be used for the purposes of determining response time compliance calculations. 16. Any delay in adhering to the Response Time and Patient Transport Times standards shall be recorded and reported by the Operator to Department. 17. Response Time calculations shall be calculated from the time a call is received as defined in (a) below till the time Operator's ambulance arrives on scene as denied in (a) below till the time Operator's ambulance arrives on scene as denied in (a) below till the time Operator's ambulance arrives on scene as denied in (b) below or is cancelled by the Response Centre.(RC) (i) Time of Call Received- shall be defined as the time at which the RC has received a call through telephone or any other source (fire service, police etc.). (ii) Time of Arrival on Scene – shall mean the time at which an ambulance crew (the driver) notifies the RC that the ambulance has reached the nearest public access point to the Patient. (iii) In case of multiple response i.e. more than one vehicle arriving on scene. (iv) Response time standards may be suspended in case of a multi casualty incident or disaster in Assam in case Department calls on the vehicles to aid. (a) Commissioner & Secretary Department of Health and FW, Govt of Assam and Mission Director NRHM and quarterly by State Level Steering Committee will review the performance monthly. (b) The Jt Director of Health Services shall be subject to inspection by designated officer(s) of the Department. The set of records submitted by the winning agency would be verified by state level steering committee. (d) The performance of the Agency shall be evaluated annually by an external agency appointed by the Government. (e) The operator will provide monthly and annual information on a limited set of indicators stated by the State level Steering Committee (a model set of indicators stated by the State level Steerin
16	2.24Commencement of Service (b)	The Operator shall commence the service within 6 months from the date of signing of the Agreement. If the firm fails to commence the service as specified herein, the department may, unless it consents to the extension of time thereof, forfeit the Performance Security and appropriate the same	 (b) The Operator shall commence the service within 270th day from the date of signing of the Agreement. If the firm fails to commence the service as specified herein, the department may, unless it consents to the extension of time thereof, forfeit the Performance Security and appropriate the same

17	3.1Evaluation of Technical Proposals	3.1Evaluation of Technical Propos	als		3.1 Evaluation of Technical Proposals
		(a) In the first stage, the Technical on the basis of Applicant's exp financial capability. Only those A Proposals score 70 marks or marks	perience, prese applicants whos	entation and se Technical	(a) In the first stage, the Technical Proposal will be evaluated on the basis of Applicant's experience, presentation and financial capability. Only those Applicants whose Technical Proposals score 70 marks or more out of 100 shall qualify for further consideration.
		for further consideration. (b) In case of consortium, the lead consortium shall be evaluated parameters. (c) The key personnel, as given by	on a 75: 25 k	basis on all	(b) During the technical evaluation process it is expected that at least three parties will be shortlisted to ensure competitive financial bidding. Thus, where a minimum of three parties fail to qualify for financial evaluation, then the eligibility criteria of 70% in the technical scoring may be relaxed only to the extent that three parties finally get selected during the technical evaluation.
		 (e) Technical Proposal of all the Appl based on appropriate marking sy marking and their respective weight 	during the ten al of the Gov icants will be e stem. The cates	valuated gories for	 (c) In case of consortium, the lead and other agency in the consortium shall be evaluation on a 75: 25 basis on all parameters. (d) The key personnel, as given by the agency in the technical proposal should not change during the tenure of the contract, without prior approval of the Government of Assam. (e) Technical Proposal of all the Applicants will be evaluated based on evaluated based on the proposal should be evaluated based on the proposal should be evaluated based on the proposal should be evaluated based on the proposal of the propos
		SI CRITERIA No	MAXIMUM MARKS	MARKS OBTAINED	appropriate marking system. The categories for marking and their respective weightage are as under:
		EXPERIENCE OF THE FIRM 1. No. of years in operation of Medical Ambulance Service. 1 2. Experience in handling	40		SI No CRITERIA MAXIMUN MARKS MARKS OBTAINED EXPERIENCE OF THE FIRM 1. Experience in handling 1. 10
		similar projects with government. 3. Experience in Computer Telephony Integration with the ability to log calls and			similar projects with government. 2.Experience in Computer Telephony Integration with the ability to log calls and track

track vehicles using Geographical Information System with GPRS integrated Ambulance Monitoring	vehicles using Geographical Information System with GPRS integrated Ambulance Monitoring System.
System. EXPERIENCE OF KEY PERSONNEL 2 1. Qualifications 30 2. Relevant Experience	3. No. of years in operation of Emergency Medical Ambulance Service
METHODOLOGY 1. Project Implementation Plan 3 2. Innovations and 20 Understanding 3. Indicators, methods and procedure	4. No. of years of experience in non-emergency, special care ambulance services 4. 15
proposed for performance evaluation and Monitoring 4 TECHNICAL PRESENTATION 10	EXPERIENCE OF KEY 10 PERSONNEL 1. Qualifications
(BEFORE THE DEPARTMENT EVALUATION COMMITTEE) TOTAL 100	Relevant Experience APPROACH AND 30 METHODOLOGY 1. Project Implementation
 (c) All Applicants shall be required to make presentations up to 30 minutes, before opening of Financial Proposals, to demonstrate their credentials before the Evaluation committee and to submit hard copies during the presentation. The presentation shall broadly cover the following aspects: (i) Brief Company profile, local presence, 	Plan 2. Innovations and Understanding 3. Indicators, methods and procedure proposed for performance evaluation a) Technical approach and methodology Project Implementation Plan

associates, major clients	& projects etc	Innovations and		
		Understanding Indicators,		
(ii) Experience and capa	abilities of conducting similar	methods and procedure		
assignments		•		
		proposed for performance		
(iii) Understanding of ass	-	evaluation10,		
methodology indicati	ng broad scope of	b)Technology and safety		
work and road map		standards of ambulance		
(iv) Proposed Key Perso	nnol along with Toom	vehicle and construction -5 ,		
Leader and Manpower co				
		c)Technology and safety		
(v) The time and venue	for the presentation shall be	standards of medical devices -		
intimated to the Applicant		5		
		d) Mark slop - E		
		d) Work plan – 5		
		e) Organization and staffing - 5		
		and Monitoring.		
	4	TECHNICAL Demonstration	20	
		(BEFORE THE DEPARTMENT		
		EVALUATION COMMITTEE)	100	
		Total	100	
		a) All Applicants shall be required t	a maka nraaan	tationa un ta
	((c) All Applicants shall be required to		
		30 minutes, before opening of demonstrate their credentials		
		committee and to submit presentation. The presentation	•	-
		following aspects:		y cover the
		ronowing aspects.		

			 (i) Brief Company profile, local presence, associates, major clients & projects etc. (ii) Experience and capabilities of conducting similar assignments (iii) Understanding of assignment along with methodology indicating broad scope of work and road map (iv) Proposed Key Personnel along with Team Leader and Manpower commitment. (v) The time and venue for the presentation shall be intimated to the Applicants. The minimum technical score required to pass is: 70 Points. Bidders who score above 70% marks on the technical evaluation criteria as decided by the committee will only be considered for financial evaluation. The financial bids of the bidders with technical marks less than 70% will not be considered for financial evaluation.
18	3.2 Financial Proposal Opening	3.2 Financial Proposal Opening Financial bid opening shall be done for only those applicants	3.2 Financial Proposal Opening Financial bid opening shall be done for only those applicants who
		who score minimum qualifying (as fixed by the committee) score	score minimum qualifying (as fixed by the committee) score in
		in technical evaluation. The selection of service provider shall be strictly on least cost basis. The Final Score will be determined	technical evaluation. The selection of service provider shall be strictly on least cost basis. The Financial Score will be determined as follows
		as follows	
		Capex L1 / Capex Quoted X 25 + Opex L 1 / Opex Quoted x 75	Capex L1 / Capex Quoted X 25 + Opex L1 / Opex Quoted x 75
		Where Capex L1 is the lowest amongst Capex amount	Where Capex L1 is the lowest amongst Capex amount

19	2.15.2 Performance Standards for the Response Centre	proposed by all Bidder, and Capex is the Capital Expenditure amount proposed by the Bidder. • Where Opex L1 is the lowest amongst Opex amount proposed by all Bidder. And Opex is the Operational Expenditure amount proposed by the Bidder. The Bidder Agency scoring the highest Final Score shall be Selected. (a) The Junior Executives receiving the calls on the toll free line must take the call within three rings. (b) From the time of received of call at the response call	 proposed by all Bidder, and Capex is the Capital Expenditure amount proposed by the Bidder. Where Opex L1 is the lowest amongst Opex amount proposed by all Bidder. And Opex is the Operational Expenditure amount proposed by the Bidder. Further The bidder who has scored the lowest will be given 100% of marks in financial evaluation and the other bids will be given percentage of marks that are inversely proportional to their prices. Eg. If bidder A scores 50 which is the lowest price quoted, gets 100% of marks in financial evaluation. Bidder B scores 125, bidder B will gets percentage which is inversely proportional to the lowest price bidder, i.e. Bidder B gets (50/125)*100=40% in financial evaluation. The Bidder Agency scoring the highest Total Score in the below mentioned Overall Evaluation shall be Selected. Total Score Evaluation: The "Total Score" will be calculated as weighted score of technical and financial i.e. 40% of technical score + 60% of financial score. Total Score= 0.40 x Technical score + 0.60x Financial Score. The proposal obtaining the highest Total Score will be ranked as H-1 followed by proposal securing lesser marks as H-2, H-3 etc. a) Over 75% of the calls that need an ambulance would have a response time less than the response time standards that are set. It should be less than 30 minutes.
	Response Centre	(b) From the time of receipt of call at the response call center the ambulance must be dispatched in 90 seconds	 standards that are set. It should be less than 30 minutes. b) All patients shifted on the ERS should have received care as per standard operating guidelines available for this purpose. (c) The Junior Executives receiving the calls on the toll free line must take the call within three rings. (d) From the time of receipt of call at the response call

			centre the ambulance must be dispatched in 10 mins.90% of calls should be within 10 mins beyond which penalty @1000 will charge per call.
20	2.11	Financing of the project shall be on reimbursement basis in accordance with the provision of the agreement	Claims for operational expenditure shall be payable on quarterly basis as advance on submission of statement of claim by the service provider for last instalment.
21		Claims or reimbursement for OPEX shall be paid on quarterly basis as advance on submission of statement	Claims or advance for OPEX shall be paid on quarterly basis as advance on submission of statement
22	2.5(j) Other (iv) Maximum Vehicles off road		Maximum Vehicles off road can 7% in first year, 8% in 2nd, 9% in 3rd onwards Assigned time
23	ANNEXURE 2: ACKNOWLEGEMENT &FINANCIAL PROPOSAL Point No-3	If our proposal is accepted, we undertake to deposit security deposit of Rs 3.00 Crores before execution of the formal agreement	If our proposal is accepted, we undertake to deposit security deposit of Rs 1.00 Crores before execution of the formal agreement
24	ANNEXURE 4: AGREEMENT Point 5(b)	The mode of payment will be as specified below- - Financing of the project for operation cost shall be on reimbursement basis. - Claims/reimbursements are envisaged on quarterly basis.	 (b) The mode of payment will be as specified below- Financing of the project for operation cost shall be on advance basis. Claims/reimbursements are envisaged on quarterly basis.
25	ANNEXURE 4: AGREEMENT Point 6(b)	The Agency (Service Provider) shall ensure that an average performance level of 3 Trips/Day/Ambulance is achieved from 6th month onwards of the deployment of ambulances during each phase. In case this level of service is not achieved a proportionate deductions from the claims will be effected.	The Agency (Service Provider) shall ensure that an average performance level of 1 Trips/Day/Ambulance is achieved from 6th month onwards of the deployment of ambulances during each phase. In case this level of service is not achieved a proportionate deductions from the claims will be effected.

26	ANNEXURE 5.	Specification(The entire content in Annexure- XII is removed) The Annexure 5. is replaced by Amendment Annexure A, Annexure B, Annexure C, Annexure D, Annexure E.	

Annexure A : Ambulance Specification for 200 New BLS Ambulances

Document: Scope of Ambulance& Fabrication

	TECHNICAL SPECIFICATION FOR AMBULANCE BASE VEHICLE		
Index No	AGGREGATE	Criterion Range	
1	ENGINE		
1.01	Туре	Diesel Engine -BSIII	
1.02	Turbo Charged	Turbo Charged	
1.02	No of Cylinders	4, In line	
1.03	Displacement	1900 to 3000 cc	
1.04	Emission Norms	BS-III	
1.05	Max. Net Engine Output	45 to 70 kW (60 to 90 bhp)	
1.06	Max. Net Torque	170 to 225 Nm, @ 1750 to 2500 rpm, respectively	
1.07	F.I.P.	BOSCH / MICO	
1.08	Air Conditioning system for Ambulances	Effective cooling for volume of 10 cubic meters min; Temp to bring down from 40 degree Celsius to 16-20 degree C in 15-20 minutes	

2	OVER ALL BODY DIMENSIONS (mm)	
2.01	Length	4350 to 5500
2.02	Width	1650 to 2100
2.03	Height	2400 to 2800
2.04	Aspect Ratio (HEIGHT : WIDTH)	1:1.2 to 1:1.3
2.05	Ground Clearance	175 to 210mm
2.06	Floor Loading Height	Max 700mm
2.07	Turning Radius	LESS THAN 7 METERS
2.08	Body Type	Body should not consists of sliding glass
2.09	Windows	Two Quarter plate tinted window to be provided on both sides, opening towards vehicle front.
		One 3*2 feet size sliding window to be provided on LH side front portion of the patient cabin.

2.10	Rear Doors	out at the rear with glass view panels. Positively securable in fully open condition of 270
		degrees with mechanical locking mechanism on side walls.(Magnetic and plastic mechanisms are not allowed)
2.11	Foot step	Fixed foot step - 1600 mm long x 190 mm wide 375 mm high at the rear door for easy exit & entry in to the vehicle
2.12	Mud Flaps	Four mud flaps to be provided along with the vehicle
2.13	Body Painting	DE RUSTING process to be carried out as a primary step
		Epoxy painting has to be used to avoid rusting before external painting is carried.
3	Patient House Dimensions	<u> </u>
3.01	Length	3200-3500mm
3.02	Volume	9.5-10.5 Cubic Meter
3.03	Floor Area	5.75-6.5 Square Meter
4	Angles	
4.01	Ramp Over Angle	as per CMVR stds
4.02	Departure Angle	as per CMVR stds
4.03	Approach Angle	as per CMVR stds
5	Electricals	
4.01	Battery	Two nos.12 V, 75 to 100 AH, sealed , maintenance free with 12 months warranty from the date

		of sale
4.02	Alternator	Min. 90 Amps
4.03	Fog lights	Two fog lights to be provided in front Bumper ,switching in combination switch
6	Other	
5.01	Fuel Tank Capacity	Adequate for traveling 400 kms without refueling
5.02	Fuel Efficiency	Min. 10km/ Ltrs. with A/C
5.03	Suspension	Mechanical / Leaf spring
5.04	Steering System	Mechanical / Power as per OEM offer approved by ARAI
5.05	Gradability (Fully Laden)	Min. 20% (11.5°)
5.06	Tyres	Radial Tyre
5.07	Payload	As per OEM approved by ARAI
6	TOOLS AND ACCESARIE	S S
	The following tools to be	provided as per the list given below
6.1	One set of standard mecha	nical jack of 2 ton capacity
6.2	Wheel spanner	
6.3	Inspection DC lamp with bulb and 10 meters wire	

6.4	1KG fire extinguishers two nos in driver compartment with proper mounting

Annexure B: Scope of Fabrication work:

1) Steel and Ply Wood Cabinet for storing medical equipment / supplies / Wash basin / Dust bins:

- Dimensions: length to cover the width of fabricated ambulance end to end Width = 1645mm and height=910mm.Placed alongside the partition wall behind the driver's compartment. Made of BIS quality water proof and fire retardant ply boards of
- Walls, Top and Bottom plywood thickness-20mm
- Drawers plywood thickness-13mm
- It should be cladded with 0.8 mm thick stainless sheet (SS-304) from all the areas exposed to patient compartment sides.
- Also all the other areas (drawer walls, sides, rear and bottom) exposed to air should be laminated with minimum! mm heavy duty mica of silver gray color.
- All the Sizes of the drawers should be as per Drawings supplied.
- Height of the cabinet-510mm(from above the oxygen compartment)
- Width of the cabinet-1645mm(From left wall to Right wall of the body)
- First lane drawers-width-515mm with one door(for dust bins and fresh and drain water tanks)
- Second lane drawer-width-290mm Three rows on vertical with equal size
- Third lane Drawer-width-550 Single door with EMT seat back rest. One partition to be made @height of 300mm from bottom of the wooden cabinet.
- Fourth Lane drawers-width- 290 two rows. Top-170mm height- Second-rest of the height
- All the <u>hardware like rails, channels, sliders, locks, catchers, hinges, handles</u> should be best quality of imported material only (e.g. HETTICH) heavy duty renowned brands.
- House the Stainless Steel (SS-304) wash basin minimum 410MM dia, maximum of 420 dia Depth minimum165MM maximum 170mm with water tap (Brass with chrome plated) supplying water through Motorized Pump (12 V DC power operated), (should be of good company like "Denso") with foot operated control mounted on the bottom of the medicine rack vertically, to pump the water from the fresh water tank.
- The Wash Basin Pump should have water tap positioned so that by washing hands water should not fall outside of the pot.
- Provision for Liquid hand wash carrier fitted on to the left side of the wall near wash basin with sufficient reinforcement (Refer Drawing). Liquid should fall directly in to pot when pressed.
- Fresh water tank and drain water tank both made of Stainless Steel (0.8 mm SS-304 grade) to be fitted below the wash basin, both 10 liters capacity.

- Wash basin and Drain water tank hose connection joints to be fixed firmly with clamp and sealant to prevent water over flow into the patient compartment.
- The drawers should he provided with double Magnet catchers for each drawer at back side to secure them against unintended opening during motion of the ambulance
- 9 slots of ABS material removable partition tray with THREE partitions to be provided in the upper drawer beside the dust bins and rest all the drawers to have 3 horizontal partitions.
- A plywood with lamination tray with 9 slots (530mm length 300mm width 130mm height) to be fixed on the right side of the wooden cabinet.
- Velcro mounting to be provided to secure needle destroyer and manual BP apparatus over the right side of the wooden cabinet
- Two Concealed Portable Steel Dust Bins to be fixed with at least two screws there by making in movable with spring loaded lids for waste disposal are to be provided under the wash basin. 420mm Height (Including spring loaded lid) X 200 mm Dia.
- Pilot cabin partition frame to be fitted with a sandwich FRP panel fastened to the MS frame form both sides.

2) Squad bench / attendant seat- (with Seat belts) with storage for EM rescue tools.

i. A squad bench shall be installed along the left hand (on LH wheel hump) wall end with open able top Seat from inside. The top seat to be mounted on 4x75mm with three bolts triangle seating four no heavy duty hinges with equal distance. All the three bolts should be mounted on the r reinforcement given to squad bench.

ii. A minimum 50mm thick, 50 or higher density Foam cushion to be provided for seat on 12 mm <u>water proof and fire retardant ply board</u> for comfort the same should be upholstered top and bottom side of the seat with non absorbent rexin of silver gray color to be fastened properly

iii. Squad bench to be made of FRP (min 4 mm) outside and with the Mild steel (MS) angular 4 mm thick frame reinforced within as per drawing, to carry 450 kg weight and to be painted with PU paint. Three compartments at equal distance to be made in squad bench for storage of rescue tools. All the storage compartments should have sufficient reinforcement with 32*4 angular frames.

iv. Dimensions of the bench: Length = 1830mm, Width=500mm. Height = 470mm.

v. The inner box area should be covered with the 4mm thick black color Heaton sheet properly glued to the inner surface and squad bench and floor joints to be sealed with silicon paste sealant to prevent water seepage into the storage area.

vi. Front side of the squad bench space to be used for securing the scoop stretcher, toggle clamp to be mounted at the rear end, Velcro and TWO SS brackets on bottom and one at front end stopper (scoop should not touch floor while loading and unloading) for holding the scoop with proper reinforcement to be provided appropriately.

vii. Three suitably placed good quality seat belts to be provided with proper reinforcement on top and bottom.

viii. Back rest with 25mm thick high density cushions to be provided on 10 mm ply wood with a height of 250mm and equal length of squad bench with proper reinforcement.

Ix. A stopper to be provided for holding the squad bench in opening position at rear end (from entrance side) of the squad bench in 90 degree position with proper reinforcement. Velcro to be provided for holding the bottom on to the back rest.

Mounting to be provided for Suction Apparatus in between the medical cabinet and squad bench to secure with Velcro strip and provision to be made for 230 V AC with Combination of 5 & 15 AMPS power socket and 12V DC Socket also to be provided @height of 300mm from the floor. (Refer as per Drawing)

One handle length in two feet in size to be provided on LH side of the wall above the fire extinguisher for holding while getting into ambulance.(grab rail type in vertical)

3) EMT's Foldable Seat:

A seat to be mounted to the oxygen cylinder compartment splint rack can be used for back rest for seat

- i) Dimensions: Length =400mm, width =500mm and height=380mm, Back Rest height=400mm
- ii) S.S. Powder coated steel pipes of 20 mm dia & 1.5 mm wall thickness to be used.
- iii) It should have one waist seat belt.(aero plane model buckle type)
- iv) A minimum 70mm thick 50 or higher density Foam cushion to be provided for comfort.
- v) And the same should be upholstered with non absorbent Rexene of silver gray color.
- vi) The seat should have Velcro Belts to fold it up.

vii) Bracket resting on floor to have spring loaded mechanism to close the bracket automatically when closed.

viii) Ribbed bushes to be provided to the brackets resting on floor

Viii) Back rest to be provided with good locking system to hold the seat in both the conditions (When the chair is open or closed).

4) Oxygen Cylinder Compartment & Delivery System:

i) A door for the Trolley to be cut (as per drawing) and fabricated with bonnet type locking with a opening lever in the driver compartment.

ii) The Door opening lever should be below the driver seat with flexible wire cage which is firm and flexible without steep bend en route.

iii) The Cylinder compartment should be properly sealed from all sides along with the Door side to protect and avoid any chances of dust entering this compartment. Rubber beading to be provided on compartment (door seating area).

iv) This trolley should be designed with M.S. angle frames 40x4 to hold two D type Oxygen cylinders (each could independently taken out), under medicine cabinet securely with a toggle clamp for fastening, Safety lock to be provided to prevent accidental opening of toggle clamp. Reliable and durable locking/unlocking the trolley and cylinders on trolley with a uto locking provision to be provided. Oxygen cylinder covering three brackets top

and bottom should be riveted with asbestos material for cylinder grip to avoid movement and noise in running.

v) Complete oxygen cylinder compartment (SIX insides of the compartment) should be riveted with 1 mm thickness GI SHEET. Outer edges of the GI sheet to be welded with body to avoid sharp edges of GI sheet.

vi)Three vents sizes 6 inches in length and one inch in height (from the centre of the door three inches LH side and three inches RH side) to be provided for oxygen doors .

vii) Vents to be inclining downward from inside

viii) High Pressure Tubing: 280 bar/ 4060 psi test pressure, with male female (5/8 inches) bull nose Brass connectors (Only forged brass connectors to be used) at both the ends, to connect it from the oxygen cylinder to the pressure regulator inside the patient cabin; 2 No's each of 2 meters length;

(e.g. Goodle make pipe to be used. metal pipes/wire mesh pipes are not acceptable)

ix) Preset Pressure Gauge cum two stages Regulator, with static outlet pressure first stage of 20 bars/290psi and second stage of 4.12 bars/ 60 psi Double safety valve type 2 No's each.

x) Humidifier Bottle: Poly Carbonate Bowl with metal Cap and T type inlet outlet nipples, 2 nos. All the connectors should be of chrome plated on brass material.

xi) Flow Meter: Brass with chrome plated body, Poly carbonate tube, to regulate the flow from 0 to 15 liters per mints. It should be a back pressure compensated.

xii) Humidifiers should be mounted @1100mm height from the floor on RH side wall in front of the wooden cabinet.

xiii)Three plus one (3+1) four ports of Brass 3/8 inches nipple in size be provided in complete one assembly (One set) on a common rectangular Brass Tube (Rail) with two Needle Valves at both the ends. (Ask for Clarification if needed)

5) Flooring

i) A water proof fire retardant marine ply board with 12mm thickness is to be used for flooring with maximum two joints coming around the centre of the body including Oxygen compartment base area Ply wood mounting should be equal surface around the floor. Ply wood should be mounted on the floor with sufficient reinforcement.

ii)A non static, mark resistant, scuff proof and safety flooring material with minimum <u>2 mm</u> thickness (LG BR-92308) to be glued properly without entrapped air bubbles and without any joints anywhere and the vinyl mat to be extended up to 50 mm on the side walls. Only one sheet to be used from below wooden cabinet to end of the floor.

iii) All floor level moldings, edging and trim shall be sealed to prevent fluids from seeping under cabinets, walls and ply board.

iv) 1930 mm length x 700 mm wide (from RHS wheel hump to below the edge of the rear door) stainless plate SS 304 grade matt finish (1 mm thick) to be provided, under the stretcher loading area to prevent scratches and SS sheet should be paste with silicon paste to arrest the water entry under the SS sheet.

v)The SS sheet placed on floor should be fixed with flat Stainless steel head less screws suitably placed to avoid any bulging of the sheet anywhere on edges or within.

6) Wall paneling work Pilot and Patient Compartments:

a) Wall paneling:

i) To be reinforced with steel rib cage and all Interiors, internal sides, cover to close the wheel hump and roof should be paneled in Fiber Reinforced Plastic (FRP) minimum 3mm thick, Chopped Strand Mat / Isophelic Polyesters / Gel Coat (Naphtha / Saint Gobin or equivalent) with superior quality PU PAINT SWAN WHITE COLOUR painting.

ii) Provision to be given on FRP for removing the rear door hinges and tail lights bulbs to be replaced without cutting the FRP panels.

iii) Dual insulations - PUF / PU 12 mm insulation and thermo coal 40mm thick (Both in two layers) for reduction of heat and noise within the patient compartment, insulating material should be non-toxic, non-settling type, vermin proof, mild dew proof and non hygroscopic body and paneling provided.

iv) Panels shall be installed in a manner that prevents sagging, deflection, warping or vibration and they should be free from any sharp projections wherever there are any open/hollow areas behind walls and door, suitable reinforcement must be installed to prevent breakage of this paneling.

b)All the Panels, Parts Mounted and Provision for Medical Equipments to be Mounted, shall have 4mm thick Mild Steel (MS Fe 410) sheet reinforced behind the specified area as per the Drawings provided.

i) The MS sheet should be MIG welded to the body of the Vehicle structure as per Automobile standards and be coated with PU Primer to avoid any rusting. (ARCH WELDING WILL NOT BE ACCEPTED)

c) A seamless appearance and finish is desirable to keep the ambulance bacteria free in services. General:

i) FRP made one pouch (Size- Width-700mm, Height-200mm, Depth-100mm) to be provided on to the partition wall behind Pilot seat for placing ambulance records with proper reinforcement on partition structure

ii) Provision for placement of power switches / sockets/ fans/ air conditioner, telemedicine and for upgrading other electrical items shall be made available in paneled walls.

iii) Provision for I.V hooks & holders 2 no. should be made on the front RHs wall and one at rear RHS wall with proper reinforcement and Velcro

iv) Adequate provision for safeguarding oxygen regulator, flow meter and humidifier on the right side panel @ height of 1100mm

v) Six plug switch board with on/off switches of standard quality (230 V AC) (With Combination of 5 & 15 AMPS) to be made available on the RHS wall around Medical Equipment's console Area.(Refer drawing)

vi) ONLY MULTI PURPOSE THREE PIN SOCKETS TO BE USED IN USED A/C CIRCUIT

vii) Identification sticker for all electrical switches, medical equipments and racks etc. to be pasted.

7) Head racks and grab rails in the ceiling and near Rear Door:

_a) Head Rack:

i) Dimension approx: Length =1800mm, Width = 350mm, Height = 270mm. To be integrated with roof above the squad bench. Made in FRP (min 3mm thick) and required 32X4 MS reinforcement to be provided. Inner surface is to be pasted with soft Heatlon black colour sheet of 4mm thickness.

ii) One Partition in centre of the head racks to be provided inside the head racks.

iii) Four ISI quality toughened glasses thickness 4mm to be provided with Aluminum black color sliding channel with velvet beadings (1.5MM thickness and 40 mm width).

iv) Glasses to be fixed in opposite direction for opening and closing with aluminum handle cum clip type. (Automatic locking when closed).

v) The Head rack should have suitable oval shaped closures to cover the opening which are easy/comfortable to operate and do not have any sharp edge at the openings.

b) Grab Rails:

i) A 2380mm long pipe of 30mm dia, 1.5 mm wall thickness made of stainless steel (SS) to be placed as grab rail on the Ceiling with proper aluminum oval shape support brackets at four places in equal distance. All the brackets should be riveted with grab rail.

ii) A 700mm long pipe of 30mm dia, 1.5 mm wall thickness made of SS is to be placed as Grab rail near the LHS rear door at LHS wall 550 mm from the floor with firm metal support brackets at the ends with proper reinforcement.

c) Spine Board, and Wheel Chair Hold, Defibrillator Mountings:

i) A provision should be made available for securing the Spine board above the RHS wheel hump cover with double strip Velcro band at three places of the board with proper reinforcement.

ii) A 200mm height stainless steel stopper to be provided for holding the spine board with proper reinforcement.

iii) Adequate Supports to be provided on RHS wall to avoid spine board touching the wall when secured.

iv)Wheel chair to be placed before to RH wheel hump on RH side wall with two mounting brackets on floor for holding the wheels, and toggle to be provided on top of the wheel chair for locking with proper reinforcement.

v) Provision for fitment of Collapsible stretcher mounting & lock bracket on floor board to be provided

vi) <u>4 mm thickness 3*3 feet in size MS Re enforcement to be given on RH side wall for fixing of Defibrillator/digital parameter monitor and ventilator. Provision to be given for holding the nuts from back side of the re enforcement.</u>

vii) 2*1 feet re enforcement to given above the spine board stopper re enforcement for mounting the LAP TOP bracket.

8) Fire extinguisher hold:

i) Provision with straps / Velcro with reinforcement for placing a fire extinguisher should be provided as per drawing. A S.S. holding bracket to be provided on the floor with proper size.

ii) Provision to be given in pilot compartment for holding the 1 kg fire extinguisher

9) Window Covering:

i) All the rear side Windows and side windows should have non transparent white film pasted from inside, more than half of the height of the window to avoid any visibility into the ambulance

10) Water Dispenser:

i) Water Dispenser 3.5 Lt. (Stainless Steel AIR POT Type-Polo Life time make or equivalent quality) is to be provided with straps near wash basin area.

Part B: Scope of Air Conditioning Work:

11) Air Conditioning System:

i) Roof Mounted Multi Flow Condenser (Length-minimum 712 MM X Width 635 MM X Thickness 26 MM) – Suborns / carrier or Equivalent- with Fiber cowl, with Double Cooling Fans. (Refer drawing)

- ii) Only casting A/C compressor mounting brackets to be used.
- iii) (Welding compressor mounting brackets are not allowed)
- iv) Double blower type Cooling Coil of reputed/renowned Indian brands Brand only to be used.
- v) With engine driven compressor DKS17 of Subros / Valeo brand :
- vi) With 50mm ducts (ports) on the ceiling, in two rows to have eight delivery ports (four each row), of the patient cabin, with flaps to cover the ports,
- vii) Digital microprocessor based temperature controller should be provided with fully automatic PCB based power supply.
- viii) System suitable for Heat Load to draw heat from 10 cubic meter volume, (to bring down temp from 40 degree Celsius to 16-20 degree Celsius in 5 mints).
- ix) Condenser fan should be cover with FRP and front with aluminum mesh.

Part C: Scope of Electrical Work:

12) <u>Inverter:</u>

- i) True sine wave inverter,
- ii) The Inverter should be of well known brands like SUKAM, Luminous
- iii) Inverter Capacity 600 watts / 800 VA,
- iv) Input Range AC 130 v-270V / DC 9.5V 13.8V,
- v) Frequency 50 Hz,
- vi) Power Factor 0.8,
- vii) Output Voltage 220(+/-)10% (regulated output from full charge battery voltage to low charged battery voltage)

viii) Waveform - Single Pulse PWM

- ix) Efficiency 85%
- x) Charger Heavy duty CC/CV type with current limit at 12A with wide input range (150V- 270A)
- xi) Integrated AC/DC supply inside the vehicle synchronous with alternator.
- xii) 10 Meter length three core 10 gauge charging wire with male three pin ends to be provided
- xiii) Provision to be made to charge the batteries placed inside the driver's cabin with external AC power.
- +++ The electrical Wiring should be done in consultation with the Inverter Manufacturer's recommendation, and should provide certification to prove this.

13) Light bar:

i) LED based Rhombic shaped, Double layered structure, Combination of continually lit, turning lamps, (E.g. SOLPHIN/GRAND)

ii) Long life span, high luminance, Voltage: DC 12V, Power: 25W

iii) With integrated double diaphragm type Siren, Public Addressing System of 100W (PMPO) output.

iv) Light bar to be mounted on front roof of the vehicle with MS frame with FRP cover. (Grand/Solphin or Equivalent Indian brands only to be used with onsite warranty)

14) Flashers, Spot Lights, Tube Lights:

i) (6Nos) high intensity Flashers (ONLY LED), red-orange pair on either side, and both red- orange on the rear of the vehicle. (Dolphin/Grand or equivalent Indian brand only)

ii) (3Nos) Spot / flood lights on three sides, except on the front, in the middle of each pair of Flashers. (Grand or equivalent Indian brand only)

iii) Spot lights 5 no's to be provided on sealing (5 no's DC Worming lights-non-external lighting) along the length of the patient cabin inside the ambulance with one of the light coming above head of the patient. (LUMAX /AUTOLITE/GRAND MAKE OR EQUIVALENT AUTOMOBILE GRADE)

iv) Tube lights 6 no's (2 feet length) with fixture and 12V DC powered on the both sides for internal lighting each on a separate circuit with a LED type. (METALITE, INNOVLITE OR ANY AUTOMOBILE GRADE) Voltage: 12V DC, Amps: 2.1, Lumens: 2175 Dimension (mm): 920.8x66.1x63.5 weight (kg): 0.953.

v) 230V AC / 15/5 amp - 3 pin (5 No's) and 12V DC-Round sockets (2 No's) power source with Crabtree or equivalent modular switches.

vi) External charge port with spring loaded lid to be located at the rear left over the foot step.

vii) One Mobile AC 15/5 amp - 3 pin Charging Switch Socket assembly is to be provided in Pilot compartment.

viii) 230V/15AMP 3 pin plug point with switch to be provided for suction apparatus between medicine rack and squad bench on LH wall.

ix) ONLY UNIVERSAL TYPE THREE PIN SOCKETS TO BE USED FOR A/C SUPPLY

♦♦♦ <u>All bulbs and lights should be sourced from renowned Indian brands only.</u>

15) <u>Electrical Wiring:</u>

i) All The main Components like,

- a) AC Blower
- b) Condenser Fans,
- c) Each of Internal Lightings (Led Lights),
- d) Internal Lightings (Spot Lights),
- e) External Lights (Flashers),
- f) External Lights (Spot/Flood Lights),
- g) Light Bars,
- h) Each of Medical Equipments powering Sockets etc...

◆◆◆ Should have separate circuits, (Power drawn directly from source (with proper cut off switch after Battery/Inverter) and a Fuse in it).

A laminated copy of standard wiring colored diagram for Air conditioning, AC and DC wiring separately should be provided with each ambulance for reference.

All precautionary measures should be taken in to consideration within the Scope of Auto Electrical work to avoid any accidental fire incidence during installation of any Electrical gadget, or any provision for that.

16) <u>Fuse and Other Safety Measures:</u>

- i) Battery main cut off switch to be provided without naked wires or mounting.
- ii) A separate Fuse to each of the (as mentioned above) circuits to be given.
- iii) There should be an Indicating sticker to be pasted to each fuse on the fuse Box to identify the Fuse separately.
- iv) There should not be any joints be given within the Circuit Wiring,
- v) At any unavoidable wiring junction(s) the wires should be joined through Bakelite Connectors.
- vi) There should not be any loose wiring and loose joints.

vii) Other than vehicle wiring harnesses, all wires/harness used for should be ((Flexi Cab, Finolex or equivalent make with fire retardant grade) All the wiring provided shall be copper with insulation having high temperature resistant.

viii)All wiring(including groundings), devices, switches, out lets etc except circuit breakers shall be rated to carry at least 125% of the maximum ampere load.

ix) All splices and terminals provided shall comply with SAEJ163 standards.

x) All the electrical wires and accessories should carry ISI Mark, with CML Number and be approved by technical committee and should be of (ARAI/ISI) automobile standards.

xi) All other unspecified Parts necessary for the Wiring should be of Automobile grade and/or ISI Certified with CML Number.

- xii) Same color code wires to be used for all ambulances for respective circuits.
- xiii) All wiring harness should be covered with crocodile sleeves and should be routed properly.
- xiv) Only electronic type relays to be used and to be concealed. (no relay or fuse boxes should not be visible to outside)
- xv) Wiring necessarily passing through oxygen compartment should be protected from damage.
- xvi) All the holes drilled for wire routing, holes edges to be covered with rubber sealing (Grommet) to prevent wire damage.

17) <u>Clock:</u>

i) A standard quality LED/Digital clock to be provided in the patient compartment. It should have a minimum Letter (font) Size of 50 to have better visibility.

18) DC connections Socket:

i) Crabtree, 2 DC Sockets 12 V near Equipment area to be provided.

19) Roof / Wall mounted fans :

- i) Half Safety metal guard. Screw mounting. Oscillating, 200 mm fan blade, operated by DC 12V in 2 nos. in the Patient compartment,
- ii) One fan (same as above) in Pilot Compartment.
- iii) Roof light to be fitted in pilot cabin.

20) Exhaust Fan:

One 200 mm bush less 230Volts Exhaust fan to be mounted to partition between Pilot and ambulance compartment, to pump ambient air into the patient compartment. (Should be sourced from renowned Indian brand only with ISI certification)-

Annexure C : EQUIPMENT FOR BLS AMBULANCE (200 New Ambulances)

All equipment & accessories being used in the ambulance including those in the Oxygen Delivery System should be BIS, US FDA, CE or EN certified (Copy of the certificate to be enclosed along with the technical bid)

All wall mounted medical equipment & their mounts in the ambulance should be EN 1789 or AS/NZS 4535 or ASSE/ANSI 2006 certified (Copy of the certificate to be enclosed along with the technical bid)

CORRIGENDUM N0-1 Inter Facility Medical Ambulance Services in Assam (Request for Proposal)

Sr.No.	Name of Medical	Specifications
-	Equipment	
1.	Ambulance Cot	 Roll-in Self Collapsing Ambulance Cot with separable stretcher (EN 1865/1789 or equivalent certified)
		 The cot should have a separable stretcher with the main stretcher frame which could be removed from trolley and used as a separate stretcher
		• The separable stretcher should also have sliding wheels and telescopic handles to use it as a separate stretcher and also easy locking/unlocking system to lock the separable stretcher into the trolley
		 The cot should have minimum four wheels with minimum two swivel types to allow cot to be handled and to slide into the ambulance easily without damaging the ambulance floor
		One person should be able to load and unload the fully assembled cot it into an ambulance easily
		Should be lightweight and should be built with anodized aluminium/ stainless steel
		Swing-down/push up-down side rails to enable convenient patient transfer from bed to cot
		Adjustable backrest angle from 0 - 65 deg
		• At least three strap-type restraining devices (chest, hip, and knee) to prevent longitudinal or transverse dislodgment of the patient during transit.
		 Should be supplied with suitable accessories to fix the portable oxygen cylinder
		One number of folding IV Poles should be provided
		 Locks on wheels/legs if required to ensure that the cot doesn't collapse/move while standing
		 50 mm thick high density foam mattress holstered with water proof and fire proof material
		•Minimum Dimensions Length: 190cm Width : 55 cm
		Loading Capacity : minimum 150 kg
		The device must be supplied with an integrated loading platform with minimum three point anchorage.
		 The loading platform should have an integrated foldable flap to guide the stretcher in and out of the ambulance without any part of the stretcher (including the legs) striking any part of the ambulance body including the rear footstep.
		 The loading platform should have integrated space in it to securely accommodate a full body length spine board (and a scoop)
		stretcher if space permits) inside it for ergonomic storing. Once the loading is completed the foldable flap of the loading platform should be lifted and remain firmly in position not getting inadvertently opened when the vehicle is in move. This should be supported with pneumatic lifters.

2	Scoop Stretcher	 Should be light, safe and reliable Aluminium alloy with adjustable length Clutch Design (Lateralised / in center) so that the stretcher can be divided into left and right halves. Easy to lock and unlock 3 Quick release buckle belts Dimensions: Min. Size L*W*H D168*43*7cm Net weight: <10 Kgs Weight bearing: 150 kg minimum To be supplied with a mountable & detachable 'Double Head Immobilizer'
3	Spine Board	 High Density Polyethylene - Single piece Rigid , Light & Floatable Resistant to bumps and corrosion Non-absorbent, immune to infiltrations Easy to clean- water & soap X ray & MRI compatible Load Capacity : 150 kg minimum L*W*H : approx 184 * 45 * 5 cm Should have suitable whole body restrains
4	Transfer Sheet	Two (2) transfer sheet with a minimum of six (6) handles, or equivalent
5	Wheel chair	 Should be light, safe and reliable Made of aluminium alloy with 4 wheels

		Folded size : approx 93*51*16 cm
		Net weight : less than 10 Kgs
		• Pull through, telescoping long handles built in to lift patients & carry them through narrow passages.
		 Two handles on the top to facilitate the lifting of patients, working in harmony with telescoping handles Loading Weight : 150 kg minimum
6	Oxygen Flow Meter with	 Loading Weight 150 kg minimum Dial setting type without any floats, needles or moving parts to indicate the flow level.
Ū	Humidifier	 Pressure compensated for inlet pressure range of 3 to 5 bar, be able to regulate the flow from 0 to 15 litres per min and should show the actual oxygen flow rate.
		 Installed vertically so as to not interfere with the other outlets and should be easily readable from the Doctor's/Paramedic' seat.
		The inlet probe should be fully adaptable to the terminal outlet in the ambulance as well as to the outlet adapter of the portable
		 oxygen cylinder specified below in the list of medical equipments The outlet of the flow-meter should be universal in design to accept the humidifier, the flow selector switch or a direct connector
		Should be calibrated for fixed flow settings and calibrated in multiple scale thereby allowing precision settings in low flow
		ranges as well.
		 Should allow the following minimum flow settings
		> 0 to 1 L range: 4 settings
		> 1 to 5 L range: 4 Settings
		> 5 to 15 L range: 5 settings
		 Should have a humidifier made up of an impact resistant polycarbonate bowl with cap and inlet outlet nipples
		Should include a flow selector switch to bypass the flow of the oxygen through the humidifier and allow nebulization to the patient directly using the flow of the oxygen
		 Should be supplied with a direct connector to provide oxygen therapy without humidifier, insufflation kit and nasal prong
7	Multi Parameter Monitor	Multi Parameter Monitor with the following parameters:
		NIBP - Adult and Paediatric
		SpO2 - Adult & Paediatric
		EtCO2 - Heart Rate
		 Respiration Rate

		12 Lead Diagnostic ECG
8	Suction Pump (Manual &	Portable & Lightweight
	Handheld)	Vacuum (max): 550mmHg.
		Non disposable container - 500 ml connecting jar made out of
		carbonate with overfilling valve
		Operating environmental temperature: -20C to + 50C.
		Maximum Weight: 900 gms
9	Suction Pump (electronic)	 Electronic Suction device with ambulance mount Control knob for continuously adjustable vacuum level up to maximum level of 630 mm. Hg starting from zero Suction capacity of minimum 30 litre per minutes Minimum 500ml capacity secretion bottles with efficient overflow protected Ambulance Wall mountable Rechargeable Battery with minimum capacity of 60 minutes The ambulance wall mount should have built in charger with integrated DC charging module to directly charge the internal batteries of the device from the 12V ambulance batteries as soon as the device is placed on the bracket. Should be supplied with Wide - bore tubing, rigid pharyngeal curved suction tip; Tonsillar and flexible suction catheters, 5F - 14F
10	Self-Inflatable Resuscitation Bags	Hand operated, self-re-expanding bag (adult & infant sizes), with oxygen reservoir/accumulator, clear mask (adult, child, infant and neonate sizes); valve (clear, disposable, operatable in all weather) • To be supplied in proper Carrying case
11	Mouth to Mask ventilation device	Suitable for Adult, Child & Infant/Neonate
12	Oxygen Cylinder (Portable) with Oxygen Pressure Reducer	Aluminium Cylinder as per BIS Specifications Max. Working Pressure at 15O C: 150kgf/cm2
		 Water capacity: min 1L Built in / attached with Pressure gauge, regulator and cylinder wrench/key Pressure regulator with plug-in type outlet port capable to accommodate the probe of the driving gas hose of ventilator or the inlet

		probe of the oxygen flow-meter directly in single action without any intermediate connectors or adapters etc.
13	Oxygen Administration Equipment	Adequate length tubing, mask (adult, child and infant sizes), transparent, non-rebreathing, venturi, and valveless nasal cannulas (adult, child and infant sizes)
14	Laryngoscope with blades	 Standard Laryngoscope With Mckintosh blade (1,2, 3 & 4) Handle should have comfortable grip
15	Handheld Glucometer	 One unit with 100 units of disposable lancets/tips and Gluco Sticks The brand provided should have supplies easily available across the state
16	Stethoscope	 Paediatric & Adult Tuneable diaphragm and a bell High quality buffed stainless steel snap tight ear tubes Poly vinyl chloride double lumen tubing 76 cms in length Soft sealing ear tips
17.	BP Apparatus (Digital)	 One Nos. Motion tolerant, self inflating ± 2 mm of Hg systolic or Diastolic AC / DC , Rechargeable in Ambulance Supplied with regular/extra large and paediatric size cuffs
18	Pupillary Torch	One Nos. with Spot illumination without peripheral ring of light
19	Needle & Syringe Destroyer and Sharp dispenser	 To be placed at an appropriate location to allow easy disposal of needles Maximum weight 2.5 Kgs Motion Tolerant
20	Thermometer (Digital)	 Two Nos. Battery operated with on and off audio alarm Measurable in Fahrenheit and Centigrade Memory of the last reading
21	Pneumatic Splints	 Set of 6 adult sizes (Hand & wrist, Half arm, Full arm, Foot and ankle, Half leg & Full leg) with carrying case

		 X-ray through the splints Inflatory tubes' extension with closing clamp makes closing easy and quick after inflation Fixing of splint is by zipper or belt Distal end left open to expose toes Should be washable and reusable Should be supplied with the appropriate pump required to inflate the splints
22	Roller Splints	 Two Nos. The splint should be made from a thin core of alloy, sandwiched between two layers of closed-cell foam Should be extremely pliable Can be used for all the sizes sizes - small, medium & large
23	Cervical Collars	 One Nos. Rigid and should be suitable for children aged 2 years or older, infant and adults Should be adjustable to 4 different sizes - Tall, Regular, Small & No neck Should have pre-moulded chin support, locking clips and rear ventilation panel, enlarged trachea opening. Should be high-density polyethylene and foam padding with one piece design enabling efficient storage where space is limited Should be X-ray lucent and easy to clean and disinfect
24.	EMT Shears	 One Nos. with Thermoplastic handles. Should cut a 1 rupee coin. 6" made of SS with one edge round and other edge sharp
25	Toothed Forceps- Dissecting	15 cms, high tensile stainless Steel
26	Artery Forceps 6"	Two Nos. 6", high tensile stainless Steel
27.	Toothed Forceps 6"	6", high tensile stainless Steel
28.	Magill's forceps	Standard Equipment in High Quality Stainless Steel

29	Kidney Tray	 20 cms. x 15 Cm x 4 cm 18/ 8 Stainless Steel. 500 ml capacity
30.	Klik Clamp	• 50 nos.
31	Tongue Depressor	100 nos. Disposable Wooden Spatulas
32.	First Aid Kit Bag	An off the Shelf Resuscitation & First Aid Kit Bag made of Nylon/tougher material having space for Emergency Airway Management and Resuscitation including essentials drugs, equipment & a portable Oxygen Cylinder of with regulator, etc.
33	Search Light (NOT TORCH LIGHT)	 Portable with spot beam of around 500 Meters, sealed lead acid/NiCd battery operated, capacity of 60 minutes with full intensity, rechargeable The search light should be securely installed at a suitable & easily accessible location in the ambulance with connection for continuous charging when not in use
34	Rescue Equipment	Crowbar (min 48 inches, with pinch point) & A multipurpose tool such as 'Stanley FuBar Forcible Entry Tool'/equivalent for vehicle extrication

Annexure D,

THE LIST OF DRUGS AND CONSUMABLES IS TENTATIVE. THE STATE HEALTH AUTHORITIES MAY MAKE NECESSARY CHANGES IN THE LIST AS PER OPERATIONAL REQUIREMENTS & STOCKING POLICY

Sr. No.	Item	Quantity
1.	Cotton roll 500 gm	2
2.	Bandage (a) 15cm (b) 10cm (c) 6cm x 5mtrs	3 each
3.	Antiseptic solution 200 ml	2 Bottles
4.	Povidine lodine solution 100 ml	2 Bottles
5.	Leucoplast, Micropore x 1mtr	2 Rolls
6.	Pain Spray	2 Cans
7.	Mistdress Spray	2 Cans
8.	Vinodine Spray	2 Cans
9.	Coolex Spray	2 Cans
10.	Face Mask (Disposable)	1 Box
11.	Surgical Gloves (Size 6.5,7,7.5)	1 Box
12.	Classic LMA disposable (2,2.5,3,4)	1 Each
13.	Endo Tracheal Tube - Disposable (all sizes)	1 Each
14.	Wide bore needles	2
15.	Syringes ABG (2 & 5 ml)	10 each
16.	Three way stop cork	5
17.	Extension I/V lines	2
18.	Disposable Delivery Kit	2
19.	ECG electrodes	1 box
20.	Guedel's airway 00-5,00,0,1,2,3,4,5	2 each
21.	Nasal airways(all sizes) & catheters	2 each
22.	Binasal Cannula,	2 each
23.	Tracheostomy tube cuff & Plain (all sizes)	2 each
24.	Mini Tracheostomy kit	1
25.	Ventimask, facemask with nebulizer	1
26.	Pressure Infusion Bags	2
27.	Rightangled Shivel Connector	2
28.	Bone Marrow Needle	2

Department of H&FW, Govt. of Assam

29.	I.V. Fluids (RL, NS, DNS 5%, 5% D, Isolyte P, Hemaxyl),HES	5 each
30.	Micro drip-set & Drip-set	2 each
31.	Nasogastric Tubes (various sizes)	2 each
32.	Burn Pack : Standard package, clean burn sheets (or towels for children)	2
33.	Triangular bandages (Minimum 2 safety pins each)	2
34.	Sterile multi-trauma dressings (various large and small sizes)	2 each
35.	ABDs, 10"x12" or larger	2
36.	4"x4" gauze sponges	2
37.	Tab. Paracetamol 500mg	50 Tab
38.	Gauze rolls Sterile (various sizes)	2 each
39.	Elastic bandages Non-sterile (various sizes)	2 each
40.	Occlusive dressing Sterile, 3"x8" or larger	2
41.	Adhesive tape : Various sizes (including 2" or 3") Adhesive tape (hypoallergenic):Various sizes(including 2"or 3")	2 each
42.	Cold packs	2
43.	Waste bin for sharp needles, etc.	1
44.	Disposable bags for vomiting, etc.	20
45.	Teeth guard	2
46.	Sample collection kits	2
47.	Inj. Adrenaline	10
48.	Inj. Atropine 0.6 mg	50
49.	Inj. Calcium Carbonate	5
50.	Inj. Dopamine	5
51.	Inj. Dobutamine	5
52.	Inj. Noradrenaline	5
53.	Inj. Nitroglycerine	5
54.	Inj. Sodium Bicarbonate	20
55.	Inj. Hydrocortisone	4
56.	Inhaler Beclomethasone	2
57.	Inhaler Salbutamol	2
58.	Inj. Frusemide	10
59.	Inj. Diazepam/Midazolam	10
60.	Inj. Etofylline 77mg + Theophylline 23mg	2ml x 10

61.	Inj. Phenytoin sodium	10
62.	Inj. Pheniramine maleate 22.75 mg/ml	2 ml x 10
63.	Inj Dexamethasone	10
64.	Inj. Ondansetrone	10
65.	Inj. KCl	5
73.	Bacteriostatic water for Injection	20
74.	Inj. Sodium Valporate	5
75.	Inj. Diclofenac Sodium	3ml x 10
76.	Inj. Paracetamol	10
77.	Syp. Paracetamol 125mg/ml	60ml x5
78.	Tab. Isosorbide Dinitrate 5mg	50Tab
79.	Tab. Aspirin 75 mg	50Tab
80.	Tab. Amlodipine 5mg	10 Tab
66.	Inj. Lignocaine 2%	5
67.	Inj. Amiadarone (50 mg/ml)	5
68.	Inj. Magnesium sulphate 25% 2ml.	5
69.	Inj. Mannitol 20 %	5
70.	Activated charcoal	2 pack
71.	Inj. Naloxone HCI	5
72.	Inj. Fentanyl	5

Note: The bidder must ensure adequate and <u>appropriate</u> storage space to house at least these drugs and consumables securely during ambulance's day to day run. <u>(THE PROTOTYPE</u> <u>PRESENTED FOR APPROVAL MUST HAVE THE FOLLOWING LISTED ITEMS IN STOCK AS PER THE QUANTITIES DETAILED FOR VERIFICATION OF THE STORAGE SPACE IN</u> <u>TERMS OF ADEQUACY AND APPROPRIATENESS</u>)

Annexure E, EQUIPMENT FOR EXISTING AMBULANCE (250 New Ambulances)

No further referbriment/ Fabrication n on this vehicles. For painting (if required) and stickering cost will be reimbursement as on actual. Bidder need not quote for this.

Sr. No	Name Of Medical Equipments	Specification
1	Self-Inflatable	Hand operated, self-re-expanding bag (adult & infant sizes), with oxygen reservoir/accumulator, clear mask (adult, child, infant and neonate sizes); valve (clear, disposable, operatable in all weather)
	Resuscitation Bags	To be supplied in proper Carrying case
2.	Mouth to Mask ventilation device	Suitable for Adult, Child & Infant/Neonate
3	Oxygen Cylinder (Portable) with Oxygen Pressure Reducer	Aluminium Cylinder as per BIS Specifications
		Max. Working Pressure at 150 C: 150kgf/cm2
		Water capacity: min 1L
		 Built in / attached with Pressure gauge, regulator and cylinder wrench/key
		 Pressure regulator with plug-in type outlet port capable to accommodate the probe of the driving gas hose of ventilator or the inlet probe of the oxygen flow-meter directly in single action without any intermediate connectors or adapters etc.
4.	Oxygen Administration Equipment	 Adequate length tubing, mask (adult, child and infant sizes), transparent, non-rebreathing, venturi, and valveless nasal cannulas (adult, child and infant sizes)

5.	Laryngoscope with blades	Standard Laryngoscope
		• With Mckintosh blade (1,2, 3 & 4)
		Handle should have comfortable grip
6.	Handheld Glucometer	One unit with 100 units of disposable lancets/tips and Gluco Sticks
		The brand provided should have supplies easily available across the state
7.	Stethoscope	Paediatric & Adult
		Tuneable diaphragm and a bell
		High quality buffed stainless steel snap tight ear tubes
		Poly vinyl chloride double lumen tubing 76 cms in length
		Soft sealing ear tips
8.	BP Apparatus (Digital)	One Nos.
		Motion tolerant, self inflating
		± 2 mm of Hg systolic or Diastolic
		AC / DC , Rechargeable in Ambulance
		Supplied with regular/extra large and paediatric size cuffs
9.	Pupillary Torch	One Nos. with Spot illumination without peripheral ring of light

10.	Needle & Syringe Destroyer and Sharp dispenser	 To be placed at an appropriate location to allow easy disposal of needles Maximum weight 2.5 Kgs Motion Tolerant
11.	Thermometer (Digital)	Two Nos.
		Battery operated
		with on and off audio alarm
		Measurable in Fahrenheit and Centigrade
		Memory of the last reading
12.	Roller Splints	Two Nos.
		The splint should be made from a thin core of alloy, sandwiched between two layers of closed-cell foam
		Should be extremely pliable
		Can be used for all the sizes sizes - small, medium & large
13.	Cervical Collars	One Nos.
		Rigid and should be suitable for children aged 2 years or older, infant and adults
		Should be adjustable to 4 different sizes - Tall, Regular, Small & No neck
		 Should have pre-moulded chin support, locking clips and rear ventilation panel, enlarged trachea opening.
		Should be high-density polyethylene and foam padding with one piece design enabling efficient

		storage where space is limited
		Should be X-ray lucent and easy to clean and disinfect
14.	EMT Shears	One Nos. with Thermoplastic handles.
		Should cut a 1 rupee coin.
		6" made of SS with one edge round and other edge sharp
15.	Toothed Forceps-Dissecting	15 cms, high tensile stainless Steel
16.	Artery Forceps 6"	Two Nos.
		6", high tensile stainless Steel
17.	Toothed Forceps 6"	• 6", high tensile stainless Steel
18.	Magill's forceps	Standard Equipment in High Quality Stainless Steel
19.	Kidney Tray	• 20 cms. x 15 Cm x 4 cm
		• 18/ 8 Stainless Steel.
		500 ml capacity
20.	Klik Clamp	• 50 nos.
21.	Tongue Depressor	100 nos. Disposable Wooden Spatulas
22.	First Aid Kit Bag	An off the Shelf Resuscitation & First Aid Kit Bag made of Nylon/tougher material having space for Emergency Airway Management and Resuscitation including essentials drugs, equipment & a portable Oxygen Cylinder of with regulator, etc.

23.	Search Light (NOT TORCH LIGHT)	 Portable with spot beam of around 500 Meters, sealed lead acid/NiCd battery operated, capacity of 60 minutes with full intensity, rechargeable The search light should be securely installed at a suitable & easily accessible location in the ambulance with connection for continuous charging when not in use
24.	Rescue Equipment	Crowbar (min 48 inches, with pinch point) & A multipurpose tool such as 'Stanley FuBar Forcible Entry Tool'/equivalent for vehicle extrication
25	"B" Type O ₂ cylinder	It should be a standard1 'B' type molybdenum steel
		cylinder to fill medical oxygen
		The capacity should be of 5000 to 6000 Liters (5 to 6 M3)
		at a pressure of 1800 - 2000ibs/inch2 ,
		A pressure regulator capable of reducing the pressure
		to appropriate level to run either a ventilator or provide
		oxygen therapy with a flow meter should be provided