

GOVERNMENT OF TAMILNADU

TAMIL NADU FIRE & RESCUE SERVICES DEPARTMENT

Tender Notice No : 2 of 2022-23

GLOBAL TENDER

**Tender document for purchase of one Aerial Ladder Platform of
Not less than 42 m**

TOP SHEET

Tenders are invited from the manufacturer or an authorized distributor/dealer of the manufacturer for supply of the following items as per the specification given in the tender document:-

Sl.no.	Name of the item	Quantity	EMD
1.	Aerial Ladder Platforms of Not less than 42 m	1	11,00,000/- (Rupees Eleven lakhs only)

Other details:

1.	Address for Communication	Office of the Director, Fire & Rescue Services, 17, Rukmani Lakshmipathi Salai, Egmore, Chennai – 600 008. Tamil Nadu.
2.	Supply of Tender Document	<u>For Down Loading :</u> Tender Document shall be down loaded free of cost at the Department's Website. <u>Tender cost to obtain in person:</u> Rs.590/- (inclusive of GST) <u>By Registered Post:</u> Rs.690/- (inclusive of GST+Postal charges)

Note:

The tender documents can be accessed from <http://www.tnfrs.tn.gov.in> and the same can be down loaded **free of cost** from the web site. The vendors who have downloaded the tender documents from the departmental website must intimate the same through the following email addresses adddirectoroperation101@gmail.com, tnfrscamp@gmail.com, so that any changes can be intimated. Otherwise, it will be considered that the vendor is doing it at his/her own risk.

3.	Earnest Money Deposit – Mode of Payment.	EMD amount as mentioned above may be furnished as Demand Draft or specified small savings instruments of Fixed Deposit or irrevocable bank guarantee in favour of the Director, Fire & Rescue Services Department, Chennai
4.	Last date and time for submission of the tender	27.10.2022 at 14.00 hours.
5.	Date, Time and Place of Opening of the tender.	27.10.2022 at 15.30 hours at the address mentioned above
6.	Specifications	Furnished in the tender document. Questionnaires have been made as a part of the specification. Answers to be furnished by the tenderer about their offers.
7.	Intimation of changes	Addendum or changes/amendments if any proposed to be issued will be put up in the web-site from http://www.tnfrs.tn.gov.in . Hence, it is the responsibility of the tenderer to go through the website before submission of their tender.
8.	Type of Tender	TWO COVER SYSTEM (a) Technical Bid with EMD (b) Price Bid
9.	Name and address of the party to whom the tender documents sold in person or by post.	

Signature of the Tenderer/s with Date
and Seal

Deputy Director (Administration)
Full Additional charge
Tender Inviting Authority
(signature of Tender Inviting Authority not
necessary if downloaded from the website)

Note: Each page of the tender form should be signed and to be attached with the tender document.

Check list for the tenderers in furnishing the tender document:

- (1) Sign the tender form in each page and attach the same with your tender document.
- (2) Attach EMD as described in the tender form along with technical bid in a separate sealed cover which may be named as “Envelope-A”
- (3) If you are the manufacturer of the item quoted attach proof for the same. If you are an authorized distributor/ dealer, you should produce along with the tender offer a certificate of specific authorization from the original equipment manufacturer in Envelope-A.
- (4) Attach Questionnaire form given in the tender form duly filled along with your tender document in Envelope-A.
- (5) Attach Price bids only in the format prescribed in the tender form in a separate sealed cover as “Envelope-B”.
- (6) As mentioned in the tender specification, the tenderer should depute a responsible person on the date of opening of the technical bids, who should be able to make a video presentation about their offer before the Tender Evaluation Committee on the same day after opening of the technical bids. Further, the tenderer has to produce a C.D. duly authenticated by him before the Committee.
- (7) The following address must be written on the OUTER ENVELOPE:

Deputy Director –Administration (F.A.C)
O/o. the Director, Fire and Rescue Services Department,
17, Rukmani Lakshmipathy Road, Egmore, Chennai-600008,
Tamil Nadu, India.

This cover shall be superscribed Tender offer for supply of “AERIAL LADDER PLATFORM OF NOT LESS THAN 42 METERS”.

**TECHNICAL SPECIFICATIONS FOR AERIAL LADDER
PLATFORM HAVING WORKING HEIGHT OF NOT LESS THAN
42 MTRS FOR FIRE FIGHTING AND RESCUE PURPOSES**

1. SCOPE

1.1 This specification covers an **Aerial Ladder Platform** unit with working height of not less than 42 meters on a 6 x 4 Mercedes Benz / Volvo chassis having horse power not less than 400 hp in compliance with EURO/BS-6 emission norms.

1.2 As a minimum requirement the design of operational stability and structural strength are based on criteria laid out in EN 1777. CE certification for the offered product (3rd party notified) to be submitted along with the offer. Compliance with other norms and standards will be stated separately as applicable. The manufacturer should be ISO 9001 certified company for the marketing, design, manufacturing and after sales service of aerial platforms for fire fighting and rescue operations. It should be also an ISO 14001 certified company.

1.3 The manufacturer must have built and supplied at least 50 hydraulic platforms to various fire brigades in the world in the last 5 years. The manufacturer must have also built and supplied minimum 10 nos. of hydraulic platforms in the last 5 years for fire and rescue purposes in India of same or higher height. Purchase order copies to be enclosed and performance certificates of such vehicles which were supplied to other government entities in the current year to be submitted with the offer.

1.4 The manufacturer must have trained manpower in India to take care of maintenance (including AMC) and after sales service of the

platform either directly or through its authorized after sales service partner, which shall have enough experience in Fire & Emergency vehicles segment with full fledged manufacturing / fabricating the Fire Vehicles / tenders. To substantiate, Indian agent / representative / distributor shall furnish the authorization letter in original with tender documents. Performance certificates to be submitted along with the tender from a fire brigade, preferably from India. Only those manufacturers may submit the offer that are themselves manufacturing the hydraulic platform for fire fighting and rescue purpose and the offer should come directly from them or their authorized distributors. The manufacturer should not have been placed on Holiday list or Black listed by any Government department / PSU / local bodies etc. and a declaration to this effect must be submitted with the offer.

2. MAIN OPERATING DATA

2.1 Working height (Not less than)	42 m
2.2 Height to working cage bottom (Not less than)	40m
2.3 Working outreach at 400 kg cage load (Not less than)	19 m
2.4 Working reach below the ground level (Not less than)	5 m
2.5 Safe cage working load without water discharge (Not less than)	500 kg
2.6 Nominal water discharge capacity of cage monitor (Not less than) (with adequate supply pressure)	3500L/min
2.7 Safe cage working load with water discharge (Not less than)	300kg
2.8 Rotation, continuous	360°

2.9 Transport height (depending on chassis)	3.25-4.0 m
2.10 Transport length (depending on chassis, max.)	9-12m
2.11 Transport width (max.)	2.5m

3. MAINFRAME

3.1 The main load bearing element of the aerial device shall be the strong main frame which takes all the loads caused by the operation of the aerial.

3.2 The main frame shall be fixed onto the chassis frame with bolts in such a way that chassis performance and durability are maintained. The front fixing bolts are fitted with springs to allow the chassis frame beams to flex when the outriggers are fully down, thus avoiding any stress concentration in the chassis beams. The actual mainframe shall be a fully welded rectangular steel structure providing high stiffness and thus maximum comfortability and operational safety. At each end of the main frame there shall be integrated housings for outriggers. The main frame shall incorporate hydraulic oil tank, outrigger beam housing, and it shall be bolted to the chassis frame.

4. STABILIZINGSYSTEM

4.1 The stabilizing system shall consist of four hydraulically powered outriggers mounted in their housings in the main frame. Each housing shall be fitted with adjustable guides to provide smooth and accurate movement of the outrigger beam. The outrigger piston rods shall be completely protected by closed steel profile.

4.2 The H-type outriggers have been chosen for their ability to stabilize the vehicle from behind obstacles and to be placed on raised structures as necessary. Each vertical jack shall be fitted with self

aligning foot plate to spread the load evenly and to allow operation on uneven ground.

4.3 It shall be possible for the outriggers to be positioned freely according to the working situation by using the push buttons / control levers of outrigger hydraulics. The system shall take the outrigger positions into account and show immediately the maximum possible outreach to different directions with the selected cage load.

4.4 As standard feature the stabilizing system shall be automatic "one button" variable jacking type, as this feature substantially reduces the width required for setting up and operating the aerial yet it provides full working height and working outreach depending on where the jacks have been placed. There shall be two independent automatically operating and self controlling safety systems to prevent an unsafe configuration.

4.5 All controls for the entire stabilizing system shall be located in dust and water proof locker at the rear of the vehicle. The remote control box shall have a wander lead which allows the operator to see outriggers at all time. The automatic jacking shall lift the tyres off from the ground, level the unit and drive the outriggers back to the transport position with one push to a button.

4.6 In the middle of the control panel there shall be following additional control devices:

- starting of chassis engine
- stopping of chassis engine
- activating the outrigger controls
- outrigger and outreach display with fault finding system

- operating hour and rpm-up gauge in the display
- switch for the battery driven back-up for the hydraulic system
- switch for the diesel engine driven back-up pump
- visual indicators for leveling of the vehicle (longitudinal and transversal)
- emergency stop
- controls for the automatic jacking

The locker containing outrigger controls shall be fitted with an automatically operating door switch and a light for night operation.

5.BODY WORK AND EQUIPMENT LOCKERS

5.1 The frame for the body work shall be made of aluminium/non-corrosive material. The elements shall be covered by non-slip aluminium plate strong enough to allow free movement of persons on it.

5.2 To provide easy access from the ground level there shall be recessed steps on both sides of the vehicle and equipment lockers made of aluminium profiles and aluminium plates, painted and finally bolted onto decking element for easy removal if necessary. All lockers shall be fitted with roller shutters, properly sealed to be water and dust proof. All doors are fitted with automatic switches activating the lights as soon as the door is opened and also activating the warning in drivers cab to indicate that all doors are not fully closed. Also Welding quality certificate of ISO 3834-4 for non-load welded structures in the body work area for mobile hydraulic aerial appliances shall be submitted with the offer from an independent agency.

6. BOOMS AND LADDER

6.1 There shall be two booms, main boom with telescopic extension providing direct movement and the second (cage) boom with or without telescopic extension additionally with vertical movement of approx. 180 degrees with the first boom. The second boom shall provide an up-and-over capability of approx. 8 to 10m throughout its vertical and horizontal movement.

6.2 Based on the selected outrigger position and cage load, the system shall select automatically the maximum outreaches to all directions (front, right side, rear, left side). The system capacity shall enable hundreds of various outreach curves for each direction (front, right side, rear, left side). The outreach control shall be practically stepless.

6.3 The hydraulic platform OEM should themselves design & manufacture the booms in-house (no-subcontracting) for better quality control and safety considerations. The booms shall be welded by the unique plasma welding method to provide high durability and extreme accuracy. For high strength and minimum flexing of the boom sections only high tensile strength steels shall be used as load bearing structure. Welding quality certificate of ISO 3834-2 for load bearing steel structures for mobile hydraulic aerial appliances & ISO 3834-4 for non-load welded structures in favour of hydraulic platform OEM should be submitted along with the offer from an independent agency.

6.4 All telescopic sections of the first boom shall move synchronized i.e. there are no intermediate jerks when the extension/retracting is operated and also slowdown modifications at the beginning of the movement as well as at the end of the movement. All sections shall be

fitted with adjustable guides to provide smooth and accurate movement.

6.5 The main boom elevation and lowering has to be controlled by two hydraulic cylinders that both have their separate safety devices and can alone carry the entire load.

6.6 Different maintenance objects shall be located well at hand either outside the boom or behind easily removable covers. All booms shall be internally and externally primed and painted for long lifespan.

6.7.RESCUE LADDER

6.7.1 As table telescopic rescue ladder system shall be attached on to the right hand side of the booms. Due to the telescopic design the ladder shall form a direct continuous rescue way with no cross-over platform or similar obstacle. The telescopic or non telescopic cage boom ladder shall also be telescopic or non telescopic and the folding/unfolding of its handrails should be controlled from the cage and turntable control panels, so that it can be used even when cage boom is telescoped out. There should be a safety mechanism programmed in the vehicle, which prevents the folding of the telescopic cage boom ladder into the transport position in an unsafe configuration to prevent damage to the ladder.

6.7.2 The ladder shall be attached on to the boom structure at several points throughout its length resulting in extreme stability even when operated in windy conditions. Extension movement of the ladder shall be automatically synchronized with the telescopic movement of the first boom requiring no separate control devices.

6.7.3 Both control panels shall be fitted with visual indication for "safe to climb" position of the ladder.

6.7.4 There shall be a step at the turntable to provide safe access from the ladder down to the decking or to a fly ladder. Thus a continuous way from the maximum height down to the ground shall be provided for high capacity rescue operations.

7. TURNTABLE

7.1 The turntable shall be a fully integrated steel structure. The centre post containing slip rings with double pins for electrical connections, 100 mm corrosion resistant water way and hydraulic pressure and tank lines allows continuous rotation of the turntable.

7.2 The centre post shall be mounted inside of the turntable in such a way that maintenance can be done directly from the turntable.

7.3 Rotation reduction gear with automatically operating braking system shall be installed in the middle, front of the turntable for easy maintenance and adjustment. The hydraulic motor powering the rotation movement shall be fitted directly into the gear for high reliability. The base control station shall be attached to the turntable so as to rotate with it and be accessible in all positions of the turntable.

8. WORKING CAGE

8.1 The working cage shall be fixed to the booms with pivoting point about cage floorlevel to provide highest possible degree of versatility. The cage shall be made of tubular steel profile, welded together and painted with special paint with high durability. The working cage shall have enough space and it shall be fitted with minimum two inward opening doors located at suitable location to enable safe access to the cage in travelling position.

8.2 The top railing shall be part of the left side cage door so entering in to the cage without bending oneself shall be possible. The rescue entrance shall be located in the front and top railing can be moved to the side for safe and easy access. There shall be two fitments for safety belts in the working cage. Safe working load shall be not less than 500 kg when no water is discharged and the cage telescope is in retracted position.

8.3 It should be possible that the cage load can be changed from the display units at the outrigger center, at the turntable or in the working cage. The chosen cage load should be able to be seen on the display by clear symbols and also numerically in selected format. The current cage load shall be shown by graphical bar.

8.4 If the selection is made at the outrigger center, the system shall show automatically maximum outreach to all directions with the selected cage load and outrigger positions. If the cage load shall be changed at turntable or in working cage, the system shall show maximum outreach to all directions and additionally outreach diagram in the present direction of the booms.

8.5 2 no of hardened plastic foldable seats with locking type safety belt shall be provided in the hand rails of the cage to hold the victim themselves. So that they may feel secure in the time of rescue from high altitudes. Also it will restrict the unwanted panic movement of occupants inside the cage, thus balancing of cage will not be disturbed.

8.6 Cage door locks shall be provided with hard enough locking security with double check lock provision and as well as it shall be easy to operate.

8.7 2 no's water bottle holders shall be provided in the cage.

9. WORKING CAGE LEVELLING AND SLEWING

9.1 The working cage shall be kept horizontally leveled in any position of the booms.

9.2 The leveling system shall be controlled by an automatic hydraulic device with fully automatic and independent safety circuit in case of an uncontrolled leveling failure. There shall be a master switch for the automatic leveling system, so that it can be isolated and the manually controlled system activated.

9.3 The leveling movement shall be powered by a hydraulic cylinder located well protected inside the boom. The cylinder shall be connected to a mechanical linkage which can carry the entire safe working load.

9.4 The working cage should turn 45 degrees to each side from its centre position to provide safety and comfortability in rescue operations. The movement shall be powered by a hydraulic cylinder with controls in the working cage and at the turntable control panels. The centre position of the cage shall be indicated by a visual indication at both control panels.

9.5 At the front of the working cage there shall be a rescue platform with automatically operating safety railing to provide additional safety during rescue and fire fighting. The likely dimensions of the rescue platform shall be 1,30 m x 0,5 m.

10. INTERCOM

10.1 There shall be a talk-back intercom system fitted between the turntable and the cage. The combined microphone and loudspeaker

for no-hands-operation shall be located in the cage and at the turntable control station.

10.2 In addition to that one to one communication device shall be provided between cage and turntable operators. It shall be a hands free model and shall be fixed in the helmet. So that they can communicate easily between themselves without using their hands when their hands are engaging with joystick operation

11. HYDRAULIC SYSTEM

11.1 Hydraulic power shall be provided by a double axial piston pump, which shall be driven by the vehicle power take-off. The power requirement for the system should be met by the hydraulic pump.

11.2 Without any operation of the aerial device, the pump rotates on minimum flow and minimum pressure. When one of the movements shall be operated the control valve automatically increases the pressure to a pre-set constant level and the oil flow to the amount that shall be needed for the movements activated. Due to this method the loss of power in the hydraulic system, which normally causes overheating of the hydraulic oil, can be avoided and also the stresses caused to the vehicle transmission and PTO system are minimized. At the same time fuel consumption and exhaust emissions are kept at the minimum.

11.3 By operating several movements simultaneously the oil flow shall increase automatically according to the need in the system thus making all movement speeds independent on each other. The constant pressure system with maximum pressure setting prevents overloading of the system and its components e.g. cylinders.

11.4 In the cage and at the lower valve compartment there shall be

instant couplings for the manometer in the pressure line. The manometer shall be included as a standard equipment. The hydraulic pressure and temperature shall be shown on displays.

11.5 The filtration of the oil shall consist of suction strainer in the suction line, pressure filters in each pressure circuit, return filter in return line and air filter on the reservoir thus providing maximum reliability by protecting the hydraulics against foreign particles.

11.6 The hydraulic cylinders shall be double acting with hard chrome-plated piston rods and they shall be fastened by means of self-aligning ball bearings to prevent lateral forces from damaging the seals or piston rods of the cylinders.

11.7 Hydraulic oil tank shall be at a suitable location for good protection and transformation of the heat. The tank shall be fitted with oil level gauge, temperature gauge, suction connections with closing valves for easy maintenance and draining outlet with closing valve.

12. BACK-UP FOR THE HYDRAULIC SYSTEM

There shall be a battery driven hydraulic pump and also a separate diesel engine driven back-up pump, which shall provide an independent means of power in case of failure of the main engine. Both the pumps may be started from all control panels thus providing an immediate back-up in a case of a failure at an intense fire or similar immediate emergency.

13. ELECTRIC SYSTEM

The electric supply shall be taken from the chassis battery which shall be kept charged when the engine shall be running. Voltage of the

system shall be 24 V DC and all circuits shall be fitted with their specific fuses. When the main current is switched on, yellow flashing warning lights located at each outrigger and underneath of the working cage shall be automatically switched on.

14. SIREN,PUBLIC ADDRESS SYSTEM & WARNING BEACON LIGHTS

14.1 There shall be an electric siren unit fitted on the front bumper or behind the front grille. Control panel of the system shall be conveniently located for the driver and it includes switches for fast (yelp),slow (wail) and two tone (Hi-Lo) sounds.

14.2 Command microphone, which shall be fitted with push-to-talk switch, allows the public address message to override the siren function. Operations are controlled by a switch in illuminated non-glare control panel.

14.3 On each side of the drivers cab roof there are red rotating beacons. The switch for switching the beacons on and off with suitable signal light shall be fitted inside of the cab in a convenient position for the driver.

14.4 4 no of blue-red combination flickering LED lights shall be fitted in the front side of the vehicle. Two shall be fitted below the front windshield and the other two shall be fitted on the front bumper.

14.5 2 no big square red blue combination Flickering LED lights shall be fixed in the rear side of vehicle.

14.6 3 no Blue-red combination flickering LED lights shall be fitted on each side platform of the vehicle.

15. CONTROL SYSTEM FOR BOOM AND ROTATION MOVEMENTS

All boom and rotation movements shall be controlled electro-hydraulically by means of proportional valves. Due to the proportional principle the control function is not sensitive to changes of ambient or oil temperature, thus providing smooth, safe and very accurate movements even in most severe operating conditions. All control movements shall be performed by the remote control system from both control panels. The side outreach shall be performed by the position of the outriggers. The variable system contains also displays at all three control stations. The displays give the real-time information about the outreach and the cage position and also show possible movements according to cage position by animated arrows. There shall be at least four different views on each display:

- Outreach preview
- Real time outreach and cage position with guidance information
- Main outreach with two views(side and up)
- Fault finding system
- Statistic information

16. TURNTABLE AND WORKING CAGE CONTROL PANELS

16.1 The turntable control panel incorporating all control levers and safety system indications shall be fitted with a rotatable arm at the side of the turntable. This feature enables the whole control panel to be placed and locked conveniently in its operating position to provide the officer in charge an excellent view over the different indications of the safety systems. If desired, the control panel shall be rotated and

locked in a position enabling direct access from the decking of the vehicle into control station.

16.2 The control station shall be fitted with convenient adjustable seat to provide comfort even in case of prolonged operation. The platform underneath the control position shall be covered by non-slip aluminium. Both control panels shall be exactly alike thus considerably reducing the risk of confusion amongst operators under stress or even panic.

16.3 At the turntable control panel there shall be a change-over switch to select the panel from which the operation shall be controlled.

16.4 The working cage control panel incorporating all control levers and safety system indications shall be recessed to cage railing to provide the largest cage space as required by the particular operational task. This feature considerably increases the versatility of the unit in actual operation.

16.5 Both control panels shall be fitted with following most important warning, indication and control devices, all marked by clear symbols for easy recognizance.

- visual and audible indication for exceeding safe working load
- visual warning for activation of working cage collision guard system
- visual indication for ground pressure of the outriggers
- visual indication for the rescue ladder "safe to climb"
- visual indication for the centre position of the booms
- visual indication for the centre position of the working cage
- starting and stopping of chassis engine
- switch for the battery driven back-up for the hydraulic system

- joy stick control levers for each movement
- membrane buttons for cage slewing
- emergency stop button
- overriding of the automatic working cage leveling system
- manual operation for the working cage leveling system
- switches for activating the bleed down system

17. CONTROLS AND INDICATORS IN DRIVERS CAB

In addition to chassis standard controls and indicators the following items shall be installed in drivers cab:

- visual warning for the main current being switched on
- visual warning for outriggers in travelling position
- visual warning for any of the equipment lockers being open
- visual warning for the booms not being fully in transportation position
- switch with visual indication for rotating beacons
- switch with visual indication for siren unit
- microphone for the public address system

18. SAFETY DEVICES

18.1 All load bearing hydraulic cylinders shall be fitted with lock valves directly integrated into the cylinder structure to prevent the booms, the working cage or the outriggers from retracting in case of a pipe or hose failure.

18.2 Retracting of any of the outriggers shall be automatically prevented as soon as the booms have been lifted from their travelling position. Similarly lifting of the booms from the travelling position shall be prevented until the outriggers have reached the ground pressure.

18.3 All boom movements shall be limited at their most extreme positions thus making it impossible for the operator to reach an unsafe configuration by normal means of operation. The movements having direct influence on the stability of the aerial shall all be fitted with two separate limiting circuits, the first one retarding and stopping that particular movement, the second one deactivating the whole electric and hydraulic system should the first circuit not have worked.

18.4 All major movements, lifting of the first boom to its maximum elevation, and extending the telescopic movement or lowering the first boom at the maximum outreach shall be fitted with slow-down devices to provide smooth deceleration of the movement. Also the starting of the movement shall be retarded for smooth acceleration.

18.5 Starting of the chassis engine from the control panels of the aerial shall be prevented unless the gear is shifted to neutral.

18.6 Inadvertent damaging of the drivers cab by the booms shall be prevented by a system preventing lowering of the booms and rotation movement when the booms are near the drivers cab.

18.7 An overload warning shall be fitted to give an audible and visual warning in case of exceeding the safe working load at all control stations. At the same time boom movements shall be slowed down and outward boom movements shall be stopped.

18.8 An ultrasonic collision guard system shall be integrated to cage load sensor to provide additional safety when operating in darkness or in dense smoke. This system shall stop all movements and can be bypassed if needed.

18.9 An emergency stop switch shall be fitted at both boom control panels to provide immediate and complete "freezing" of all systems in

case of an unexpected emergency. Activation of the emergency stop shall be shown on each display.

18.10 The control system shall be fitted with dead man switches to provide additional safety. There shall be a "bleed down" system which can be operated from working cage and turntable control panels. By means of this system the booms can be lowered and the working cage brought down onto the ground even if no hydraulic pressure shall be available. In such a case manual rotation shall be provided by manual means.

18.11 A Load-man device to test the bearing capacity of any kind of ground to see if it is safe to use the hydraulic platform under the given ground conditions. This should be a light weight portable device for measuring the bearing capacity of any kind of ground to see if it is safe to pitch the vehicle in the concerned area. The device shall be used to measure the bearing capacity on roads, streets, bridges, construction sites etc. The device must be easy to handle and shall be used practically on all materials under any conditions.

18.12 Measuring principle - The deflection caused by the load of a falling weight inside the device measured by an accelerometer:

- Total weight 15-20 kg
- Height 110-120 cm
- Diameter 10-15 cm
- Diameter of loading plate(s) 120-140 mm
- Falling weight 10 kg
- Falling height 80 cm
- Operating voltage 27 V (batteries to be provided)
- Measuring range 0.1-5 mm

- Length of loading/unloading impulse 25-30 ms

19. WATER WAY

19.1 The water way system shall be completely made of non-corrosive steel / Aluminium / Stainless steel material. The nominal diameter of the water way shall be 100 mm. There shall be one instantaneous 2½" inlet with a closing valve at each side at the rear of the vehicle from where the line leads through the centre post in the turntable up to the working cage where the water monitor shall be mounted. Along the lower boom package, the piping shall be fitted onto the right hand side between the ladders and the booms.

19.2 The centre post, which shall be mounted in the centre line of the turntable, provides continuous rotation even if water supply shall be simultaneously used. The piping shall be protected from possible overpressure by means of at least one relief valve mounted underneath of the turntable set not less than 16 bar.

19.3 On the side of both booms there shall be telescopic water pipes, which shall be made of noncorrosive material. Moving sections of this pipe shall be designed to provide reliable function and long life span.

19.4 Seals between the sections shall be of low friction type and can be easily tightened if so required. At boom pivoting points flexible, specially reinforced pressure hose shall be used. All hoses shall be fixed to the pipe with reliable span-lock connections.

19.5 Piping shall end at the left hand side at the front of the working cage where the water monitor shall be placed. A 75 mm (3") valve shall be fitted in the cage to isolate the monitor if required.

19.6 There shall be an additional outlet with 65 mm (2½") closing valve and coupling for water supply from the cage through an

extension hose. There shall be drain cocks fitted in the piping to enable it to be drained after use.

19.7 On the front of the cage there shall be nozzles of water spray curtain system to protect cage occupants from radiant heat.

20. WATER MONITOR

Water monitor shall be connected onto the piping system and it shall be placed at the front of the cage on the left hand side just outside of the railing. Due to the fact that the monitor is placed outside of the cage the entire cage floor area can be fully utilized in extreme rescue situations. The monitor shall be made of light alloy and fitted with jet/fog nozzle with a nominal capacity of minimum 3500 L/min and the monitor shall be remote operated.

21. PAINTING

21.1 Before painting all surfaces of steel structures shall be carefully shot blasted after which they shall be primed. After the final top paint the thickness of the paint film shall be 100 microns. All booms have been painted from inside. To provide very high corrosion resistance hollow structures such as steel profiles of the working cage, cage boom and outrigger beams and housings shall be treated with anti-corrosion protection "TECTYL".

21.2 Paint tones used for standard units shall be:

Area	Colour	Colour code
Working cage	White aluminum	RAL 9006
Working cage support, Boom sections, Turntable and related cylinders	White	RAL 9010

Main frame. Outriggers and body work	Red	RAL 3000
Chassis frame touch ups	Chassis original tone	--

21.3 The word "Tamil Nadu Fire and Rescue Services" shall be painted on both side of the vehicle at suitable place as per the instructions of the department.

21.4 The emblem of Tamil Nadu Fire and Rescue Services shall be painted on both side of the vehicle in Natural colour.

22. ELECTRONIC SAFETY AND OUTREACH SYSTEM

22.1 The Electronic system makes it possible to leave outriggers to positions and to select the working cage load according to working situation. With these variables the system shall select automatically the maximum allowed outreach to front, rear, right and left side. This shall be based on calculations and parameters saved in the system so that it will guarantee exactly the same outreach regardless of the external influences like wind speed and direction, temperature, friction of the cylinders, etc.

22.2 The display units of the system shall show maximum possible outreach and position of the working cage in real-time. There shall be also many additional features included in the display units. All electrical components in the system shall be doubled.

23. APPROVAL FOR ELECTRONIC SYSTEM

The Electronic system shall be approved according to the valid standards and directives of European Union. The System shall be EMC

tested and certified from 3rd party and the EMC certificate must be submitted with the offer.

24. SAFETY CERTIFICATES FOR MANUFACTURER AND THEIR PRODUCT

24.1 ISO 9001 certificate for marketing, design, manufacture and after sales support of appliances for use in rescue, fire fighting and access applications for their quality management system.

24.2 Certificate from an independent agency for welding quality certified to ISO 3834-2:2005 for load bearing steel structures for mobile hydraulic aerial appliances. Also welding quality certificate of ISO 3834-4 for non-load welded structures in the body work area for mobile hydraulic aerial appliances should be submitted along with the offer from an independent agency.

24.3 ISO-14001 certificate for their manufacturing plants.

24.4 EC type certification (CE certificate as per EN1777), 3rd party notified for the quoted model.

24.5 Certificate from an independent agency for electromagnetic compatibility (EMC as certified to EN55012:2007) for the electronic (computerized) control system.

24.6 Certificate from an independent agency as per pr/EN954-1 certifying the safety of the limiting system as per the machinery directives.

24.7 Certificate for electromagnetic compatibility of wireless remote control (if applicable).

25. DISPLAY UNITS

The system shall include *3 full colour displays* situated at outrigger center, at turntable and in working cage and they shall be touch screen type.

- Colour display:
- Based on TFT technology, trans-reflective type. Good visibility in bright daylight and at night time(display shall be back lighted)
- Size6,5",ratio16:9(widescreen)
- 400x 240RGBpixels, full colours
- 12 back lighted multifunction membrane push buttons
- Two warning LEDs

26. FAULT FINDING SYSTEM

26.1 Special attention shall be focused on the defect sensitivity. If anyway some faults appear, the location of the defective component shall be shown on the screen. The system shall show location and nature of fault on screen. The system shall have simple test screens to enable testing of the working cage and the turntable control panels. The test shall cover display unit, push buttons, joysticks and control lamps.

26.2 For maintenance purposes the following tools shall be available as standard:

- Fault finding system and fault register
- Status screens for sensors, switches, hydraulic valves, control lamps etc.
- Total operation and RPM-UP hour meters
- Operation and RPM-UP hour meters since last service

- Total movement counters for all boom movements (informed as seconds)
- Service counters and alarm for general maintenance
- S
oftware verification management.

27. STANDARD FEATURES OF THE SYSTEM

27.1 Ground pressure alarm

When one outrigger has not enough ground pressure, the system shall give an audible and a visual alarm. If two outriggers loose ground contact, unsafe boom movements shall be stopped.

27.2 Cab protection

The cab of the truck shall be protected to avoid damage by the booms or working cage. Working in front of the truck close to the cab shall be also possible. When arriving to the cab protection area, the movements of the booms shall be slowed down and stopped softly. Leaving the area shall be done by opposite movements. Cab protection can be overridden by push button.

27.3 Automatic drive of booms to transport position

The booms shall be lowered back to transport position and outriggers also retracted fully automatically by pushing a single push button.

27.4 Working cage auto centre position and ladder rung alignment
working cage shall be turned automatically to centre position. Also the system must automatically align the ladder rungs in the same line.

27.5 Approaching speed

Lower speeds of the boom movements for training and general use for persons not very familiar with the platform or when reaching the

building very accurately.

27.6 Personal profile

The platform operator shall be able to generate his/her own boom movement speed and ramp time profile in the system. Possibility to enter own name for easier selection of own profile. The profile shall remain in the system until changed.

27.7 Zero position of joysticks

All joysticks must be in zero position before activation of RPM for boom movements.

27.8 Automatic switch off for the outrigger pressure

Push button version of outrigger controls. Outrigger pressure shall be automatically switched off if dead man pedal of working cage or turntable shall be pushed. Outrigger pressure shall be also automatically switched off after certain time delay.

27.9 Service time reminder

The system shall give an alarm when closing 250 h (or every third month) or 1000 h (yearly) service time. The service time counter shall be able to reset when maintenances carried out.

27.10 Pressure and temperature of hydraulic oil

Platform shall be equipped with electrical temperature and pressure sensors of the hydraulic oil. The temperature and pressure are shown in every display unit along with audible and visual warning at display for hydraulic oil level at all three control panels.

27.11 Tilt alarm

If chassis is tilted or the unit is leveled incorrectly, the system shall give an audible and a visual alarm in every display unit. The tilt alarm

angle shall be adjustable.

27.12 Language and measure units of screens

The system shall be based on clear and easy-to-understand symbols. If texts are used on master screens, the language shall be English. All measure units of master screens can be changed to locally used format by operator.

27.13 Auto jacking

Automatic leveling system shall be easy and fast way to make platform ready for operation. The system shall be fully automated and enable leveling within less than 30 seconds. The system shall perform very accurate leveling and shall have safety circuits to assure that leveling shall be proper and platform shall be ready for safe operation. This system shall be controlled by hand held remote control device. The device shall be equipped with following functions (back-lighted push buttons):

1. Left side outrigger beams out
2. Right side outrigger beams out
3. Automatic leveling
4. Outriggers back to transport position

27.14 Pressure of water in water line

The platform shall be equipped with water pressure sensors:

- Water pressure in water inlet (>0.0 bar)
- Pumping pressure of water
- Water pressure in water monitor
- The water pressure shall be seen on water pump screen on every display unit.

27.15 Water flow rate and total amount of water used

Actual volume of water in water line. The water volume shall be seen on water pump screen on every display unit. The system shows also the total amount of water used at one time (this counter can be reset when needed).

27.16 Wind speed meter

A wind speed sensor shall be fixed in working cage and can be at place also during transportation. Wind speed shall be seen on all three display units. When wind speed shall be higher than allowed the system shall give audible and visible alarm. The wind speed meter shall limit the further extension of the boom of the platform.

27.17 Indication of low fuel level

Depending on the chassis used the system shall give an alarm to the operator when the fuel tank shall be getting empty.

27.18 Oil filter Service Indicator

If any of return oil filters needs unscheduled service, a visual indication shall be shown on every display unit.

27.19 Hydraulic tank low oil level alarm

System shall give an alarm to the operator when hydraulic oil level shall be too low in the oil tank. Saturation level of hydraulic oil (amount of water in hydraulic oil) shall also be indicated.

27.20 Temperature of cage floor

Temperature of working cage floor can be seen on every display unit.

27.21 Engine fault alarm

In case of fault in the chassis engine an alarm for the same shall be given

28. ACCESSORIES

1. Wooden outrigger ground pads with brackets– 4 pcs
2. Working range diagrams, one at the turntable, one in cage–2 pc
3. Marking of safe working load in the cage– 1 pc
4. Unit type marked at the boom– 2 pc
5. Warning labels and instruction plates–1 set
6. Operation and maintenance manuals for super structure–2 sets
7. Plug for 24V working light at the turntable and in the working cage
–1 pc
8. 24V/ 70 W working light with universal bracket–1 pc
9. Lifting loop under the working cage, capacity 500kg–1pc
10. Hydraulic pressure gauge– 1 pc
11. Battery operated (no hydraulics) Combi-tool (EN certified) with integrated battery with charger, spare battery and 230V power adaptor. The power of the tool shall not go down even when the battery power decreases till the battery power is completely depleted–
1 set
12. Battery operated (no hydraulics) Rescue Ram with extension (EN certified) with integrated battery with charger, spare battery and 230V power adaptor. The power of the tool shall not go down even when the battery power decreases–1 set
13. Safety Belts for cage– 5 pcs
14. Stretcher carrier with stretcher–1 set
15. Quick action cage mounted water hose reel, 25mm diameter, 20m length –1 pc
16. Oil cooler for cooling the hydraulic system–1 pc
17. Operation and maintenance manuals for chassis– 2 sets

18. Personal protective Suits (Multi layered) as per the following norms – 6 no's

Norms for personal protective suit: The suit shall be of three layers, in two pieces of pant and coat/jacket. Three layer personal protective suits shall confirm to norms as specified in EN 469, protective clothing for firefighters and a certificate to this effect from the reputed institute of testing shall be sent along with the offer. The colour of the pant and coat shall be of blue and retro – reflective tape of 50 mm wide and also with an insignia of 'T.N. Fire and Rescue Services' shall be provided on specific portion of Jacket. Reflective tapes have to be provided around the body and sleeves. The gloves confirming to EN 659, boots confirming to EN 345, helmet with torchlight confirming to EN 443 and hood as per norms and test certificates to this effect from the reputed institute of testing shall be sent along with the offer. The suit and accessories shall be certified to mentioned EN (or equivalent) standards.

19. Battery operated public address system

Further Spares required for the maintenance of the Aerial ladder platforms

For Chassis:

- 1.** Engine oil filters 2 sets
- 2.** Diesel filters - 2 sets
- 3.** Air filters-1 set
- 4.** Fan belts-1set
- 5.** Fuses - 1 set and
- 6.** Accessory tools- 1 set

For sky lift platforms:

1. Hydraulic filters – 1 set
2. Fuses-1 set
3. Fault finding guides
4. Suitable spare sensor-1 set

29. BREATHING AIR SYSTEM

A breathing air system shall be provided from turntable to working cage. At the cage there shall be a 4-way manifold with instantaneous couplings to connect 4 breathing masks. Air cylinders to supply the breathing air shall be mounted at the turntable. The cylinder capacity shall be such that they provide minimum 7000 L of free air. Isolation valve shall be provided at suitable location so that the cylinder can be changed without interrupting the air supply. Pressure regulator as required shall also be incorporated in the system. Suitable face masks for breathing (4 nos.) shall be supplied. The breathing mask hose shall have enough length to allow the users to roam inside the cage without any restriction. 4 No spare air cylinders shall be supplied in addition to the set.

30. INSTRUCTION MANUALS

Two sets of complete instruction manuals in English/ Tamil language for and maintenance of aerial ladder platform unit (including all systems), standby systems, chassis and itemized spare parts list shall be supplied along with the vehicle.

31. WARRANTY

5 (Five) Years warranty from handing over according to warranty terms on the superstructure and truck chassis according to truck

warranty terms should be given. Further, all the spares should be supplied free of cost during the warranty period. The manufacturer shall give assurance to supply the spare parts for twenty years.

32. DRAWINGS AND OPERATING DIAGRAMS

The complete set of operating diagrams of aerial ladder platform shall be submitted along with the offer.

33. STABILITY

The stability of the vehicle (in traveling position) when fully equipped and loaded (excluding crewmember), with hydraulic platform resting on the resting stand and without extending the stabilizing jacks, shall be such that it shall remain stable and shall not over turn even if the surface on which the vehicle stands has gradient as per EN 1777 on either side from the horizontal. A certificate to that effect shall be furnished by the manufacturer at the time of supply.

34. INSPECTION

Before Shipment of the vehicles, the vehicles will be inspected at manufacturer's site by a team of Officers deputed by the Director, Tamil Nadu Fire and Rescue Services Department. Further, the officers deputed for inspection, should be imparted training at Manufacturer's site on the operations of the vehicles proposed to be supplied to this Department. The team of officers proposed to be deputed will consist of minimum of 6 officers. The cost for deputing the officers for inspection and training including to and fro charges and accommodation for stay should be borne by the Manufacturer.

35. TRAINING AND COMMISSIONING

35.1 The manufacturer shall undertake the training for a week in

Chennai in the operation and maintenance of the aerial ladder platform and vehicle for the operational staff of the Fire Brigade. Cost on this account shall be included in the offer. Duration 7 working days.

35.2 A complete training package in CD-format for internal re-training of the operating personnel must be supplied for each product delivered. A presentation of such a package shall be given before the technical committee during technical bid evaluation.

36. TECHNICAL BACK-UP

36.1 The manuals containing operating instructions, maintenance manuals, illustrated spare part catalogues and workshop manuals have to be supplied in CD-format for the superstructure. The chassis must be commercially available standard type with after sales back up available in India.

36.2 The manufacturer must have factory trained and certified after sales personnel located in India. The manufacturer must guarantee the supply of spare parts and technical back-up for the superstructure for a period of 20 years.

36.3 The manufacturer must have a GSM-based mobile remote trouble shooting facility integrated in the vehicle system that enables the user to get in touch with manufacturer directly.

36.4 The manufacturer or their authorized agency shall have a service support set up in Chennai so as to ensure the vehicles trouble free operation.

QUALIFICATION CRITERIA

- The orders issued under Rule no.144 (xi) of General Financial Rules (GFRs) 2017 relating to restrictions on procurement from a bidder of a Country which shares a land border with India will be applicable for this tender as per the guidelines issued by the Government of Tamil Nadu vide G.O.Ms.no.343 Finance (Salaries) Department Dated 18.09.2020. The Bidder has to undertake compliance of this and any false declaration and non-compliance of this would be a ground for rejection of their tender.
- The manufacturer should be ISO 9001 certified company for the marketing, design and manufacturing and after sales service of aerial platforms for firefighting and rescue operations. Further, the manufacturer should have ISO 14001 certificate for their manufacturing plants.
- Certificate from an independent agency for welding quality certified to ISO 3834- 2:2005 for load bearing steel structures for mobile hydraulic aerial appliances. Also Welding quality certificate of ISO 3834-4 for non-load welded structures in the bodywork area for mobile hydraulic aerial appliances shall be submitted along with the offer from an independent agency.
- 3rd party certificate from an independent agency for electromagnetic compatibility (EMC as certified to EN 55012:2007) for the electronic (computerized) control system, for electromagnetic compatibility of wireless remote control system should be produced. Further, 3rd party certificate as per

EN 954-1 certifying the safety of the limiting system as per the machinery directives should be produced.

- EC type certification (CE certificate as per EN 1777), 3rd party notified for the quoted model
- A performance certificate shall be submitted along with the tender from a fire brigade, preferably from India along with copy of orders received.
- The tender should be submitted by the manufacturer or their authorized agent in India.
- Manufacturer shall have minimum 15 years of experience & shall have manufactured & supplied minimum 50 nos. of Hydraulic Platforms/ Aerial Ladder platforms all over the world in the last 5 years including 10 nos. of similar or higher height.
- In addition to the above mentioned experience criteria Manufacturer shall have supplied minimum 10 nos. of hydraulic platforms in the last 5 years for fire and rescue purposes in India of same or higher height. Purchase order copies should be enclosed with and performance certificates of such vehicles which were supplied to other government entities in the current year should also be submitted along with the offer.
- Certificate from any accredited 3rd party agency certifying the OEM as an approved training center for Aerial Platforms and to show the quality of trained instructors for providing quality training on these appliances.

Criteria for Evaluation of Tenders

➤ **This is a two-bid tender consisting of:**

(i) technical bid

and

(ii) price bid

- Technical bid which may be named as “Envelope-A” should contain the technical details of the items offered, commercial terms and conditions along with a list of the enclosures such as proof in respect of manufacturer or the authorization letter from the manufacturer, latest local tax clearance certificate if any applicable to the country/origin along with EMD
- Price bid, which should be furnished separately as “Envelope-B” in the format prescribed in the tender form in a sealed cover, and the same will be opened only after evaluation of the technical bid
- The technical bid evaluation of the tender offers will be done in three stages. The rules laid down in Tamil Nadu Transparency of Tenders Act, 1998 and related rules, as amended from time to time, will be scrupulously followed.
- If at any stage, a technical flaw is noticed in following the procedures, the procuring entity will take appropriate decisions and reserve the rights to relax or waive or modify at his discretion any of the condition in the interest of the Department so as to ensure that the overall objective of procurement is not defeated.

Stage I: Rejection of tender offers found technically defective:

- a) Only the tender document supplied by this Office or the tender documents which have downloaded from the department’s website free of cost should be used and it should be resubmitted in full shape without detaching any page from it.
- b) Each page of the tender document, including technical specifications should be duly signed for having noted the contents of the tender document. the tenderers are requested to put the page number to the tender documents serially including all enclosures while submitting their tender.
- c) Tenders in any forms other than the forms and schedules issued by the department to the tenderer will not be considered and will be rejected as non-responsive.

- (i) Those who do not submit the EMD, as defined in this tender document, along with the tender (unless the vendor is exempted by a specific rule provision for which documents must be submitted along with the tender to prove that he or she is exempted for this particular item) will not be considered.
- (ii) In case of partial amount of EMD, the tender will be rejected straightaway and the offer will not be considered. In cases where exemption is sought, a plea for producing the exemption documents later will not be accepted.
- (iii) EMD submitted in a manner other than that specified in the tender document will be considered as not submitted and the tender will be rejected.
- c) (i) A vendor who does not answer all the questions in the Questionnaire will not be considered. Only those offers will be considered in which all questions in the Questionnaire have been answered.
- (ii) Oversight will not be taken as a reason for not answering a question. It is presumed that a vendor trying for a deal about equipment related with life-saving would show adequate seriousness about furnishing details about the product offered by him or her.
- d) While supplying information in response to the Questionnaire answers such as “will be supplied later” or “will be intimated later” will not be accepted. Such answers will lead to the conclusion that the vendor is either not an authorized dealer of the said company or is not serious about the deal.

Stage 2.(Evaluation of Essential Features as per specifications in the tender form)

The offers that are not rejected at Stage-1, will be examined for the essential features noted below. The information for such evaluation will be taken from those pages of the answers to the questionnaire, which have been signed and carry the seal of the vendor.

(Kindly note that information on the pages of the answers to the questionnaire, which are not signed, or do not carry the seal will be ignored. The information on any pamphlets or brochures submitted by the vendor may be used for corroboration and cross checking of the information supplied by him or her in answer to the questionnaire but may not be used unless this information is provided in a signed answer-sheet carrying the seal. An answer like “Please see the marked portion of the pamphlet or brochure attached” may be taken as not answered. The whole transaction will be conducted on the presumption that a serious vendor knows what he or she is selling)

The following essential features will be considered to qualify at this stage for further evaluation. Failure to comply with the following essential features, the tender will be rejected

- The tenderer should fulfill the qualification criteria prescribed in this tender.
- The manufacturer should attach a copy of proof of approvals given by the appropriate authority to satisfy all the qualification criteria mentioned in the specification part, failing which the tender will be rejected.
- The manufacturer must have trained manpower in India preferably in Chennai either directly or through its authorized after sales service partner to take care of maintenance and after sales service of the platform and should be able to enter into an comprehensive maintenance contract with the Tamil Nadu Fire and Rescue Services Department.
- A performance certificate shall be submitted along with the tender from a fire brigade, preferably from India.
- The tender should be submitted by the manufacturer or their authorized agent/distributor in India. Attach a copy of proof for the same
- Certificate of approval of the standard by the competent authority in respect of the product offered. Attach a copy of proof for the same
- The answers given by the tenderer to the Questionnaire will be taken into account for preliminary verification whether the offer made by the tenderer satisfy the specification and other requirements.

Failure to comply with the above instructions and an offer which does not meet out the detailed specifications will be rejected.

(However, the procuring entity will take appropriate decision and reserve the rights to relax or waive or modify at his discretion any of the condition / specification in the interest of the Department so as to ensure that the overall objective of procurement is not defeated.)

Stage 3: Selection of the suitable tenders:

- The offers that are not rejected during stage 2 above will be further evaluated for selection of the suitable items.
- Since the tender is for fabrication and supply of “**Aerial Ladder Platform**” as per specifications given in the tender document, further evaluation will be made based on the detailed drawing of the body, Aerial ladder platform, to be submitted along with tender and also with reference to the details given to the questionnaires in the tender document.

- While evaluating the tender, any additional details may be called for from the tenderers as per the discretion of the DFRS for which a message will be dispatched to him through Fax. Hence, it is the responsibility of the tenderer to furnish the additional particulars as and when called for. Furnishing of such additional details will, however, be no indication that there is going to be accepted. In case, any vendor fails to furnish the details called for within the stipulated time, it will be presumed that he is unable to furnish the details and not interested in his offer and his offer will be rejected.
- While evaluating the technical bids If the offered models of the tendered Aerial Ladder Platform does not suit our conditions as laid down in technical specifications, the Director of Fire and Rescue Services reserves the right:
 - (1) to relax or waive or modify at his discretion any of the condition / specification in the interest of the Department
 - (2) to reject all the Tenders in respect of this item without assigning any reasons whatsoever and to suitably modify the numbers of Aerial Ladder Platforms to be bought of tendered items of Aerial Ladder Platforms to suit our requirement – consider and suitably modify

Price bid opening

- The Vendors whose offers have been found to be suitable for the use of this department based on the above mentioned criteria for evaluation alone will be called for opening of their price bid at a later date and time fixed by the department which will be intimated to the tenderer after the technical evaluation of the tender is completed. .
- The Price bid should be furnished in the format given in the tender form in a sealed cover as indicated in the tender for each model separately. The price bid furnished by the tenderer should contain the break up details of basic price, Custom duty, Octroi, insurance for delivery, freight charges including charges applicable for delivery at Headquarters, Egmore, Chennai and such other levies. If the price bid not furnished correctly the same will be liable for rejection.
- The Price bid will be evaluated as per the criteria laid down in Tamil Nadu Transparency in Tender Rules 2000

Questionnaire to be filled by the Tenderer in respect of tender for supply of “Aerial Platform not less than 42 meters”

Note:

- *Kindly give to the point and specific answers on a paper or letter head of your Company and put your signatures and seal at the end. In case you use more than one paper or letterhead, please sign and put seal on each page*
- *Information given on unsigned papers or letterhead will not be taken into account.*
- *The vendor if he wishes, may, apart from the answers to the questionnaire enclose brochures and leaflets. However, the information on any pamphlets or brochures submitted by the vendor may be used for corroboration and cross-checking of the information supplied by him or her in answer to the questionnaire but may not be used unless this information is provided in a signed answer-sheet carrying the seal.*
- *It will be presumed that a vendor who does not answer the questions in this questionnaire is either hiding the information or is not serious about selling his product to the Department.*

Questionnaire

(Attach separate sheet or letter head to furnish the details)

- 1 What are the name, address and the e-mail address of your Company?
- 2 (a) Are you a manufacturer? If so attach a proof for the same or
(b) Are you an authorized distributed/dealer of the manufacturer? If so attach a proof for the same
3. Whether you are fulfilling the Qualification Criteria prescribed in this tender document? If so, attach your specific compliance report on the Qualification Criteria.

4. Describe the following technical aspects in respect of your offered model of Aerial Platform not less than 42 meters.		
1.	GENERAL REQUIREMENT	
(a)	Make and Model	
(b)	Standard and Approval	
(c)	Details with reference requirement of General description given in the specification	
Details to be furnished in respect of their offer with reference to the detailed specifications given in the tender document for each item separately under the following headings		
2.	Chassis	
(a)	Make	
(b)	Model	
(c)	Compliance to emission norms	
(d)	Wheel base	
(e)	Engine type	
(f)	Rated HP	
(g)	Type of clutch	
(h)	Type of gear box	
(i)	Type of front axle	
(j)	Type of rear axle	

(k)	Type steering system	
(l)	Type of braking system	
(m)	Fuel tank capacity	
(n)	Size of tyres	
(o)	Type of cabin	
(p)	Type of electrical system	
(q)	Type of PTO	
3	Main Operating Data	
(a)	Maximum working height	
(b)	Maximum height to working cage bottom	
(c)	Maximum height to the top of the ladder	
(d)	Maximum working out reach at 400 Kg cage load	
(e)	Maximum working out reach below the ground level	
(f)	Safe working load (without water discharge, minimum of)	
(g)	Safe working load with monitor (with water discharge) up to 3500 lit. per minute Rotation continuous 360 degree.	
(h)	Transport height (depending on chassis)	
(i)	Transport length (depending on chassis)	

(j)	Transport width	
(k)	Typical weight with chassis/ GVW	
4.	Main Frame	
5	Stabilizing system	
6	Body work and Equipment Lockers	
7	Booms	
8	Turn Table	
9	Working Cage	
10	Working Cage Leveling	
11	Working Cage Slewing	
12	Fold Down Rescue Platform	
13	Rescue Ladder in respect of Aerial Platform for 42 mt	
14	Hydraulic System	
15	Back-Up for the Hydraulic System	
16	Electric System	
17	Siren and Public Address System-	
18	Rotating Beacons & Flickering lights	

19	Inter Communication System-	
20	Control System for Boom and Rotation Movements	
21	Turn Table and Working Cage Control Panels	
22	Controls and Indicators in Drivers Cab	
23	Safety Devices	
24	Water Way System	
25	Water Monitor	
26	Paintings	
27	Description of the accessories offered as per specification	
28	Describe the tools kit/spare parts (make and model, technical details etc) proposed to be supplied for each Aerial ladder platform vehicles separately.	
29	Please state whether you are agreeable to bear the cost for deputing a team of officers from this Department for Inspection and Training on the vehicles proposed to be supplied to this Department before shipment	
30	Whether detailed drawing of the body has been attached with the tender.	

31	State clearly if any deviations are required from the specifications given in the tender document for each item	
32	Describe about the provision made in your tender for Inspection, Training and Commissioning	
33	Warranty period offered for each item	
34	Whether willing to continue the service of the vehicle up to a period of 20 years from the date of delivery?	

-0-

IMPORTANT INSTRUCTIONS TO TENDERERS

1. Source of funds:

The Government of Tamil Nadu have sanctioned money towards the purchase of the two Aerial ladder platforms for fire fighting and rescue operation for the use of Tamil Nadu Fire and Rescue Services Department.

2. Eligible Tenderers

2.1. This Global Tender for supply of Aerial Platform of no not less than 42 m is invited directly from reputed manufacturers or through their authorized distributors/dealers.

2.2. The orders issued under Rule no.144 (xi) of General Financial Rules (GFRs) 2017 relating to restrictions on procurement from a bidder of a Country which shares a land border with India will be applicable for this tender as per the guidelines issued by the Government of Tamil Nadu vide G.O.Ms.no.343 Finance (Salaries) Department Dated 18.09.2020.

3 Eligible Goods and Services:

3.1. All goods and ancillary services to be supplied under the contract shall have their origin.

3.2 For purpose of this clause, "Origin" means the place where the goods are mined, grown or produced or from which the ancillary services are supplied. Goods are produced when, through manufacturing processing or substantial and major assembling of components a commercially recognized product results that is substantially different in basis, characteristics or in purposes or utility from its components.

3.3. The origin of goods and services is distinct from the nationality of the Bidder.

4. **Cost of Bidding:**

4.1. The Bidder shall bear all costs associated with the preparation and submission of its bid, and the Tamil Nadu Fire and Rescue Services Department, hereinafter referred to as "the Purchaser" will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

4.2 The Bidder is expected to read all instructions, forms terms and specifications in the Bidding Documents. Failure to furnish all information required by the Bidding Documents or submission of a bid substantially responsible to the Bidding Documents in every respect will be at the Bidder's risk and may result in the rejection of its bid.

5. **Amendment of Bidding Documents:**

5.1. At any time prior to the deadline for submission of Bids, the Purchaser may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the Bidding Documents by amendments.

5.2 The amendment will be notified in writing to all prospective Bidders, which have received the Bidding Documents and will be binding on them.

5.3. In order to afford prospective Bidders, reasonable time in which to take the amendment into account in preparing their bids, the purchaser may, at its discretion, extend the deadline for the submission of bids.

6. **Language for preparation of bids**

Since it is a Global Tender, the Bid prepared by the Bidder from abroad and all correspondence and documents relating to the bid exchanged by the Bidder and the Purchaser, shall be written in English language, provided that any printed literature furnished by the Bidder may be written in another language so long as accompanied by an English translation or Tamil of its pertinent passages in which case, for purposes of interpretation of the bid, the English or Tamil translation shall govern.

7. Earnest Money Deposit

7.1. **Earnest Money Deposit amount in Indian Rupee value of Rs.11,00,000/- (Rupees Eleven lakhs only) should be paid** along with tender by way of Demand Draft in favour of the Director of Fire & Rescue Services Department, Chennai should be compulsorily appended with the tender document. Specified small savings instruments or irrevocable bank guarantee from a Nationalized Bank will also be accepted. Personal / Company cheques will not be accepted. If OEM from abroad is directly participating, **EMD may be paid through their representative in India**

7.2. Any tender submitted without EMD and partial payment of EMD will be summarily rejected.

7.3. In case of unsuccessful tenderers, their Earnest Money Deposit will be returned to them at their cost in due course soon after the final decision is taken on the tenders by the department.

7.4. The Earnest Money Deposit will not bear any interest.

8. **Mode of submission of tender offer:**

1. (a) Sealed tenders containing :

- (i) Technical bid which may be named as "Envelope-A" containing technical details, commercial terms along with a list of the enclosures such as proof in respect of manufacturer or the authorization letter from the manufacturer, Questionnaire format duly filed and all Qualification Criteria documents, Product flyer/brochures, Approval Certificate etc, latest local tax clearance certificate if any applicable to the country/origin along with EMD;

and

- (ii) Separate price bid as "Envelope-B" in a sealed cover in the format prescribe in the tender form for supply of Aerial Ladder Platform not less than 42 meter

Will be received for and on behalf of the Tamil Nadu Fire and Rescue Services Department so as to reach on or before the due date prescribed. All the tenders shall be prepared and submitted strictly in accordance with the instructions set forth herein. The Tamil Nadu Transparency in Tenders Act 1998 and the Tamil Nadu Transparency in Tender Rules 2000 are applicable for the Tender.

(Sealed Tenders means, it may be wax sealed or any other mode of seal at tenderer's risk which could not be tampered)

(b) The Earnest Money Deposit in the prescribed format or, if exemption from EMD is sought, proof of exemption from payment of EMD and undertaking in lieu of EMD should be produced along with sealed tenders.

(c) The following address must be written on the OUTER ENVELOPE containing the technical bid cover and two Price bid covers:

**Deputy Director –Administration,
O/o. the Director, Fire and Rescue Services Department,
17 Rukmani Lakshmipathy Road, Egmore
Chennai-600008, Tamil Nadu, INDIA.**

This cover shall be superscribed “Tender for supply of one Aerial Ladder Platform”. This cover must reach the addressee i.e. Deputy Director – Administration on or before the due date and time mentioned at the top sheet of this tender document.

(d) The tenderer has the option of sending the offer by Registered Post A/D or by speed post or by Courier or by air mail for overseas delivery before the date and time fixed. The tenderers who could not send their tender by post can put the tender in the Tender Box kept for this purpose at the above mentioned address before the date and time fixed.

(e) Delivery of tender in person will not be accepted on any account and the tender submitted after the last date and time will not be accepted under any circumstances.

(f) The slit of the tender box shall be 28 cm x 3 cm and therefore, the cover should be brought of suitable size to move inside the slit.

9. Price:

9.1. The price shall include the cost of Chassis in respect of Aerial Ladder Platform NOT LESS THAN 42 m

9.2. The price shall include fire fighting equipments and accessories described in the specification.

9.3 The Bidder shall indicate on the appropriate Price Schedule attached to these documents the unit prices and total Bid Prices of the goods it proposes to supply under the Contract and in case of goods of foreign origin in F.O.B. & C.I.F. cost.

9.4. Prices indicated on the price Schedule shall be entered separately in the following manner: -

For goods offered from within the Purchaser's country:

9.4.1. The price of the goods, quoted ex-factory, ex-showroom, ex-warehouse or off the –shelf, as applicable including all customs duties and sales and other taxes already paid or payable;

9.4.2. On the components and raw material used in the manufacture or assembly of goods quoted ex-factory; or

9.4.3. On the previously imported goods of foreign origin quoted ex-show rooms, ex-warehouse or off-the-shelf.

9.4.4. Any purchaser country sales and other taxes which will be payable on the goods if this contract is awarded;

9.4.5. Charges for inland transportation, insurance and other local costs incidental to delivery of the goods to their final destination;

9.5 The Bidder's separation of price components in accordance with Para. 9.1 to 9.4.5 above will be solely for the purpose of facilitating the comparison of bids by the Purchaser and will not in any way limit the Purchaser's right to contract on any of terms offered.

10. BID CURRENCIES :

10.1. Price shall be quoted in the following currencies:

(a) For goods and services which the Bidder will supply from within the Purchaser's Country, the prices shall be quoted in Indian Rupees: and

(b) For goods and services which the bidder will supply from outside the Purchaser's country, the prices shall be quoted either U.S. Dollars or Euro or in the freely convertible currency.

10.2. Further, a Bidder expecting to incur a portion of its expenditures in the performance of the Contract in more than one currency, and wishing to be paid accordingly, shall so indicate in its bid. In such a case, either (i) the bid shall be expressed in different currencies and the respective amounts in each currency together making up the total price, or (ii) the total bid price shall be expressed in one currency and payments required in other currencies expressed as a percentage of the bid price along with the exchange rate used in such calculation.

11. Conversion to Single Currency:

To facilitate evaluation and comparison, the Purchaser will convert all bid prices expressed in the amounts in various currencies in which bid price is payable; to the Indian Rupees at the selling exchange rate established by the Reserve Bank of India/State Bank of India.

12.Delivery and Documents:

12.1. No goods shall be shipped or delivered until an intimation, in writing has been applied for an obtained by the supplier from the Director of Fire and Rescue Services that the goods may be delivered.

12.2 Before dispatch from the Contractor's works all goods shall be adequately protected by painting or by other suitable means for the whole period of transit and storage in a tropical humid climate prior to use, against corrosion and incidental damage including the effects of vermin, strong sunlight, rain, high temperature and humid or salty atmosphere or sea spray. The supplier shall be held responsible for the goods being so protected as to ensure spray. The supplier shall be held responsible for the goods being so protected as to ensure that as far as is practicable it reaches its ultimate destination intact and undamaged.

12.3. The supplier shall be deemed to have included in the bid prices for all material and packing crates or cases appropriate to the particular item of goods necessary for the safe package, conveyance and delivery of the goods.

12.4. The supplier shall arrange to ensure that each box or unit of shipment is legibly and properly marked for correct identification to supply the item to the purchaser. Failure to comply with this requirement shall render the Contractor liable for any additional expenses involved.

12.5. The Contractor shall give complete shipping information concerning the weight, size and content of each package including any other information the purchaser may require

The following documents shall be airmailed to Purchaser within 7 days from the date of shipment:

- (i) Three copies of the Supplier's invoice showing Goods description, quantity, unit price, total amount:
- (ii) Original and duplicate copies of the negotiable, clean on-board bill of lading marked freight prepaid and two copies of no-negotiable bill of lading:
 - a. Three copies of packing list identifying contents of each package:
 - b. Insurance Certificate in triplicate
 - c. Manufacturer's/Supplier's guarantee certificate in duplicate.
 - d. Three copies of Inspection certificate, issued by the nominated inspection agency and the Supplier's factory inspection report : and
 - e. Certificate of origin in duplicate

13. **Insurance:**

13.1. The Contractor shall provide for insurance coverage for an amount equal to the CIF or FOR value as appropriate plus an additional 10 per cent thereof and the same shall extend from the date of dispatch of the goods until its arrival at the final designated destination: Department head quarters - Chennai. The insurance policy should provide coverage against all risks, including those of wars riot, strikes and malicious damage.

13.2. If the goods or any portion thereof is damaged or lost during transit, the purchaser shall give notice to the Contractor setting forth particulars of such goods damaged or lost during transit. The replacement of such goods shall be effected by the Contractor within a reasonable time to avoid unnecessary delay in supply of goods. The replacement price of items shall be recovered by the Contractor from the insurance coverage provided for this purpose. The import license/port clearance, permit, etc. in respect of a foreign supply contract, required for the purpose shall be made available for such goods. In the case of contracts awarded to domestic contractors, the replacement of goods damaged during transit shall be made free of cost by the Contractor.

14. **Transportation:**

The goods are to be delivered at site in India at Head Quarters of Tamil Nadu Fire and Rescue Services Department at no.17, Rukamani Lakshmi pathi Salai, Egmore, Chennai-8 from Chennai Port. Prices shall be inclusive of cost of the goods free on board at the time of shipment plus the cost of marine freight, land freight and insurance of the goods from warehouse to warehouse.

15. **Incidental Services:**

As specified in the specifications and in the tender document, the Supplier may be required to provide any or all of the following services;

- (a) The manufacturer/ supplier should furnish an undertaking at the time of placing orders to give warranty for the complete unit including chassis for a period of 5 years from the date of acceptance of the vehicle. Further, all the spares should be supplied at free of cost during the above warranty period. Apart from giving 5 years warranty with replacement of parts during that period, service should be continued up to a period of 20 years from the date of delivery.
- (b) Performance & supervisions of on-site assembly and start-up of the supplied goods
- (c) Furnishing of tools required for assembly and maintenance of the supplied goods.
- (d) Furnishing of a detailed operations & maintenance manual for each appropriate unit of the supplied goods.
- (e) Performance, supervision, maintenance and repair of the supplied Goods, for a period of time agreed by the parties, provided that his service shall not relieve the supplier of any warranty obligations under this contract.

- (f) Conduct, training of the Purchaser's personnel, at the Supplier's plant and on-site, in assembly, start-up, operations, maintenance and repair of the supplied goods as mentioned in the

16. Payment:

- 16.1. The method and conditions of payment to be made to the Supplier under Contract are specified in the Special Conditions of Contract.
- 16.2. The Supplier's request(s) for payment shall be made to the Purchaser in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and services performed, and by shipping documents, and upon fulfillment of other obligations stipulated in the contract.
- 16.3. Payment will be made in the currency or currencies in which the Contract price has been stated in the Supplier's bid as well as in other currencies in which the Supplier had indicated in its bid that it intends to incur expenditures in the performance of the Contract and wishes to be paid.
- 16.4. The payment will be made based on standard terms of international trade and the payment may be effected through irrevocable letters of credit drawn through a Nationalized Bank or as decided by the Director of Fire and Rescue Services in case of a Foreign bidder.

17. Taxes and Duties:

- 17.1. A foreign Supplier shall be entirely responsible for all taxes, stamp duties, license fees and other such levies imposed outside the Purchaser's country.
- 17.2. A local supplier shall be entirely responsible for all taxes, duties, license fees, etc, incurred until delivery of the contracted goods to the Purchaser.

18. Validity of the offer:

- 18.1. The rate shall be valid for **180 days** from the date of opening of the tenders.
- 18.2. Further, the tenderer shall agree to extend the validity of the tender without altering the substance and prices of their Bid for further periods, if any, required by the purchaser.

19. Reservation of Rights:

- While evaluating the technical bids If the offered models of the tendered Aerial Ladder Platform does not suit our conditions as laid down in technical specifications, the Director of Fire and Rescue Services reserves the right:

- (1) to relax or waive or modify at his discretion any of the condition / specification in the interest of the Department
- (2) to reject all the Tenders in respect of this item without assigning any reasons whatsoever and to suitably modify the numbers of Aerial Ladder Platforms to be bought of tendered items of Aerial Ladder Platforms to suit our requirement – consider and suitably modify

FORM FOR TENDER AND CONDITION OF CONTRACT

Tender for the Supply of Articles.

To

The Governor of Tamil Nadu,
Represented by
The Director,
Office of the Director of Fire & Rescue Services,
Egmore, Chennai 600 008.

I, _____ hereby contract and agree on the acceptance of this Tender to supply to the Government of Tamil Nadu (hereinafter referred to as “the Government”) in accordance with the conditions of contract stated below, the articles specified in the schedule below of the quality of sort and at the rate of price therein specified and I hereby forward a sum of Indian Rupee Value of Rs.11,00,000/- (Rupees Eleven lakhs only) as Earnest Money Deposit to be returned to me if this tender is not accepted.

If this tender should be accepted, I hereby undertake to execute within the date specified the department, a contract in accordance with the terms and conditions of contract aforesaid together with such further usual conditions as before the execution of the contract may be agreed upon between the successful Tender and the authority concerned in the Department.

Signature of the Tenderer
With Date and Seal.

**CONDITION OF CONTRACT TO BE INCORPORATED IN THE AGREEMENT
WITH SUCCESSFUL TENDERER**

1. This contract is to last for one year certain from its date. But in the event of any breach of agreement at any time on the part of the contractor, the contract shall be terminated by the Director of Fire and Rescue Services, Chennai on behalf of the Governor of Tamil Nadu upon giving fifteen days' notice to the contractor.
2. The articles to be supplied under this contract are to be of the quality or sort above mentioned and in every respect equal and answerable to the patterns or submitted during evaluation and such as the Director or any other duly authorized by him shall approve.
3. The articles are to be delivered free of charge at the contractor's risk in such quantities or number at such times and in such manner as the Director of Fire and Rescue Services, Chennai or anyone duly authorized by him shall from time to time order.
4. Rejected articles shall be removed by and at the expense of the contractor within seven days after notice shall have been given him of the rejection. If not so removed, the Director of Fire & Rescue Services, Chennai may cause the articles to be removed and charge the contractor with all expenses incurred in such removal.
5. In case of failure by the contractor to deliver articles demanded from him within the period limited for delivery or in case of articles delivered by him not being the stipulated quality, sort, weight or measure or in case of articles being delivered without a correct invoice in triplicate, the Director of Fire & Rescue Services, Chennai or anyone duly authorized by him shall have power to reject any such articles and to purchase others instead of any articles so rejected or not delivered unless the contractor shall himself forthwith supply orders that shall be sufficient and satisfactory and any excess cost so incurred by the Government over the contract price together with all charges and expenses attending the purchase shall be recoverable by the Government from the contractor.
6. In case of failure to complete the supplies within the date of delivery specified in terms of the contract placed on the contractor the difference between his offer and the next selected offer shall be recoverable by the Government from the contractor.
7. The contract or any part, share or interest in it is not to be transferred or assigned by the contractor directly or indirectly to any person or persons whomsoever without the written consent of the Director of Fire & Rescue Services, Chennai.
8. The contractor shall make his own arrangements for obtaining import licenses in respect of articles tendered for supply under this contract from the authorities concerned and in no case will his applications in this regard be forwarded.
9. With every delivery of articles under the contract, the contractor should send invoices or bills in triplicate, which after verification will be passed for payment.

10. The Government hereby agree that during the term fixed by this contract, and except as herein provided Government shall not purchase from any persons other than the contractor or from any Company or Corporation all or any quantities of the goods or materials agreed to be supplied by the contractor.
11. Nothing herein contained shall prevent the Director of Fire and Rescue Services, Chennai from at any time requiring the contractor to supply and delivery any larger number of any one or more of the said articles than the number of the same mentioned in the said schedule and in any such case and so often as the same shall happen, the contractor shall and will supply and deliver as aforesaid such additional number of all or any of the said articles subject to the several provisions herein contained as shall be required by him and nothing herein contained shall render it obligatory on the Director of Fire and Rescue Services, Chennai to take from the contractor the whole or any of the said articles and the contractor shall supply and deliver under this contract only such of the said articles as shall from time to time be required by or on behalf of the Director of Fire & Rescue Services, Chennai.
12. Any notice to the contractor shall deemed to be sufficiently served if given or left in writing at his usual or last known place of abode or business.
13. The contractor shall furnish money security for the due fulfillment of the contract equivalent to **5 percent** of the total value of the supplies contracted for. This security may be in the form of Cash or Demand draft or Bankers' cheque or specified small savings instruments or where the procuring entity deems fit, irrevocable bank guarantee in a prescribed form.
14. Upon the complete fulfillment of this contract by the contractor to the satisfaction of the Government or any officer duly authorized by them, the security furnished by the contractor shall be returned to him, less the amount if any due by the contractor to the Government.

Noted the contents:

(Contractor's Signature)

GENERAL TERMS AND CONDITIONS FOR THE TENDER FOR THE SUPPLY OF THE TENDERED ITEMS TO FIRE AND RESCUE SERVICES DEPARTMENT.

Tender Form

1. The tender schedule is not transferable and only the tenderer to whom it is officially issued by the Fire and Rescue Services Department should use it.
2. The Vendors who have downloaded the Tender documents from the departmental website must intimate the same through the following e-mail address: adddirectoroperation101@gmail.com, tnfrscamp@gmail.com ddhq.tnfrs@gov.in, so that any changes can be intimated. Otherwise, it will be considered that the vendor is doing it at his own risk.
3. The tenderer has the option of sending the offer by Registered post or Speed Post or by courier or air mail before the date and time fixed.
4. The tenderers who could not send their tender by post can put the tender in the Tender Box kept for this purpose in person before the date and time fixed. The slit of the tender box shall be 28 cm x 3 cm and therefore, the cover should be brought of suitable size to move inside the slit. This Department will not be responsible for any postal or other transit delay in receipt of the tender offer.
5. Telex/Fax or Telegraphic offers will not be entertained and will be rejected.
6. Any offer received by the purchaser after the due date and time specified for submission of the tender offer will be summarily rejected and returned unopened to the tenderer.
7. Only the original tender document supplied by this Office or the tender documents which have downloaded from the department's website should be used and it should be resubmitted in full shape without detaching any page from it. Xerox copies of copies typed on paper will not be accepted and the offer will be rejected.
8. Incomplete tender documents will be rejected.
9. Each page of the tender document, including technical specifications, should be duly Signed.
10. When the tender is made by an individual, it shall be signed with his name and address and in case of partnership firm, it shall be signed by one of the Partners empowered to submit tenders on behalf of the partnership as contemplated. If it is made by a Company or Corporation it shall be signed by an officer duly authorized for the purpose. In all cases, the status of the tenderer, whether a Proprietorship, Partnership, Company or Corporation should be furnished in the covering letter with full address of the tenderer's name, names of Partners, Directors etc., The tenderer should also furnish such particulars / evidence as may be required by the competent authority in this Department before execution of the agreement.

11. If any covering letter accompanying the tender document is in the tenderers letter head form, all terms and conditions printed therein should be scored out and duly authenticated. It should be distinctly understood that such printed terms and conditions in the letter head will not have any binding on this Department and those terms and conditions quoted in the tender document only will be considered.
12. No erasures, interpolations or alterations will be allowed except when initialed by the tenderer.
13. Only manufacturers / their authorized distributors/ dealers can participate in the tender. The authorized distributor/dealer should produce the specific authorization from the original equipment manufacturer.
14. The vendor if he wishes, may, apart from the answers to the questionnaire enclose brochures and leaflets.

Earnest Money Deposit

15. Earnest Money Deposit amount in Indian Rupee value as prescribed in the top sheet of the tender document should be paid through their Indian Representative along with tender by way of Demand Draft in favour of the Director of Fire & Rescue Services Department, Chennai should be compulsorily appended with the tender document. Specified small savings instruments or irrevocable bank guarantee will also be accepted. Personal / Company cheques will not be accepted.
16. Any tender submitted without EMD and partial payment of EMD will be summarily rejected.
17. In case of unsuccessful tenderers, their Earnest Money Deposit will be returned to them in due course soon after the final decision is taken on the tenders by the department.
18. The Earnest Money Deposit will not bear any interest.

Prices: Details to be furnished and conditions

19. Rates should be shown distinctly in words as well as figures.
20. Prices quoted should include the cost of all accessories essential to make the equipment / article fully functional.
21. While giving the Price, the details like basic rate (i.e. the rate without taxes and duties) along with separate details of GST, Custom duty, Excise duty, freight charges, Octroi, insurance for delivery and such other levies that may be applicable must be quoted only in the price bid format attached with tender document. The total of all these must be separately indicated as NET RATE. Rates should be shown distinctly in words as well as figures. In case of a discrepancy between the rate in words and figures, the lower of the two shall be taken. The rates given in any forms other than the price bid format attached with the tender document will not be considered and will be rejected as non-responsive.

22. The rate shall be valid for **180 days** from the date of opening of the tenders.
23. Further, the tenderer shall agree to extend the validity of the tender without altering the substance and prices of their Bid for further periods, if any, required by the purchaser.
24. No charges other than those mentioned in the supply order will be paid under any circumstances.

Verification/Demonstration of equipment and Evaluation

25. The evaluation of tenders will be made as per “ Stage III- Criteria for Evaluation” given in the tender document.
26. The tenderer should produce the equipment / materials which he has quoted for providing in the Aerial Ladder Platform for demonstration before the evaluation committee as and when called for. The tender will be rejected if the article is not produced for demonstration the Earnest Money Deposit is liable to be forfeited in the event of such failure.
27. Each sample produced for demonstration must have a label attached to it, showing clearly the name of the tenderer and the country of manufacture.

Warranty

28. The warranty period shall be as may be stipulated for the article concerned from the date of supply.
29. The warranty shall cover defects in materials or bad workmanship under normal use and service for the period of warranty notwithstanding the fact that the material were inspected and approved by inspecting officers.

Acceptance of tender

30. The lowest tender will not necessarily be accepted.
31. Notification of acceptance of tender by the Department shall be deemed to result in and constitute a valid and considered contract binding on the tenderer. If the tenderer withdraws his / her tender after acceptance by the Department, the EMD shall be forfeited.

Release of Purchase Order.

32. The contractor should examine carefully the purchase order immediately on receipt and bring to the notice of the indenting officer within five days of receipt of purchase order and discrepancy with regard to the quantity ordered, specifications, packing, etc., for prompt rectification. The letter should be sent by registered post Acknowledgement due. Meanwhile, supply of the materials, which are cleared in all respects for despatch and acceptance by the consignees shall be arranged by the date mutually, agreed upon and should not be held up for any reason whatsoever.

Agreement

33. The successful tenderer should execute an agreement in non-judicial stamp paper as specified while placing provisional order of acceptance by the Department for the due fulfillment of the contract.
34. Successful tenderers will be required to execute an agreement in the Form, which can be seen at the Office of the Director of Fire & Rescue Services, Chennai. The Stamp duty on the agreement shall be borne by the successful tenderer. On their executing the agreement, the Earnest Money will be returned to them. The charges for refunding the money by way of Demand Draft will be deducted from the amount refundable
35. If the tenderer is from abroad, payment terms for imports shall be based on standard terms of international trade and the payment will be effected through irrecoverable letters of credit drawn on banks.

Security Deposit

36. Security Deposit equivalent to 5 percent of the total value of the supplies contracted for will have to be furnished by the successful tenderer through their representative in India. This security may be paid in the form of Cash or Demand draft or Bankers' cheque or specified small savings instruments or where the procuring entity deems fit, irrevocable bank guarantee in a prescribed form. This is liable to be forfeited either in full or in part for any breach of conditions of contract or default on the part of the contractor.
37. The Earnest Money Deposit will be forfeited if the successful tenderer fails to remit the Security Deposit and execute the agreement within the period specified. The security deposit will be refunded only upon satisfactory fulfillment of the contract after completion of supply of the entire materials ordered and expiry of the guarantee period duly adjusting the amount due to the Department if any. However, if the tenderer has been insisted for Performance Guarantee for certain items as per the discretion of the DFRS, the Security Deposit will be refunded to the tenderer.
38. Security Deposit paid by the successful tenderer will not bear any interest.
39. On successful completion of supply to the satisfaction of the Fire & Rescue Services Department and on receipt of the invoice bill in triplicate, 100% payment will be settled immediately.
40. The Director of Fire & Rescue Services Department, Chennai, acting on behalf of the Governor of Tamil Nadu or any other authority empowered in this matter shall have the right of rejecting any tender without assigning any reason for doing so.
41. The proposed quantity to be procured in respect of each item is mentioned in the tender document in relevant page. However, the Director of Fire & Rescue Services Department, Chennai or any other authority empowered shall have the right or requiring a successful tenderer to supply a greater number or reduce the number than the number or quantity mentioned in the schedule

42. Tenders will be liable to rejection for the following reasons apart from any other reasons mentioned anywhere else in this document.
- a. If the country of manufacture and of the origin of material used in manufacture of articles is not noted in the tender.
 - b. If the tender is not in the form supplied by this Office or downloaded from the departmental website.
 - c. If the offer is not as per the specifications mentioned in this tender document.
 - d. If samples of / models of articles quoted are not submitted as and when required for technical evaluation test.
 - e. If the tender is not accompanied by the receipt of Earnest Money.
 - f. If the tenderer enters any restriction on other conditions in his tender.
 - g. If the tenderer enters one rate in figures and another in words and declines to abide by the lower of the two.
 - h. If the tenderer alters the period of supply or expunges any clause in the form of tender, and
 - i. If the tender is presented without signature.

Reservation of rights

43. The authority competent reserves the rights:-

- (1) The Tender Inviting Authority may extend the last date and time for receiving tenders after giving adequate notice to all intending tenderers in cases where:-
- (a) the publication of the tender notice has been delayed
 - (b) the communication of changes, in the tender documents to the prospective tenderers took time
 - (c) any of the tenderers requested clarifications communication of which took time to all the tenderers and
 - (d) any other reasonable grounds exist, for such extension which shall be recorded in writing by the Tender Inviting Authority.

(2) If at any stage, a technical flaw is noticed in following the procedures, the procuring entity will take appropriate decisions to ensure that the overall objective of procurement is not defeated.

(3) After negotiation with the tenderer and before passing the order accepting a tender, if the Tender Accepting Authority decides that the price quoted by such tenderer is higher by the percentage as may be prescribed over the schedule of rates or prevailing market rates, the tender shall be rejected.

(4) The Tender Accepting Authority before passing the order accepting a tender, may also reject all the tenders for the reasons such as changes in the scope of procurement, lack of anticipated financial resources, court orders, accidents or calamities and other unforeseen circumstances.

(5) The purchaser reserves the right to:-

- (i) vary the quantity finally ordered to the extent of 25% indicated in the Tender document.
- (ii) To split the tender quantity and place orders on one or more than one firm to meet the delivery requirements.
- (iii) Recover losses, if any, sustained by this Department, from the supplier who pleads his inability to supply and backs out of his obligation after award of contract. The EMD and the Security Deposit paid shall be forfeited.
- (iv) To cancel the orders for not keeping up the delivery schedule.
- (v) To award contract to one or more tenderers in respect of each item covered by the tender.
- (vi) To reject any or all the tenders without assigning any reasons therefor.
- (vii) To relax or waive or modify at his discretion any of the condition / specification in the interest of the Department.
- (viii) The decision of the tender accepting authority in this regard shall be final, conclusive and binding on the supplier.

Delivery

44. The rates accepted will be for delivery at such destinations as indicated in the tender document or in subsequent purchase order.

45. The delivery period should be mentioned by the Tenderers in their offers. However, the maximum time limit for supply of the goods will be fixed by the Director while executing the agreement with the successful tenderer. The supplier shall reckon the delivery period from the date of receipt of the purchase order. The date of delivery as per postal acknowledgement due in the case of purchase order sent by post or the date of delivery if delivered in person or through special messenger shall be deemed to be the date of receipt of the purchase ordered
46. Delivery period is inclusive of pre-delivery inspection. The date of delivery of materials in good condition to the consignees shall be the date of supply. The rate of progress indicated in the purchase order should be maintained. The materials should be delivered to the consignees as per the purchase order placed.
47. Acceptance of materials by the consignee:- If on examination of the sample, any portion of the supplied materials / equipment is found to be damaged or substandard or not fully in accordance with the relevant specifications, the whole supply shall be rejected irrespective of the fact that this material was cleared under pre-delivery inspection. The materials / equipment should strictly conform to the specifications given in the tender conditions. In case of doubt whether the materials conform to the specifications or not, the decision of the consignee shall be final. The consignee has right to reject the equipment found not conforming to the specifications and they should be replaced within seven days at the cost of the supplier.

Penalty: -

48. Where their supply is not completed within the delivery schedule, without prejudice to the right of the Department to cancel undelivered portion of the purchase order, extension of time may, if so required by the contractor may be granted at the discretion of this Department. Such extension of time will entail recovery of penalty from the contractor at one percent per week, on the value of the undelivered quantities subject to a maximum of five percent of the value of the undelivered quantity. However, the Director may waive the penalty on valid reasons as per his discretion.
49. The officer authorised by this Department will have the right to cancel the purchase order and to recover from the contractor liquidated damages at **2%** of the value of the undelivered quantity or the extra financial commitment to this Department on the purchase of the balance quantity, whichever is higher besides forfeiting the security deposit.

Performance guarantee

50. 10 percent of the payment amount will be retained if necessary as per the discretion of the DFRS and as per agreement during the warranty period as performance guarantee and will be paid after successful completion of the warranty depends upon the items. Alternatively, if the tenderer gives an irrecoverable Bank Guarantee in lieu of the balance 10 percent through their representative in India the department reserves the right to accept the same.

Certificates and Details to be furnished

51. Latest tax verification certificate applicable to the Country/origin of the Supplier should also be appended with the tender document.
52. The tenderer should furnish details of orders executed for Government Departments / Departments / autonomous boards etc., and details of orders on hand or pending execution. Certificates in proof of these should also be furnished.

CERTIFICATE BY THE TENDERER

I / we have gone through the terms and conditions and will abide by them as laid down above and in other sections of this Tender document.

I / We hereby declare that the particulars furnished by us in this offer are true to the best of my / our knowledge and we understand accept that, if at any stage the information furnished are found to be incorrect or false, we are liable for disqualification from this tender and also liable for any penal action that may arise due to the above.

**Signature of the Tenderer
with Date and Seal.**

<p style="text-align: center;">FORMAT</p> <p style="text-align: center;">PRICE BID FOR SUPPLY OF “One Aerial Ladder Platform of not less than 42 m”</p> <p style="text-align: center;">(Note: To be furnished in “ ENVELOPE –B”)</p> <p>(The Price bid for supply of Two Aerial Ladder Platforms not less than 54 meters should include the cost for supply of tools and accessories mentioned in the specification.</p> <p style="text-align: center;">For different makes/models should be furnished in a separate sealed cover)</p>								
S.No	i) Description of article ii) Make and Model iii) capacity iv) Country or origin of the article or components	Basic Price per unit Outside the Purchaser’s country, the prices shall be quoted either U.S. Dollars or in the freely convertible currency.	Custom duty, Other taxes, levies, charges, clearance charges from Port and transportation charges etc. per unit (specify the type of tax/charge and the amount for each such item)	GST or any other similar type of tax applicable per unit	Total including Taxes, levies, charges including Customs duty, clearance charges from Port and transportation charges etc. per unit	Qty as per tender	Grand total for supply of one no Aerial ladder platforms of not less than 42 m.	Other details (FOR terms, Payment terms, Validity, Delivery Schedule)

Note: Additional sheet may be attached if necessary for furnishing the rates for different models.

Signature of the Tenderer with seal