



**WEST CENTRAL RAILWAY**

**Tender Document  
For**

**Modification/technical upgradation of 02 numbers HOT-CSM  
(i.e. CSM-959 & CSM-970) of WCR to HOT-SCSM through OEM**

**OFFICE OF THE  
DEPUTY CHIEF ENGINEER (TRACK MACHINE)  
BHOPAL**

## **Index**

The tender document comprises of following parts and contains pages as under: -

<b>Sr. No.</b>	<b>Description</b>	<b>Page no.</b>
	<b>TENDER DOCUMENT</b>	
1	Index	2
2	Tender Notice	3
3	Section-1 Schedule of Quantities and Rates	4-17
4	Section-2 Terms and Conditions of Contracts	18-20
5	Section-3 Special Terms and Conditions	21-25
6	Section-4 Instructions to Bidder (ITB)	26-28
7	Section-5 Annexures	29-37

**Note:** All the above parts taken together shall constitute the complete tender documents hereinafter referred to as “Tender Document” and must be read together and acted upon accordingly. No part of the tender document can be relied upon or acted upon in isolation.

## **TENDER NOTICE**

Dy. Chief Engineer (Track Machine), West Central Railway, Bhopal, for and on behalf of the President of India, invites Single Tender under single packet system through e-Tendering from the agencies fulfilling the eligibility criteria for following work-

**Name of the work:** Modification/technical upgradation of 02 numbers HOT-CSM (i.e. CSM-959 & CSM-970) of WCR to HOT-SCSM through OEM.

1. **Type of tender** : Single Tender (e-Tender)
2. **Tender Notice No.** : WCRBPLTM26W04
3. **Cost of tender documents** : Rs. Nil
4. **Bid Security/EMD** : Rs. 64,62,100/-.
5. **Security Deposit** : As per GCC April-2022.
6. **Performance Guarantee** : As per GCC April-2022.
7. **Estimated cost of work (inclusive of all taxes)** : Rs. 32,31,05,122.00/-
8. **Completion period** : 12 months from the date of issue of letter of acceptance.
9. **e-Tender Closing Date & Time** : As per IREPS website.
10. **e-Tender Opening Date & Time** : As per IREPS website.
11. **Validity of offer from date of opening:** 60 days from the date opening of tender.
12. **Technical Eligibility Criteria** : Not applicable being single tender with OEM.
13. **Financial Eligibility Criteria** : Not applicable being single tender with OEM.
14. **Similar Nature of Work** : Not applicable being single tender with OEM.
15. **PVC** : Not applicable.
16. **Measurement Book (M.B.) (by Contractor or Railway):** By Contractor
17. **Expenditure: Revenue / Capital** : Capital (RSP)
18. **Bidding System: Single Packet/ Double Packet** : Single Packet
19. **Composite Work: Yes/ No** : No
20. **Consignee** : SSE/ZTMD/BPL

## **SECTION - 1**

# **SCHEDULE OF QUANTITIES AND RATES**

## SCHEDULE OF QUANTITIES AND RATES

**Name of Work:** Modification/technical upgradation of 02 numbers HOT-CSM (i.e. CSM-959 & CSM-970) of WCR to HOT-SCSM through OEM over West Central Railway including following Schedule activities.

S No.	Description	Qty	Unit	Unit Cost	GST @ 18%	Total Amount per unit	Total Amount (All inclusive)
1	<p>Technical up-gradation of existing high performance tamping machine 09-32 CSM-959 &amp; 09-32 CSM - 970 to latest available HIGH OUTPUT SCSM i.e. Tamping and stabilizing machine (Model 09-3X Dynamic &amp; Stabilizing machine) working over West Central Railway comprising following activities.</p> <p><b>a)</b> Overhauling of complete 09-32 CSM-959 &amp; 09-32 CSM -970 machine including provision of new tamping banks.</p> <p><b>b)</b> Satellite Frame:- Dismantling, inspection &amp; reconditioning.</p> <p><b>c)</b> Replacement / upgradation of major systems including Control System with latest smart ALC, CWS, CMS and DRP system. Removal of old ALC panel &amp; fixing of smart ALC screen.</p> <p><b>d)</b> Replacement of existing engines with single advanced new emission controlled high power diesel engine along with fitment of compatible radiators, exhaust manifolds (with aluminium cladding) etc.</p>	02	Job	Rs. 13,69,08,950/-	Rs. 2,46,43,611/-	Rs. 16,15,52,561/-	Rs. 32,31,05,122/-

<b>S No.</b>	<b>Description</b>	<b>Qty</b>	<b>Unit</b>	<b>Unit Cost</b>	<b>GST @ 18%</b>	<b>Total Amount per unit</b>	<b>Total Amount (All inclusive)</b>
	<b>e)</b> Introduction of additional hydraulic components and replacement of major hydraulic components (such as proportional valves, direction control valves, unloader valves, safety valves, servo valves, hydraulic pumps, motors etc.) including upgradation of hydraulic cooling system and complete hose system as per modified requirements.						
	<b>f)</b> Complete re-wiring of the machine & converting panels as per upgraded requirement.						
	<b>g)</b> Replacement of pump gearbox including new pumps.						
	<b>h)</b> Replacement of lighting system, horn, wiper, hooter etc. to the latest versions.						
	<b>i)</b> Adaption of existing chassis structure to accommodate the new engine and stabilizer unit including capacity enhancement of Diesel tank, hydraulic tank etc.						
	<b>j)</b> Manufacturing of complete stabilizer trailer including new Cabin, Driver panel, Bogie, Stabilizer units, second Measuring system.						
	<b>k)</b> Bogies (including axle & wheel) along with axle gear boxes shall confirm to suit 730 mm wheel diameter.						
	<b>l)</b> Overhauling of bogie of satellite unit.						

S No.	Description	Qty	Unit	Unit Cost	GST @ 18%	Total Amount per unit	Total Amount (All inclusive)
	<b>m)</b> Updating pneumatic system compatible with proposed up-gradation of machine. <b>n)</b> Upgradation of brakes in line with fitment of 09- 3X-DTE. <b>o)</b> Upgradation of Hooks, Buffers and Suspension system. <b>p)</b> Marking and colour of machine. <b>q)</b> Complete overhauling of ZF gear box and satellite frame.						
<b>Total Value (Rs.)</b>							<b>Rs. 32,31,05,122/-</b>
<b>Offer Rates (In % Above / Below / At par)</b>							
<b>Total Offered Value (Rs.)</b>							

**Total amount of work is Rs. 32,31,05,122/- (inclusive of all taxes).**

Clause No.	Technical Specification
<b>1</b>	<b>DIMENSIONAL AND OPERATING REQUIREMENTS</b>
1.1	The upgraded machine shall be diesel powered vehicle which shall be of robust, design similar to DTE machines (CSM+DTE combined) being supplied to Indian Railways by OEM M/s. Plasser India. It should be suitable for working on plain track, transition and curved track (up to 10°) on the broad Gauge (1676 mm) of Indian Railways. The design and dimensions of the machine and components shall be to metric standards and shall comply with provision of Indian Railways Schedule of Dimension-1676 mm gauge (BG), revised, 2004 Quality assurance during upgradation shall be as per ISO9001. The welding standard followed for manufacturing of machine shall conform to ISO 3834 EN: ISO 15085. Or any other equivalent standard for welding railway vehicle and components. The manufacturer shall specify the standard followed and certify that it meet the welding standard mentioned above
1.2	The profile of the upgraded machine longitudinally and in cross section shall be within the Indian Railways schedule of Dimensions 1676 mm Gauge (BG), revised 2004 with the latest corrigendum and up to date correction slips issued during transfer as self-propelled vehicle or towed in train formation as last vehicle. Wherever required, the tenderer shall submit the sketches of purposed upgraded machine in plan and shall give calculations for moving dimensions on 10° curves to show the extent of lateral shift at the ends, center and any other relevant cross sections. It shall be ensured that the machine does not cause infringement while moving on a 10° curve.
1.3	In the past Indian Railways has condoned certain infringements to the Indian Railways Schedule of Dimensions – 1676 mm gauge (BG), revised, 2004 of such dimensions as rigid wheel base, length of stocks, distance apart of bogie Centre's and maximum height of floor above rail level in certain track machines after due consideration of their design features vis-à-vis safety and operation requirements of Indian Railways. However, condonation of an infringement in another track machine in the past does not by itself entitle the manufacturer to assume acceptance of the same in other track machines by Indian Railways. Where an infringement to Indian Railways Standard BG schedule of Dimensions (metric)-2004 is considered necessary by the manufacturer as intrinsic to the design of the machine for meeting the work performance requirements laid down in this specification while meeting the safety and operational requirements of Indian Railways, the condonation of the same may be permitted by Indian Railways. However, only those infringements which are acceptable shall be permitted.
1.4	Adequate clearance shall be allowed so that no component infringes the minimum clearance of 102 mm from rail level while travelling up to condemnation limit of wheel.
1.5	Wherever applicable, axle load of the machine shall be lesser than 20.32 t with minimum axle spacing of 1.8 m. Load per meter shall not exceed 7.67 t. Axle loads up to 22.82 t and lower axle spacing may be permitted, provided the load combinations do not cause excessive stresses in the track and bridges of Indian Railways. Stresses in the track and bridges shall be calculated by IR/RDSO, based on design data submitted by the firm and decision of IR/RDSO shall be final in this regard.
1.6	Wheel dia for stabilizer unit shall be compatible with wheel dia of exiting machine Permitted worn out wheel diameter shall be specified by the manufacturer. The diameter of wheel for assessment of permitted axle load will be the worn-out wheel diameter. The new wheel profile (of the stabilizer) in the machine shall be as per Indian Railway standard drawing.
1.7	Wheels alongwith stabilizer unit shall be conforming to Indian Railway Standard R-19/93 or European Standard EN13262 or any other equivalent standard (for product requirement) and design shall duly conform to European Standard EN 13979 or other equivalent standard. The supplier shall submit detailed design calculation along with material parameters at the time of supply of the machine.
1.8	The non-powered axles shall be conforming to Indian Railways Standard R-16/95 or European Standard EN 13261(EA1N) or any other equivalent standard. The supplier shall submit detailed design calculation, if new nonpowered axles provided along with material parameters at the time of supply of the machine.
1.9	The powered axles shall be conforming to Indian Railways Standard R-43/92 or European Standard EN 13261 (EA4T) or any other equivalent standard (for product requirement). The design shall conform to EN: 13104 or any other equivalent standard. The supplier shall submit detailed design calculation, if new powered axles provided along with material parameters at the time of supply of the machine
1.10	Upgraded machine shall be capable of negotiating curves up to 10°curvature (175 m radius), super elevation up to 185 mm and gradients up to 3% in travel mode. The supplier shall specify the minimum attainable speed under the above gradient 'conditions; which in any case shall not be less than 40 kmph. The machine shall be able to work on single/multiple lines as well as between platforms without infringing the traffic movement on the adjoining track.
1.11	It shall be capable of continuous operation during the varying atmospheric and climatic conditions occurring throughout the year in India the range of climatic conditions is as follows: Ambient temperature : -5°to 55° C Altitude : Sea level to 1750m above mean sea level



	<p>Relative Humidity : Up to 100%</p> <p>Maximum rail temperature : 70° C</p> <p>All the system components on the machine shall be covered by roof or other suitable sturdy covering so that the system &amp; components vulnerable to moisture ingress are not adversely affected during rains and the machine is able to work continuously even during rains</p>
1.12	<p>During transfer from one station to another, it shall be capable of travelling on its own at a speed of 80 kmph and at a speed of 100 kmph when hauled in a train formation as last vehicle. Since the machine is likely to cover long distances on its own power, the travel drive system shall be robust to sustain these requirements during the life of the machine. It shall be possible to drive the machine in both directions at the same speed. Driving cabin shall be at both end of the machine for this purpose. The machine shall be capable of hauling an 8-wheeler camping coach at a maximum speed of not less than 50 kmph.</p>
1.13	<p>It shall be capable of working without requiring power block in electrified sections. 25 KV or 2x25 KV AC power supply is used for traction through an overhead wire at 5500 mm above rail level.</p> <p>The height of overhead wire is restricted to 4800 mm on bridges and in tunnels.</p>
1.14	<p>The machine or its any part shall not infringe the adjoining track as per “Indian Railways Schedule of Dimensions 1676 mm gauge (BG), Revised 2004 with the latest corrigendum and up to date correction slips issued”, while opening and closing the work. During working, also it shall not infringe the adjoining track and it shall be possible to permit trains at full speed on that track.</p> <p>Minimum spacing of track is 4265 mm centre to centre.</p>
<b>2</b>	<b>WORKING MECHANISM</b>
2.1	<p>The upgraded machine shall consist of a tamping unit and stabilization unit. The stabilizing unit will be in the form of trailer linked with the tamping portion of machine by suitable coupling. The stabilizing unit shall be operated by same operator who is operating the tamping unit. The machine shall be capable of tamping up to two sleepers at a time along with lining/lifting/levelling. No separate operator for stabilizing unit shall be required. Stabilizing unit shall be so synchronized with the tamping unit that stabilization can be made to start automatically from the first sleeper tamped and stop at the last sleeper tamped. The machine shall be capable of performing both function of tamping and stabilizing independently also. The machine shall be capable of carrying out automatic lifting, levelling, tamping, lining along with simultaneous stabilization of the tamped track, at the peak rate of 1800 sleepers or more per hour over a period of not less than 10 minutes and an average of not less than 1400 sleepers in an effective hour of working on all type of track structures in Indian Railways with uniform sleeper density as per clause 2.11 at the specified parameters of clause 2.6 for achieving durable compaction. The time shall be counted from start to finish of tamping work at work place. Stoppage of work not attributable to machine shall be discounted. The setting up time and winding up time shall be measured and the total time taken by the two operations of setting up and winding up of the machine together shall not exceed 10 minutes. The setting up time shall be counted from the time machine arrives at site to the time work is started. The winding up time will be counted from the time the work is stopped to the time machines starts moving away from the work site. The tenderer shall furnish the full details of the working cycle of the machine, its timings and other operational details.</p>
2.2	<p>The machine shall be provided with new automatic tamping units. Separate tamping units have to be provided for each rail. Each unit comprising of tamping tools, shall be operated hydraulically.</p>
2.3	<p>The necessary work units shall be positioned on an under-frame separate from the main frame capable of cyclic movement from sleeper to sleeper, independent of the main frame, to facilitate continuous working for high output so that the operator does not get undue fatigue due to acceleration pull, braking jolt in each tamping cycle.</p>
2.4	<p>The tamping below the sleepers, after the track geometry correction, shall be based on vibratory squeeze principle to achieve a durable compaction. The amplitude and vibration frequency squeezing pressure and squeezing time to achieve a durable compaction on different track structures shall be specified.</p>
2.5	<p>The ballast depth up to 350 mm shall be effectively compacted having zone of influence of tamping of approx. 150 mm layer below the bottom of sleepers. Machine should be capable to Tamp Track laid with any type of sleepers. Rail top to sleeper bottom depth may vary from 365 mm to 420 mm. There shall be provision for step-less adjustment of the depth of tamping tools to suit different types of sleepers. The machine shall be provided with a penetration assistance system to achieve full penetration even in caked ballast bed. The Tamping units shall be equipped with a vibration control system. The system shall increase the mechanical induced vibration for easy penetration while lowering the tamping units.</p>
2.6	<p>Amplitude of vibration, vibration pressure, vibration frequency, squeezing pressure, squeezing time and tamping depth of the tamping tools in tamping unit shall be such that durable compaction under the sleeper is achieved. The vibration frequency and vertical load of stabilizing unit should be such that controlled settlement, lasting consolidation and substantial increase in post tamping lateral ballast resistance of sleeper is achieved. Details of all the above parameters will be submitted in the offer. The machine shall be capable of giving the output as stipulated in Clause 2.1 with the following tamping parameters:</p> <p>a. Squeezing time of 0.8 sec or more.</p>

	<p>b. Squeezing pressure of 110 kg/cm<sup>2</sup> or more.</p> <p>c. Tamping depth upper edge of tool blade should be 15 – 20 mm below the bottom of the sleeper.</p>
2.7	The tamping tools shall come to rest automatically after they encounter the resistance from the ballast to preselected squeezing pressure and hold the squeezing pressure for pre-set time. It shall be possible to vary the squeezing pressure, squeezing time, to suit varying track structure and ballast conditions.
2.8	The lifting system shall be such that the track can be lifted without bearing on the ballast. The machine frame and the lifting system shall be strong enough to bear the track lifting forces for all types of track structures for 150 mm lift in one go. The free length between the two bogies of the main machine shall be long enough to permit the track lifting up to 150 mm in one go, having 60 Kg rails on concrete sleepers without excessive stresses in the rail or on the lifting mechanism. The lifting system should hold the rail continuously rather than releasing and re-lifting the rail at every tamping cycle. However, the lifting/lining system and actual tamping should be so synchronized that the track is stiffly held in position and there is no movement in the track when the tamping tool is inserted for tamping. This is required to ensure that the lift and slew are not altered during the process while track is being tamped. The machine shall also have arrangement to lift properly the insulated glued joint, switch expansion joint and special one meter fish plated joint during tamping.
2.9	<p>The machine shall be provided with automatic levelling equipment which will permit correct levelling of the track including provision of super elevation along with tamping. Tolerances achievable shall be as follows:</p> <p>Unevenness : + 1 mm on 3.6 m Chord</p> <p>Cross level : + 1 mm</p> <p>Alignment : + 2 mm on 7.2 m Chord</p> <p>Twist : 1 mm/m</p>
2.10	The machine shall be fitted with automatic lining equipment capable of carrying out lining simultaneously with levelling. The machine shall also have the ability to slew all type of track structures including rails and concrete sleepers up to 150 mm in one go. The lining & levelling unit shall have two sets of track lifting and lining rollers clamps for each rail.
2.11	The machine shall be capable of tamping, lifting, lining and stabilization of track laid on pre stressed concrete sleepers with long welded rails, short welded rails and fish-plated rail. The normal sleeper spacing centre to centre in different track structures on Indian Railways is 550 mm to 650 mm and the clear spacing between sleepers will be minimum 260 mm and maximum 405 mm.
2.12	The working cabins of the machine shall be air-conditioned. The air-conditioning provided shall be of robust industrial design capable of operating in highly dust laden environment. However, the electronic equipment should be so designed that the machine shall be able to work without air-conditioning under the climatic conditions described in clause no. 1.11 & 18.5.
2.13	It shall be possible to control the target track geometry parameters, in infinitely variable steps from operators/front cabin. To suit this, suitable proportional/servo control systems shall be provided.
2.14	The machine shall be provided with a computerized unit for the overall control of its working system for all possible track geometry. The system shall be so designed that for working on tracks with pre-decided target geometry, the standard track geometry data as well as correction values can be entered prior to work either directly on system or via USB, CD or DVD. For working on tracks with unknown target geometry, it shall be possible to determine the correction values by making a measuring run and subsequent geometry compensation of the recorded data considering obligatory point and constrains of lifting and lining etc. Interactive processing of the target profile by the operator shall be possible. Important tamping Parameters like datum rail, general lift, single insertion or double insertion, design or smoothening. mode, time of start and finish of work, squeezing pressure, squeezing time, vibration pressure and tamping depth etc. shall be displayed in graphic as well as text form on a colour monitor. It shall be possible to guide the working system of the machine continuously and automatically by this unit. The software shall be Windows based. The hardware shall be sturdy for operations under conditions of shock, vibrations, dust, electromagnetic influences from outside and interruption of power supply. The unit shall have memory storage not less than 500 GB to keep records of minimum 100 km of work performed, New track geometry obtained and enables transfer of the data via USB port on a memory stick as required. Any software required to read this retrieved data should be supplied with the machine as an integral part of the machine offered.
2.15	In addition to the computer system provided on the machine for its own controls, the machine shall be provided with laptop (14 inch screen, intel i7 processor with turbo boost technology, 16GB RAM, 512GB SSD, 12th generation or higher, q series chip set, windows 11 pro) for keeping record of overall aspects of working, spares management and reporting. The detailed specifications of Laptop will be same as that being provided by OEM with new DTE machines.
2.16	<p>The machine shall be equipped with an electronic device for measuring and recording the following track parameters in real time:</p> <p>i) Alignment and longitudinal level on minimum 7.2m chord length</p> <p>ii) Cross level difference and twist at every 0.6 m or less interval.</p> <p>iii) Super elevation</p>

	<p>iv) Lifting value.</p> <p>The system therefore shall be able to record the final corrected track parameters during tamping itself and as achieved after tamping and there should be no need for separate run to record these parameters. The hardware shall consist of a touch panel computer with flash disc and a laser jet printer. There should be provision to fix threshold value of above parameters and it shall be possible to draw reports to allow evaluations when threshold values are overstepped. Standard deviations shall also be calculated in 200 m sections for the track parameters i.e. alignment of the reference rail, longitudinal level and twist. It shall have an inbuilt storage to store the above parameters of minimum 100 km of tamping work. The storage however shall not be less than 500 GB for this purpose.</p> <p><b>Firm should provide Printer which will be available in Indian Market.</b></p>
2.17	A programmable logic control system shall be provided in the machine so that the works like lifting, lining, tamping and work drive of machine will commence only when all conditions for their working/movement are fulfilled.
2.18	In case of failure of the up and down cylinders of tamping unit, there shall be an arrangement for lifting the tamping units mechanically by lifting equipment like trifor/chain pulley etc. Any other alternative arrangement shall also be provided for mechanically lifting tamping unit in such failures. <b>Necessary Hooks to hang the chain pully, chain hoist to be given.</b>
2.19	The machine shall be equipped with a centralized computer and monitoring system which shall monitor the health of machine working system such as engine (lubricant oil pressure, temperature, rpm etc.), hydraulics (hydraulic pressure in different units, temperature, oil level in tank etc.), pneumatic (pressure of different units), electrical (charging/discharging rate, voltage etc.). All these data should be displayed on a monitor installed in working cabin.
2.20	The stabilizing unit shall be an integral part of the machine. It shall achieve effective and continuous stabilization of the track and shall be able to match the working speed of the tamping portion without loss in stabilizing quality. It should be able to increase the lateral ballast resistance of individual concrete sleepers on an average by minimum 25% of lateral resistance left immediately after tamping (with general lift of 20-30 mm) on concrete sleeper track with at least 150 mm clean ballast cushion.
2.21	During the operation, the stabilizer unit shall be capable of lowering the track in a controlled manner, while maintaining the pre-stabilized geometry. Proper longitudinal and cross-level control mechanisms shall be provided to achieve this. The manufacturer shall clearly explain the mechanism in its offer.
2.22	The stabilizing unit shall be capable of continuous stabilization of track including typical Indian Railways heavy concrete sleeper track. To achieve a controlled settlement and a lasting consolidation of such heavy track, it shall be equipped with minimum two independent stabilizing units, applying equally or variable maximum vertical load of 12 t or as designed to get the required consolidation.
2.23	The stabilizing unit shall be capable of pre loading the track. The driving wheels shall provide adequate adhesion to avoid wheel slippage/loss of traction and risk of derailment while pre loading the track by stabilizing unit.
2.24	The horizontal and vertical force and frequency of vibration shall be adjustable so as to carry out effective stabilization on various types of track structures.
2.25	The machine shall be equipped with suitable mechanism to control the degree of settlement of the track which shall copy the pre-stabilizing geometry by automatically increasing/relieving the vertical load on the stabilizing units. For optimum results, mechanism shall work independently for the left and right hand rail.
2.26	It shall be possible to steplessly preselect the frequency of stabilizer vibrations which shall be between 0-45 Hz for optimum adjustment to suite the various kinds of track structure. During work near fixed structures like bridges, it shall be possible to pre-select a frequency within that range which is beyond the natural frequency of the structure. In this context, it is also essential that the vibrations be automatically cut off, when the machine working speed reduces below cut off speed. This is to be prescribed by the manufacturer in the offer.
2.27	The stabilizing unit shall be equipped with a frequency modulation measuring unit for optimum regulation of frequency. The machine shall be equipped with display units for monitoring vibration frequency, and degree of settlement on both rails.
2.28	Only lateral vibrations shall be permitted to avoid damages on the rail surface by excess friction and force by the rollers and to achieve a force free resettlement of the ballast grains and these lateral vibrations by stabilizing unit shall be created without any vertical impact.
2.29	The tamping tool holding arrangement in tamping arm of tamping bank should be cylindrical compressible type with bolting and dowel arrangement such that no hammering is normally required for fixing and removing the tamping tools.

<b>3</b>	<b>DIESEL ENGINE</b>
3.1	The machine shall be powered by one diesel engine preferably indigenous with proven record of service in tropical countries with wide service network in India. Robust construction and low maintenance cost are of particular importance. Adequate allowance shall be made for de-rating of diesel engine under the most adverse climatic conditions mentioned in the specification elsewhere. High speed diesel oil to Indian standard specification shall normally be used. A minimum fuel tank capacity sufficient for continuous operation for 8 hrs but not less than 1400 litres shall be provided. Sight glass type fuel measuring gauge preferably of full height shall be provided on the fuel tank. Storage batteries of well-known indigenous make with wide service network in India shall be provided for starting the engine. The engine shall normally be push/pull button start type or key type. (Necessary modifications will be carried out in machine frame as per new engine requirement.).
3.2	The engine shall be of such design/brand which are being manufactured indigenously and/or such designs having after sale service facilities available in India. The supplier shall furnish the information regarding make and model of the engine proposed to be used and details of agency which will provide after sales service support and availability of spares in India.
3.3	Since the engine has to work outdoor under extreme dusty conditions, the air intake system shall be designed suitably so as not to allow dust through air intake system.
3.4	There is a likelihood of dust deposition over the engine body and surrounding area over the spilled lubricants. These locations shall be easily accessible for daily cleaning and routine maintenance. In case, air cooled engines are proposed by the supplier, maintenance equipment for cleaning and maintenance of the air cooling fins shall be provided by the supplier along with the machine.
3.5	The engine parameter monitoring gauges like temperature, rpm, and lubricant oil pressure shall be direct reading type mounted on the engine backed up by electrical/mechanical gauges in the operator's cabin showing the absolute readings along with safe limits suitably coloured. There shall be audio-visual warning (safety mechanism) to the operators in case of any of these parameters exceeding the safe limit and engine will shut down automatically.
3.6	Suitable and rugged mechanism shall be provided to start the prime mover at minimum/no load and gradual loading after the start of the prime mover.
3.7	The engine power take off shall be coupled to the main gearbox through a flexible coupling/cardon shaft (propeller shaft). A fail safe clutch mechanism, if required, may be provided to meet this requirement. The engine shall be mounted on suitable Anti-Vibration Mountings
3.8	The engine shall have Electronic Control Module (ECM) or similar arrangement for taking out operating parameters on real time basis such as RPM, load, fuel consumption, temperature, pressure and diagnostic data as well as trip and historical data. These data shall be displayed and stored on a centralized computer and monitoring. It shall also be possible to transfer these data on USB device through the centralized computer based control
3.9	In order to adhere to pollution control norms, the diesel engine should be electronically controlled emission engine with minimum compliance of EU stage IIIa or Equivalent emission standards.
3.10	The engine shall be enclosed in a weather protective, sound and dust resistant enclosure to minimize engine noise and to prevent oozing out of oil spills etc. from engine area to the adjacent machine components, hoses, electrical cables fittings as a protection against fire. All doors on the enclosure shall be strategically located in areas as to allow ease of maintenance of the engine and allow good access to and visibility of instruments, controls, engine gauges, etc. Sufficient louvers shall be provided to allow the total engine cooling air requirements used in this application
<b>4</b>	<b>DRIVE MECHANISM</b>
4.1	The machine shall be upgraded with an efficient traction drive system for traction during the operation. It shall be equipped/upgraded with separate power train circuits for high speed travelling in travelling mode and slow cyclic movement in working mode
4.2	The machine's driving system shall be through hydro dynamically coupled power with shift arrangement capable of achieving full speed in travel mode in both the directions and hydrostatic drive for working mode. However, the system should be so designed/upgraded that all the driving wheels work in synchronization and there is no slippage/skidding of the wheels during the work drive. The driving mechanism for travel drive shall be rugged to perform satisfactorily during the life cycle of the machine
4.3	The driving mechanism, in working mode, shall be adequately designed/upgraded to handle the acceleration and braking forces at each tamping cycle. A suitable synchronization circuit to control the synchronization of lifting/lining/tamping process with the machine drive/braking system in working mode shall be provided/upgraded to prevent any damage to the machine systems on account of non-synchronization.
4.4	Suitable differential systems may be provided between coupled wheels on the same bogie
4.5	Suitable flow divider/throttling arrangement may be provided to equalize the tractive effort amongst different bogies.
4.6	The tenderer shall provide the necessary technical details including circuit diagrams and detailed specifications of all electronic/electrical parts to confirm the above requirements

4.7	Adequate gauges shall be provided in working and driving cabins near operator's seat and solenoid valves shall be provided near linkage assembly for indication, flow control and carrying out necessary adjustment in the field.
4.8	To the extent possible hydraulic and pneumatic component/assembly shall be fixed at suitable location preferably on the side frame of the machine so as to avoid the need of going on top of the machine for day-to-day maintenance schedules.
4.9	The pneumatic circuit shall be provided with air dryer for the smooth working of pneumatic components
4.10	The machine shall be equipped with adequate safety circuit such that if any unit/part which may endanger the safety is unlocked, the machine shall not move during run drive. The indication of locking and unlocking of all units should be displayed in the working cabin
4.11	On-board system for online filtration and monitoring the quality of hydraulic oil in hydraulic circuit should be provided. The gauge shall clearly indicate if the hydraulic oil is contaminated beyond the permissible limits and requires immediate replacement.
<b>5</b>	<b>COOLING SYSTEM</b>
5.1	The cooling system shall be efficient and designed for a maximum ambient temperature of 55°C. Supplier shall note that the machine shall be working under extreme dusty conditions and the cooling mechanism shall be maintainable under these conditions.
5.2	Adequate heat transfer arrangement for the hydraulic system shall be designed and provided so that under extreme heat conditions as mentioned in clause 2.12 above, the system oil temperature does not go beyond the range specified by the supplier
<b>6</b>	<b>BRAKES</b>
6.1	The machine shall be fitted with compressed airbrake system which shall apply brakes equally on all wheels and provision shall be made to connect air brake system of the machine to that of camping coach when the machine is hauling it. Fail safe braking mechanism system shall be provided so that in case of any failure of brake, there shall be arrangement of automatic application of brake. The pneumatic parking brake shall also be spring loaded so that in case of drop in pneumatic pressure below certain value the brake will be applied automatically. The brakes shall be protected from ingress of water, grease, oil or other substances, which may have an adverse effect on them. The brake shoe lining shall be suitable for high ambient temperature of 55°C. The force required for operating the brake shall not exceed 10 kg at the handle while applying by hand and 20 kg on the pedal, when applied by foot.
6.2	Machine shall be equipped with suitable arrangement of braking so that while attached in train formation as last vehicle, machine can be braked by traction vehicle having compressed air braking system. In addition, the machine shall be equipped with suitable air brake system in the driving cabins so that the attached coach while being hauled by machine can be braked.
6.3	There shall be provision of emergency brake application using the compressed air in the machine either travelling alone or coupled with the camping coach, in addition to the normal braking system of the machine. The emergency braking distance (EBD) of the machine on the Indian railway track at the maximum designed speed on a level track shall not be more than 600 m. Design calculations for the braking effort and EBD at the maximum design speed of the machine on level track & at falling grade of 1 in 33 should be provided by the supplier. Brake design details are to be submitted.
6.4	Mechanical brakes shall also be provided in addition for use as parking.
6.5	Clearly visible brake lights shall be provided at both the ends of the machine, which will be automatically operated when brake is applied and switched off when brake is released. This will be required to alert the operator of machine following this machine when the machines are working in groups
<b>7</b>	<b>HORN, HOOTER AND SAFETY SWITCHES:</b>
7.1	The machine shall be provided with dual tone (low & high tone) electric/pneumatic horns conforming to RDSO specification no. RDSO/2010/SPEC/0105 May, 2010 (pneumatic) with the amendments facing outwards at each end of the machine at suitable locations for use during travelling and to warn the workmen of any impending danger. Control shall be provided in close proximity to the driver permitting the driver to operate either horn individually or both horns simultaneously. The horns shall be distinctly audible from a distance of at-least 400 m from the machine and shall produce sound of 120-125 dB at a distance of 5 m from horn (source of sound). The higher tone horn shall have fundamental frequency of 370 ±15 hertz. These horns shall be operated by means of push buttons provided in the cabins
7.2	Adequate numbers of safety stop switches shall be provided all around so that in case of any danger to worker as well as hitting of any obstructions by working unit like signalling cable, joggle fish plate etc, during working, the operator can be warned or the machine can be stopped immediately
7.3	Safety equipment like jacks, pullers, terfor and other such equipment specific to the machine for restoring failed units of the machine during working shall be provided on the machine

7.4	The machine shall be provided with emergency backup system to wind up the machine quickly in the event of failure of prime mover or power transmission system of the machine. The emergency backup system shall be able to be operated manually also. The emergency backup system shall be operated either through the DG set or by a separate portable diesel engine mounted unit.
7.5	Pneumatically/electrically operated hooters conforming to RDSO specification no. TM/SM/318 dated 21.05.2008(or latest if any) shall be provided facing outwards at each end of the machine at suitable locations, operated by means of push buttons provided in the cabins to warn the staff working on/around the machine about approaching train on adjoining track. Pneumatically/electrically operated hooters capable of producing intensity of sound between 105-110 dB at a distance of 5 m (when measured in still air in a closed room) and variation in intensity of sound shall not be more than 5 dB. Additionally switches for such hooter shall be provided outside on the machine frame and near the both side exit gates so that it can be operated by staff present at work site near the machine. The hooter shall also be operated by remote switch at a distance of at least 300 m from the hooter.
7.6	In addition, separate electric horns with push button type switches shall be provided at suitable locations in all cabin(s) and on machine body for communication between the machine staffs about infringement/malfunctioning or any other trouble.
<b>8</b>	<b>HOOKS AND BUFFERS</b>
8.1	The machine shall be fitted with CBC as well as transition coupling as per RDSO specification no. 56-BD07 with latest revision along with side buffers to RDSO drawing no. RDSO/SK-98145 with latest alteration on both ends for coupling with camping coach or other vehicles and for attachment with the coach, locomotives and wagon while running in train formation as last vehicle.
<b>9</b>	<b>SUSPENSION SYSTEM</b>
9.1	The suspension system shall be preferably of two-stage type with suitable spring and damping arrangement. Spring for primary and secondary suspension shall be designed to cater for actual service conditions. Effective measures shall be adopted to minimize the weight transfer while starting, stopping and during runs.
<b>10</b>	<b>HEAD LIGHT, FLASHER LIGHT AND OTHER LIGHTING ARRANGEMENTS</b>
	<p>10.1 The electrical equipment to be provided shall conform to relevant standard specifications and shall be suitable for Indian climatic conditions. The machine shall be equipped with latest twin beam headlight assembly conforming to RDSO specification no. ELRS/SPEC/PR/0024 revision-1 September, 2004 with the amendments ensuring a light intensity of 3.2 lux at ground level at track centre at a distance of 305 m away on a clear dark night, at each end and with two front and rear parking lights, which can be switched to red or white according to the direction of the travel. Powerful swivelling flood light shall also be provided to illuminate the working area sufficiently bright for efficient working during night. In addition, minimum eight power point locations (24 volt DC/15 amp socket) shall be provided on outside frame of the machine two in front, two in rear and two on both sides for providing lighting arrangements during night working.</p> <p>10.2 The amber colour LED based flasher lights producing not less than 500 lux at 1 m and 55 lux at 3 m in line measurement in axial direction from flasher light shall be provided on the both ends of the machine to give indication to the train arriving on other line about any impending danger.</p> <p>10.3 The machine shall be provided with marker light to RDSO specification no. ELRS/SPEC/PR/0022, (Rev-1) October 2004 or latest.</p> <p>10.4 In addition to swivelling LED floodlights mentioned in para 10.1, powerful swivelling LED floodlights shall also be provided at each corner of the machine to illuminate the surrounding area sufficiently bright for efficient working during night. In addition minimum eight power point locations (230/250 V AC socket) shall be provided on outside frame of the machine two in front, two in rear and four on both sides for providing lighting arrangements during night working. Suitable light fittings shall also be provided which will be used during night working otherwise it should be kept at a secure place provided on the machine. The power supply to all the fittings and sockets operated with 230/250 V AC shall be fed by welding plant as mentioned in clause no. 13.5. Illumination survey or light assessment or Lux level survey report shall be submitted by the supplier. Average illumination level shall be 15 Lux on 6 m meter width along the machine both sides and also up to 6 m length on both ends.</p>
<b>11</b>	<b>CHASSIS AND UNDER-FRAME</b>
11.1	The chassis shall be modified from standard welded steel sections and of steel sheets, so as to permit transportation of the machine in train formation without endangering safety of the train. The under-frame shall be modified with rolled steel section and/or plates and shall be designed to withstand a horizontal squeeze load of 102 t at each side of buffers without any permanent distortion. The modified under frame shall be sufficiently robust for safe travel of the machine in train formation and not necessarily as the last vehicle.

<b>12</b>	<b>CABINS</b>
12.1	Cabin will be equipped with fully enclosed air conditioner, sound and heat insulation. The air conditioner(s) shall be electrically operated of a reputable make with a comprehensive service network in India. In view of the high ambient temperature prevailing in India, special attention should be paid to free circulation of air and ventilation in the driver's cabin. It shall be possible to have a clear view of the track ahead while driving the machine in both the directions from the cabins at either end. The cabin layout shall be such that, the operating staffs have full view on both the sides before leaving the machine, to avoid any danger to them from trains on the adjacent tracks. Additional driver's cabin shall be provided, if the view, while driving is not clear for safe travel in both directions.
12.2	The gauges and control panels shall be suitably located in the operator's cabin so that they can be observed by the operator without undue fatigue. Screen wipers preferably operated by compressed air or electrically operated shall be provided on the wind screen.
12.3	Suitable number of fire extinguisher (dry chemical type) shall be provided in all the cabins. The chemicals used for extinguishing fire by such fire extinguishers shall not chemically react with electronic equipment/components, PCBs, cables etc.
12.4	The machine shall be provided with well-designed space for keeping the tools and spares required for onsite repairs of the machine to attend the breakdowns and other working requirements.
12.5	The operator's cabin shall be ergonomically designed to have easy access to all the controls. The operator shall have a full view of the working area from the operating seat to have full control over the work. The stabilizing unit shall also be controlled/operated from the working cabin.
12.6	Necessary inter-communication system shall be provided inter-connecting all the cabins and shall be so oriented that the operator, seating on the seat of either cabin/working cabin, can easily operate/hear distinctly the conversation.
12.7	The machine shall be equipped with speed indicator and recording equipment of range between 0-120 kmph for recording the speed of the machine in real time basis. The recorded data shall be retrievable on computer through memory card/pen drive. It shall be provided in the driving cabin at suitable place and recording system shall have sufficient memory to keep the speed record of minimum 15 days which should always be stored for retrieving as per requirement.
12.8	The electric supply in the cabin for operation of electrical instruments, gauges etc. shall not be more than of 110 V.
<b>13</b>	<b>TOOLS AND INSTRUCTION MANUALS</b>
13.1	Each machine shall be supplied with a complete kit of tools required by the operator in emergency and for normal working of the machine. The list of tools to be provided (excluding the existing usable tool available with the machine) shall include all tools necessary for maintenance and repair of the entire machine including specialized equipment. All special tools shall be listed and catalogued illustrating the method of application. The tenderer shall along with his offer submit the list of tools to be supplied along with each machine. The list can be modified to suit the purchaser's requirement, while examining the offer.
13.2	Detailed operating manual, maintenance and service manual, user manual indicating capabilities of machine, shall be specifically prepared in English language and four hard copies & soft copies of these shall be supplied with each machine.
13.3	The supplier shall also supply circuit diagrams in hard and soft copies of electrical, hydraulic, pneumatic and electronic circuits used on the machine. Trouble shooting diagram/table shall also be supplied. In addition, the supplier shall provide dimensional drawings with material description of items like rubber seals, washers, springs, bushes, metallic pins etc. Main features such as type, rpm & discharge etc. of items like hydraulic pumps, motors and such other bought out components/assemblies shall be furnished by the tenderer. These shall be specially prepared in English language and four copies of these shall be supplied with each machine.
13.4	While offering the machine for first inspection, the supplier shall submit one copy of complete technical literature in English language including operation, service and field maintenance manual/instructions and complete electrical, electronic, hydraulic & pneumatic circuit diagrams, troubleshooting charts, component drawings/description and other relevant technical details as a reference document for the inspecting officer.
13.5	One portable diesel operated D.C. welding generator (with the provision of auxiliary output of minimum 2.5 KW, 230 V AC for lighting) of reputed make (preferably made in India) with a minimum 5 KVA capacity of welding up to 5 mm electrode at 60% duty cycle along with sufficient length of cable or lead shall be provided with the machine for day to day repairing of machine and its wearing parts. The diesel tank capacity shall be not less than 15 liters
13.6	The firm shall provide detailed technical drawings and specifications of new wheels and axles, if provided in the machine. The above details shall be provided during final inspection of machine at OEM firm premises.
<b>14</b>	<b>SPARE PARTS</b>
14.1	The supplier shall be responsible for the subsequent availability of spare parts to ensure trouble free service for the balance life of the machine (14 years). It is preferred that the spares shall be stored in India and will be available at short notice say maximum within a month.

14.2	For indigenous parts and brought out components and assemblies, the relevant technical details shall be supplied while offering the machine for inspection.								
15	<b>MAKER’S TEST CERTIFICATE:</b>								
15.1	Copies of maker’s certificate guaranteeing the performance of the machines shall be supplied in duplicate along with the delivery of each machine.								
16	<b>OPERATORS:</b>								
16.1	The required number of operators and allied staffs shall not exceed as prescribed for Plasser make DTE (CSM + DTS)								
17	<b>INSPECTION OF THE MACHINE</b>								
17.1	The machine shall be stabled on straight & level BG track. The length of the track shall be at least 10 m more than buffer to buffer length of machine In order to check maximum moving dimensions in cross section, a sturdy frame of Indian Railways maximum moving dimensions shall be provided by the manufacturer and passed over the machine holding it perpendicular to track, centre aligned with track centre. Adequate arrangements shall be made to the satisfaction of inspecting official.								
17.2	<p>The following documents shall be provided to the Inspecting Officer (IO) at least 30 days before the proposed date of inspection.</p> <p>i. One copy of complete technical literature mentioned in clause 13, in English language, including operation, service and field maintenance manuals/instructions and complete electrical, hydraulic and pneumatic circuit diagrams, troubleshooting charts, component drawings/description and other relevant technical details as a reference document in soft &amp; hard copies for the inspecting officer</p> <p>ii. Cross section of the machine super imposed on Indian Railways maximum moving dimensions envelope shall be provided to Inspecting Officer (IO) in advance.</p> <p>iii. Clause by clause comments of the manufacturer shall be sent to Inspecting Officer (IO) in advance for his review. Comments shall state manufacturer’s conformity of compliance of each of the requirement stated in each clause, elaborating where necessary the details/manner in which the requirement has been complied. The pro forma for the clause-wise comments is given below:</p> <table><tr><td>Clause No.</td><td>Clause</td><td>Comments of Supplier/manufacturer</td><td>Comments of Inspecting officer</td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr></table> <p>iv. Manufacturer’s Internal Quality Inspection Report of the machine.</p> <p>v. Manufacturer’s quality certificate and/or test reports for bought out assemblies/subassemblies shall be provided to Inspecting Officer (IO), containing serial number wherever applicable.</p> <p>vi. Draft Inspection Report shall be prepared by the manufacturer, containing all annexure mentioned at clause 17.3.</p> <p>vii. Details of arrangements made for checking maximum moving dimensions for his approval Supplier will incorporate amendments/further clarification in the above documents to the satisfaction of the Inspecting Officer (IO) keeping in view the Inspecting Officer’s comments, if any.</p>	Clause No.	Clause	Comments of Supplier/manufacturer	Comments of Inspecting officer				
Clause No.	Clause	Comments of Supplier/manufacturer	Comments of Inspecting officer						
17.3	<p>List of documents to be annexed in the draft Inspection Report should include:</p> <p>i. Maker’s Test Certificate.</p> <p>ii. Manufacturer’s Internal Quality Inspection Report</p> <p>iii. Quality Certificates of Bought out assemblies/sub-assemblies.</p> <p>iv. Cross section of the machine super imposed on the IR MMD</p> <p>v. Vogel’s diagram.</p> <p>vi. List of Manuals, Drawings, Spare Parts Catalogues, etc. to be dispatched along with the machine, duly indicating the number of sets of each</p> <p>vii. Manufacturer’s certificate on standard followed for design of wheels and axles against clause 1.8 to 1.10.</p> <p>These above documents in soft &amp; hard copies shall be part of final inspection report.</p>								
18	<b>ACCEPTANCE TEST:</b>								
18.1	In addition to verification of the various items of specification, the purchaser’s nominee shall carry out the following tests in India at the purchaser’s premises at the time of commissioning of the machine. The pre-commissioning tests shall be completed and the machine shall be commissioned within 90 days of its arrival at the premises of the final consignee								
18.2	The dimensional check of loading gauge, i.e. maximum moving dimensions, buffer heights, clearances, length of machine bogie distance etc.								
18.3	Testing for negotiability of 10° curve and 1 in 8.5 turnouts								
18.4	Construction and engineering of the machine and its ability to perform all the functions as laid down in the specifications above.								
18.5	<p>Actual output and performance test: These tests shall be conducted under field conditions on Indian Railway. An electrified section shall be chosen for this test.</p> <p>The general conditions of tests shall be as follows:</p>								



	<ul style="list-style-type: none"> <li>a) Machine crew shall be either trained personnel of Indian Railways or the staff of the supplier.</li> <li>b) Dry weather, ambient temperature between -5°C to 55°C.</li> <li>c) Plain Track on curve with radius not less than 175 m.</li> <li>d) Straight track with gradients up to 5 per thousand.</li> <li>e) Rails and sleepers in good conditions and properly fastened.</li> <li>f) Concrete sleepers.</li> <li>g) Clean ballast cushion of minimum 150 mm in sufficient quantities below the bottom of the sleepers and generally not cemented.</li> <li>h) LWR track with ballast as per standard profile.</li> <li>i) Regular sleeper spacing of 60/65 cm with a tolerance of <math>\pm 2</math> cm on straight track.</li> <li>j) Formation good</li> <li>k) Amount of lowering up to 20 mm by stabilizing unit maintaining track parameters within permissible range.</li> <li>l) General lift during working up to 30 mm.</li> <li>m) Lifting of track in non- working mode of 150 mm in one go to be conducted at manufacturer's premise/siding.</li> <li>n) Maximum slew during working up to <math>\pm 10</math> mm.</li> <li>o) Slewing of track in non-working mode of 150 mm in one go to be conducted at manufacturer's premise/siding.</li> </ul> <p><b>Actual Test to be conducted:</b></p> <ul style="list-style-type: none"> <li>a) Track lowering by Stabilizing Unit: The amount of lowering of track as measured shall be limited to maximum 20 mm and track parameters left by tamper should be simultaneously retained in general within acceptable limit.</li> <li>b) Tamping Output: At the parameters specified against clause 3.6 for achieving durable compaction by settlement, lasting consolidation and desired increase in lateral ballast resistance of sleeper by stabilizing unit, the machine shall be able to tamp and stabilize 1400 sleepers in one effective hour of working. The time shall be counted from start to finish of tamping work at work place. The machine shall also be able to achieve a peak tamping and stabilizing rate of 1800 sleepers or more per hour over a 10 minutes period at the above prescribed parameters. Stoppage of work not attributable to machine shall be discounted. The setting up time and winding up time shall be measured and the total time taken by the two operations of setting up and winding up of the Machine together shall not exceed 10 minutes. The setting up time shall be counted from the time machine arrives at site to the time work is started. The winding up time will be counted from the time the work is stopped to the time machines starts moving away from the work site.</li> <li>c) Lifting Capability: Lifting of track in non- working mode of 150 mm in one go.</li> <li>d) Slewing Capability: Slewing of track in non-working mode of 150 mm in one go.</li> </ul>
<b>19</b>	<b>Should any modification be found necessary as a result of the tests, these shall be carried out by the supplier at his own expenses</b>
<b>20</b>	<b>MARKING &amp; COLOUR OF MACHINE:</b>
20.1	The machine body shall be painted in golden yellow colour of Indian Standard Colour code of 356 conforming to IS: 5. the exterior painting shall be polyurethane binder based conforming to RDSO Specification No. M&C/PCN/100/2013 (Specification for Epoxy cum Polyurethane Painting System –Two packs for the Exterior Painting of Railway Coaches, Diesel and Electric Locomotives and other Industrial Applications) or conforming to ISO 12944.
20.2	<p>Following should be written in black on the machine at appropriate location in English &amp; Hindi as per direction of Indian Railway official</p> <ul style="list-style-type: none"> <li>i) Indian Railways logo of height between 300 mm to 600 mm as suitable on all four faces of the machine.</li> <li>ii) The text "INDIAN RAILWAYS" shall be written in Bold and in Black colour of size equal to or slightly smaller than the size of logo but of size not less than 250 mm on both side faces and below the Indian Railways logo.</li> <li>iii) Machine model and manufacturing year shall be written in black colour and in letter of size less than the size in which Indian Railways is written but not less than 200 mm in any case below the text "INDIAN RAILWAYS" mentioned above.</li> <li>iv) If required, the manufacturer's name may be written in size not more than 150 mm and shall not be at more than four locations. Also, the manufacturer's logo may be provided at not more than two locations and shall be of size less than 200 mm.</li> </ul>

**SECTION - 2**

**TERMS AND CONDITIONS OF CONTRACT**

## Terms and Conditions

### 1. **Payment Schedule:**

- (a) 90% payment will be released after Final Inspection & Testing of all functions of track Machine by Railway Officer in OEM's premises.
- (b) 10% payment will be released after Commissioning of track machine after successful performance during trial blocks.

### 2. **Mode of Payment:** All the payment will be made through electronic fund transfer only through any of the nationalized/scheduled Bank.

### 3. **Termination of Contract:** As per GCC Clause.

### 4. **Lodging boarding & incidental charges:** The service charges of service engineer shall include local transportation / conveyance / lodging / boarding and any other incidental charges.

### 5. **First aid to Service Engineer:** Railway will provide only available first aid to the service engineer in case of any injury/accident to the service engineer.

### 6. **Taxes and Duties:** Taxes and duties if not quoted separately, the rates quoted by the firm will be deemed to have included all taxes levied by Central / State Government as in force on the date of quoting tender. However, any additional taxes levied by State / Central Government after this date may be paid on production of documentary evidence as per SVC applicable.

### 7. **Deduction of income Tax:** The railway will deduct 2% of income tax on the gross amount of each bill while making payment to the contractors. The settlement of income tax should be made with the income tax authority. Any updation as per law will be applicable.

### 8. **Force Majeure clause:** Railways standard Force majeure clause as per GCC April 2022 shall be applicable.

### 9. **GST Act 2017:** -

9.1 All the bidders / tenders ensure that they are GST compliant and their tax structure /rates are as per GST Law.

9.2 In case the successful tenderer is not liable to be registered under CGST/IGST/UTGST/SGST Act, The Railway shall deduct the applicable GST from his / their bills under reverse charge mechanism (RCM) and deposit the same to the concerned tax authority.

### 10. Tender will be governed by the latest general conditions of the contract. (GCC) April 2022 with upto date correction slips. (Source: Railway Letter No. 2022/CE- I/CT/GCC2022 /Policy dated 27-04-2022)

### 11. **Special Conditions of Contract for mandatory updation of Labour data on Railway's Shramik Kalyan Portal by Contractor.**

#### **The special conditions are as under:**

A. Contractor is to abide by the provisions of Payment of Wages act & Minimum Wages Act in terms of clause 54 and 55 of Indian Railways General Conditions of Contract. In order to ensure the same, an application has been developed and hosted on website [www.shramikkalyan.indianrailways.gov.in](http://www.shramikkalyan.indianrailways.gov.in). Contractor shall register shall his firm/company etc and upload requisite details of labour and their payment in this portal. These details shall be available in public domain. The Registration/updation of Portal shall be done as under:

(a) Contractor shall apply onetime registration of his company/firm etc. in the Shramik Kalyan Portal with requisite details subsequent to issue of Letter of Acceptance. Engineer shall approve the contractor's registration on the portal within 7 days of receipt of such request.

(b) Contractor once approved by any Engineer, can create password with login ID (PAN No.) for subsequent use of portal for all LOAs issued in his favour.

(c) The contractor once registered on the portal, shall provide details of his Letter of Acceptances (LoA)/Contract Agreements on shramik kalyan portal within 15 days of issue of any LoA for approval of concerned engineer. Engineer shall update (if required) and approve the details of LoA filled by contractor within 7 days of receipt of such request.

(d) After approval of LoA by Engineer, contractor shall fill the salient details of contract labours engaged in the contract and ensure updating of each wage payment them on Shramik Kalyan portal on monthly basis.

(e) It shall be mandatory upon the contractor to ensure correct and prompt uploading of all salient details of engaged contractual labour & payments made thereof after each wage period.

B. While processing payment of any 'On Account bill' or 'Final bill' or release of 'Advances or Performance Guarantee/Security deposit', contractor shall submit a certificate to the Engineer or Engineer's representatives that I have uploaded the correct details of contract labours engaged in connection with this contract and payments made to them during the wage period in Railway's Shramik Kalyan portal at 'www.shramikkalyan.indianrailways.gov.in' till \_\_\_\_\_ Month \_\_\_\_\_ Year." (Railway Board's letter No. 2018/CE-I/CT/4 dated 17.10.2018).

**SECTION - 3**

**SPECIAL TERMS AND CONDITIONS**

## **SPECIAL TERMS AND CONDITIONS**

1. The contractor should have sufficient knowledge of various spare parts & the functioning of OEM M/s Plasser Make CSM-959 & CSM-970 and DTS machine. The contractor should have supplied/repaired various components of OEM, M/s. Plasser make track machine, and quoted offer of such tenderers will be given preference.
2. The quantities shown in the tender schedule are approximate and may be operated in full/part at the discretion of Engineer-in-charge. However, payment will be made based on actual quantities operated/executed.
3. All items included in tender schedule should be carried out in accordance with the standard specification of OEM i.e. M/s Plasser to the satisfactory functioning of this track machine after complete machine overhauling.
4. General conditions of contract with latest correction slips, special conditions of complete machine overhauling and additional special terms & conditions of contract will remain the part of tender document.
5. The complete machine overhauling of these track machines i.e. CSM-959 & CSM-970 should be completed within 12 (Twelve) months from the date of issuance of acceptance letter, subjected to Machine Idling period of three months. i.e. Machine idling for up-gradation to OEM will be limited to 3 months.
6. Programme of work:
  - (i) Immediately after issue of LOA, OEM team will inspect the machine within 15 days (for each machine) & will start the design part. Design will be submitted to West Central Railway within 03 months from date of LOA for both the machines.
  - (ii) Procurement of all the spares will be completed in next 02 months. After notice from OEM (Minimum 10 days notice) regarding its readiness to start the work along with submission of bar chart, machine will be moved for OEM facility.
  - (iii) Upgradation work will be executed in 03 months time for each machine (from the date of machine reaching OEM facility). This Base Bar Chart will be dynamically reviewed and updated from time to time to carry out the upgradation work in a time bound manner. If contractor does not attend the machine for upgradation work on stipulated date/dates as per bar chart, suitable liquidated damages/penalty will be levied on contractor.
7. Completion Period and working time.

Inspection & Design Phase-03 Months (Total -03 Months for two machines)  
Procurement phase-02 Months (Total -02 Months for two machines)  
Execution Phase-03 Months for each machine (Total -06 Months for two machines)  
Trial Block and Testing – 15 days for each machine (Total -01 Months for two machines)  
Total – 12 Months for two machines.

Thus, entire up-gradation work including final inspection & testing of track machine for two machines will be completed in 12 months from date of issue of LOA. Timely troubleshooting of any defects noticed during inspection and testing will be done by contractor. After up gradation work, Track Machine should work/function properly & should be fine-tuned / calibrated as per Contract specifications & commissioned for proper working by the contractor.
8. Trial Block and commissioning of Track Machine

After successful inspection and testing, track machine will be dispatched to field for conducting trial blocks and final commissioning for which 10-15 trial blocks will be conducted at field site. Railway shall shift the track machine and arrange necessary site, traffic blocks and HSD oil for these trial blocks. Any defect noticed during trial blocks will be required to be rectified by contractor at site. It is to be noted that, machine will be considered as commissioned after doing 10 successful blocks without any “Major failure” (of spare part/work done by Contractor). Discretion of Dy. CE/TMD/BPL will be final and binding with regard to definition of “Major Failure”. Occasional bursting of seal/connections etc. will not be treated as “Major Failure”.

9. Inspection & Testing:

All items included in tender schedule should be carried out in accordance with the specification mentioned in contract & RDSO maintenance schedule (TM/HM/TEX) and OEM's line diagrams / circuit diagrams and OEM's (M/s Plasser) specifications, to the overall satisfactory functioning of this track machine after upgradation. After upgradation, Track Machine will be subjected to final inspection & testing by Railway Officer (on one week notice from OEM) before it is released from OEM facility and dispatched to field / work site for trial blocks before Commissioning. Inspection and acceptance of machine shall be carried out as per para of technical specifications of Tender document. Should any modification be found necessary as a result of the tests, these shall be carried out by the supplier at his own expenses.

10. Warranty:

Defect Liability Period for the new technically upgraded CSM-959 & CSM-970 shall be as Railway Board Contracts i.e. 1200 hours of effective working hours or 18 months from date of commissioning or 24 months from date of delivery, whichever is earlier, (except for tamping bank, for which this warranty will be 24 months or 2000kms, whichever is earlier from the date of commissioning).

The contractor should repair the Track Machine and replace the said defective part within 72 hours or earlier from the date of written request/e-mail/whatsapp by the competent authority, to avoid stabling of machine. Failing which, a penalty of Rs. 5000/- per day will be imposed for the period of delay beyond this stipulated period, subject to a maximum amount of penalty of Rs. 2,00,000/- in one instance.

OEM Service engineers will inspect the machine after interval of three months and will submit detail technical report regarding all the major assemblies during warranty period.

11. Earnest Money, Security deposit and all other retention money as per terms and conditions will be released only after satisfactory completion of warranty period on submission of No-Claim Certificate by the firm as per extant rules of railway as applicable time to time.

12. If contractor does not attend the track machines for complete machine overhauling at specified place on stipulated date of complete machine overhauling after informing on arrival of track machine at said location by the Railway, a penalty of 5,000/- (Rupees Five thousand only) per day will be levied from stipulated date for delay in reporting maximum up to Rs. 5,00,000/- (Rupees Five Lakh only) for each machine. For both machine maximum penalty will be Rs 10,00,000/-.

13. If contractor does not complete machine overhauling at specified place on stipulated date of complete machine overhauling i.e. within 03 months of execution phase, a penalty of 5,000/- (Rupees Five thousand only) per day will be levied from stipulated date for delay in completion maximum up to Rs. 5,00,000/- (Rupees Five Lakh only) for each machine. For both machine maximum penalty will be Rs 10,00,000/-.

14. The cost of work includes labour, transportation, material & relevant taxes. No other incidental charges will be payable.

15. All released spare parts will be returned to Engineer-in-charge of zonal depot i.e. SSE/ZTMD/BPL, who will be the in charge for completion of this complete machine overhauling work.

16. Consignee will be SSE/ZTMD/BPL.

17. For all technical matters pertaining to overhauling work of this track machine, the decision of Dy CE/TMD/BPL will be final & binding to the firm to honour it.

18. Security Deposit/Performance guarantee will be applicable as per GCC clause of Railway.

19. After fixing of items, track machines should work/function properly & should be calibrated as OEM, M/s. Plasser specifications & commissioned for proper working by the contractor.

20. All other terms & conditions as embodied in the tender document and signed by the firm shall be deemed and taken to be part & parcel of the agreement.

21. PVC Clause:- Not applicable, as the quoted/accepted Rates will remain firm of contract agreement.
22. Arbitration Clause: - As per GCC and Railway guidelines as applicable.
23. Only specified makes against each item as mentioned in tender schedule will be permitted for fitment of CSM-959 & CSM-970 track machines.
24. No tools and Plant will be provided by Railway for completion of work. Electricity will be supplied by Railway free of cost for minor work, if required for execution of the above mentioned items/works.
25. Bill passing authority will be Dy. CE/TMD/BPL.
26. Bill paying authority will be Sr. DFM/BPL.
27. APPLICABLE TECHNICAL DOCUMENTS: Following manual/documents will be applicable for this work.  
 (a) Indian Railway Track Machine Manual- Sept. 2019 as updated on date of opening of tender. An updated copy of above manual/documents is available on Indian Railway web site [Indianrailways.gov.in/railway board](http://Indianrailways.gov.in/railway%20board).  
 (b) Maintenance Schedule for CSM-959 & CSM-970 as issued by RDSO (TM/HM/TEX). This is an overall Reference Documents for guidance. The scope of contractor will be limited to SCHEDULE OF ITEM, RATE AND QUANTITIES (Tender Documents).  
 Note 1: Subsequent changes after date of opening of tender including correction slips to above documents will be applicable only when revision of rates, terms and conditions are worked out with mutual consent.
28. ORDER OF PRECEDENCE: In case of any difference, contradiction, discrepancy, with regard to Conditions of tender/contract, Specifications, Drawings, Bill of quantities etc., forming part of the tender/contract, the following shall be the order of precedence:  
 i) Letter of Award  
 ii) Tender Document along with GCC.  
 iii) Indian Railway Track Machine Manual,2019  
 iv) Relevant B.I.S. codes.

29. This up-gradation work will be done at OEM facility at Faridabad/Karjan.

30. STAGES

SN.	Stage
1	Award of contract
2	Thorough inspection of the existing machine & detailed design work
3	Procurement of spares
4	Finalization of base bar chart
5	Overhauling & upgradation
6	Final Inspection & Testing of functions on track in OEM facility
7	Dispatch of machine to field
8	Trial Blocks
9	Commissioning of track machine after successful trials
10	Warranty period

31. The cost of work includes the scope of work as defined above. No other incidental charges will be payable. Consumables required during up-gradation and testing at OEM premises are deemed to have been included in the cost and nothing extra shall be paid on this account.  
 The satellite frame shall be replaced in case found beyond repair. The cost of replacement is not part of this tender and will be paid separately on mutually agreed terms.
32. All efforts have been made to include scope of work in schedule & Special Conditions. It is the bidders responsibility to upgrade the machine, with in the frame work of tender. Any incidental work is to be



executed by the bidder for which no extra payment will be made except items which are defined to be not executed in the tender.

33. Contractor is entrusted with overall responsibility of final inspection, testing & commissioning of machine after up gradation and any defects in material / installation/ connection/ fitting/ workmanship etc. will be identified by him for further repair/replacement/corrective action.
34. In case or reasons beyond the control of contractor, suitable extension of completion period will be considered by competent authority.
35. Approved MAKE of material & Sample  
Contractor has to supply the material of approved MAKE, with details as under:

Item	Approved Makes
Hydraulic Hose	AEROQUIP, PARKER, Plasser
Electric Spares	Plasser, Schneider
Electric Cables	Plasser, LAPP

36. Safety of Staff: The Agency is wholly responsible for the safety of its staff during up-gradation of machine at OEM facility and during trial of machine at site. Railway will not be liable for any such claim whatsoever.
37. Maintenance of Records : The contractor shall maintain the daily progress register for keeping details of daily activities. The contractor shall compare it with standard/amended bar chart and shall submit weekly progress through e-mail to the Railway officers. The contractor shall also maintain site order book for receiving instructions from railway staff.
38. Price Variation Clause: Not applicable for this contract.
39. Quantity Variation: All efforts have been made to include scope of work in Special Conditions. It is the bidders responsibility to upgrade the machine, within the framework of tender. Any incidental work is to be executed by the bidder for which no extra payment will be made except items which are defined to be not executed in the tender.
40. Statutory Variation Clause: All the bidders/tenderers while quoting the rates should clearly indicate the rate of applicable duties and taxes included in the prices quoted by them. Any variation in tax structure/rate shall be dealt with under Statutory Variation Clause.
41. Released Spares: All released spares including engines, tamping unit, hydraulic pumps & motors etc. will be railway's property.
42. During fitting & handling of spares by the contractor if any item got damaged due to the negligence on the part of agency or his personnel, it shall be replaced / rectified by the contractor free of cost.
43. Up-gradation work will be carried out under supervision of railway representative.
44. The tenderer has to quote the rate against the Schedule as percentage above or below.

**SECTION – 4**

**INSTRUCTIONS TO BIDDERS**

**(ITB)**

## INSTRUCTION TO BIDDERS

1. In connection with the Invitation of Bids for the work, Dy CE (TMD) BPL, acting on behalf of The President of India, issues this Tender Documents for the work as specified in the Tender Document.

2. Bids other than in the form of E-Bids shall not be accepted against above Tenders. For this purpose, Tenderers are required to get themselves registered with IREPS website along with class III Digital signature certificates issued by CCA under IT Act-2000.

3. Tenderer requiring any clarification of the Tender Document shall contact the Dy. CE/ TMD/BPL WCR in writing at the address DRM Office Bhopal or by email at **dy.cetmbpl@gmail.com**.

4. Care in Submission of Tenders: Refer GCC, April-2022 with correction slips.

5. **Submission of Tender:** The Tender shall be submitted e Tender online on the e-procurement website [www.ireps.gov.in](http://www.ireps.gov.in) on or before the due date and time fixed for the receipt of e-bids as set forth in the tender document. Detailed guidelines for Tender submission are given online on the website.

### 6. Deviations:

6.1 Tenderer should submit their offer strictly in accordance with the terms and conditions of tender document. Tenderer should not quote any deviation from the tender document and should not quote any conditions.

6.2 Nevertheless, as an exception, if any unavoidable deviation or conditions are quoted by the tenderers, financial impact of each of such conditions/deviations on their quoted unit rates, in terms of Rupee per unit rate, shall be clearly mentioned by the tenderer in the tender offer.

6.3 If any of deviation/condition has no financial impact on the quoted rates, in such cases also, the tenderer must clearly mention its financial impact as 'Nil'. This is required for proper financial evaluation of such conditional/deviated offers.

7. **Bid Security/EMD:** As per GCC April-2022.

8. **Security Deposit:** As per GCC April-2022.

9. **Performance Guarantee:** As per GCC April-2022.

10. **Price Variation Clause:** Not applicable.

11. **Deadline for Submission of Tender:** Tender must be uploaded online no later than the date and time specified in tender notice/tender document.

12. **Online Opening of Bids:** No Contractor shall be required to be present in the Railways office for any E-Tender opening process. They can obtain totally transparent bid tabulation statement by logging on to the IREPS.

The Railway does not guarantee opening of tenders at the specified date and time. Thus, the actual time and date of opening may, at the sole discretion of the Railway, be rescheduled to any future time and date without assigning any reasons thereof. Since this is an online bidding where the website does not permit submission of offers after the stipulated date and time of closing, it is ensured that no offers are submitted after the scheduled tender closing time and date. Thus, there is no scope for late / delayed tenders.

13. **Evaluation of tenderer:** Refer GCC April-2022 with correction slips

14. **Consideration of Tenders:** As per GCC April-2022.

15. **Contract Documents:** As per GCC April-2022.

**16. Renewal of Deposits by Contractor:** The fixed deposit receipt submitted by the successful tenderer towards Security deposit/PG and it shall be the responsibility of the tenderer/s to advise, the Sr. DFM/BPL for renewal and revalidation of the currency period of the fixed deposit as required. Such advice by the Contractor shall be made well in advance so as to reach the Sr. DFM/BPL not later than one month before the maturity of the currency period. If the contractor fails to do so, the loss of interest on the fixed deposits, if any shall be solely on the contractor's account and the railway shall not in any way be responsible for the loss of interest suffered by the contractor.

**17. Corrigendum:** The Employer reserves the right to issue any corrigendum to the tender prior to the due date of closing of the tender. Tenderers are also advised to check the website accordingly for the purpose of submitting their e-bids or revising their e-bids, if submitted earlier to the issue of corrigendum if any.

**18. Inclusion of 'Letter of Credit' (LC) as Mode of Payment as option in Works Tenders or Service Tenders as per Railway Board's Letter No.2018/CE-I/CT/9 dtd.04.06.2018 will be applicable.**

# **SECTION – 5**

# **ANNEXURES**

# CONTRACT FORM

CONTRACT AGREEMENT OF WORKS CONTRACT AGREEMENT NO. \_\_\_\_\_ DATED  
\_\_\_\_\_

ARTICLES OF AGREEMENT made this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_ between President of India acting through the Railway Administration hereafter called the "Railway" of the one part and \_\_\_\_\_ herein after called the

"Contractor" of other part.

WHEREAS the Contractor has agreed with the Railway for performance of the works \_\_\_\_\_ set forth in the Schedule hereto annexed upon the Standard General Conditions of Contract, corrected upto latest correction slips and the Specifications of \_\_\_\_\_ Railway corrected upto the latest correction slips and the Schedule of Rates of \_\_\_\_\_ Railway, corrected upto latest correction slips and the Special Conditions and Special Specifications, if any and in conformity with the drawings here-into annexed AND WHEREAS the performance of the said works is an act in which the public are interested.

NOW THIS INDENTURE WITNESSETH that in consideration to the payments to be made by the Railways, the Contractors will duly perform the said works in the said schedule set forth and shall execute the same with great promptness, care and accuracy in a workman like manner to the satisfaction of the Railway and will complete the same in accordance with the said specifications and said drawings and said conditions of contract on or before the \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_ and will maintain the said works for a period of \_\_\_\_\_ Calendar months from the certified date of their completion and will observe, fulfil and keep all the conditions therein mentioned (which shall be deemed and taken to be part of this contract, as if the same have been fully set forth herein), AND the Railway, both hereby agree that if the Contractor shall duly perform the said works in the manner aforesaid and observe and keep the said terms and conditions, the Railway will pay or cause to be paid to the Contractor for the said works on the final completion thereof the amount due in respect thereof at the rates specified in the Schedule hereto annexed.

**Contractor** \_\_\_\_\_ (Signature)  
**Address** \_\_\_\_\_  
**Date** \_\_\_\_\_

**Railway: Designation** \_\_\_\_\_  
**(For President of India)**  
**Date** \_\_\_\_\_

**Signature of Witnesses (to Signature of Contractor) with address:**  
**Witnesses:**

\_\_\_\_\_

### Form of Guarantee Bond For Performance Guarantee Bank Guarantee Bond

The President of India,  
Through,  
Sr. DFM / BPL  
West Central Railway,

In consideration of the President of India (hereinafter called "the Government") having agreed to accept from \_\_\_\_\_ (hereinafter called "the said Contractor/s), under the terms and conditions of an Agreement/Acceptance letter dated \_\_\_\_\_ made \_\_\_\_\_ between \_\_\_\_\_ and \_\_\_\_\_ (hereinafter called "the said Agreement") the Performance Guarantee for the due fulfillment by the Contractor/s of the terms and conditions in the said Agreement on production of Bank Guarantee for Rs. \_\_\_\_\_ (Rs. \_\_\_\_\_ only) we, \_\_\_\_\_ (indicate the name of the Bank hereinafter referred to as "the Bank) at the request of \_\_\_\_\_ contractor/s do hereby undertake to pay the government an amount not exceeding Rs. \_\_\_\_\_ against any loss or damage caused to or suffered by or would be caused to or suffered by the Government by reason of any breach by the said Contractor (s) of any of the terms or conditions contained in the said Agreement.

1. We \_\_\_\_\_ (indicate the name of the Bank) do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on demand from the Government stating that the amount claimed is by way of loss or damage caused to or suffered by the Government by reason of breach by the said contractor/s of any of the terms or conditions contained in the said agreement or by reason of the contractor/s failure to perform the Agreement, any such demand made on the bank shall be conclusive as regards the amount due and payable to the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. \_\_\_\_\_.

2. We undertake to pay to the Government any money so demanded notwithstanding any dispute or disputes raised by the contractor(s)/supplier (s) in any suit or proceeding pending before any Court or Tribunal relating thereto our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the contractor (s)/suppliers (s) shall have no \_\_\_\_\_ against us for making such payment.

3. We, \_\_\_\_\_ (indicate the name of the bank) further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Agreement, including Maintenance/Warranty Period, and that it shall continue to be enforceable till the dues of the Government under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till \_\_\_\_\_ office/Department) Ministry of Railway certifies that the terms and conditions of the Agreement have been fully and properly carried out by the said Contractor (s) and accordingly discharged this guarantee, unless a demand or claim under this guarantee is made on us in writing on or before the \_\_\_\_\_ we shall be discharged from all liability under this guarantee thereafter.

4. We, \_\_\_\_\_ (indicate the name of the Bank) further agree with the Government that the Government shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor (s) from time to time or to postpone from any time or from time to time any of the powers exercisable by the Government against the said contract and to forebear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the contractor/s or for any forbearance act or omission on the part of the Government or indulgence by the Government to the said contractor(s) or such any matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

5. This Guarantee will not be discharged due to the change in the constitution of the bank or the Contractor (s) Supplier (s).

6. We, \_\_\_\_\_ (indicate the name of Bank) undertake not to revoke this guarantee during its currency except with the previous consent of the Government in writing.

Date this \_\_\_\_\_ day of \_\_\_\_\_ 20...

For \_\_\_\_\_

(Indicate the name of Bank)

(IMP Note: Bank authority signing the BG must affix their stamp indicating their name and employee code at last page of the BG, else BG will not be accepted)



## COVERING LETTER

Tender No. \_\_\_\_\_

Name of Service \_\_\_\_\_

To

**The President of India****Acting through the Principal Chief Engineer,**\_\_\_\_\_ **Railway.**

1. I/We \_\_\_\_\_ have read the various conditions to tender attached hereto and agree to abide by the said conditions.
2. I have submitted the required earnest money online with following details:
  - a) Amount: INR Rs. \_\_\_\_\_
  - b) Reference details regarding submission of earnest money: \_\_\_\_\_
3. I/We also agree to keep this tender open for acceptance for the validity period defined in tender document. In case of withdrawal of our offer within the validity period, I/We will be liable for forfeiture of my/our "Earnest Money".
4. I/We also hereby agree to abide by the tender conditions.
5. Full value of the Earnest Money shall stand forfeited without prejudice to any other right or remedies in case my/our Tender is accepted and I/we do not submit the Performance Guarantee within the time specified in the Tender document;
6. We fulfill the provisions of Public Procurement (Preference To Make In India) Order as applicable till date of finalization of tender.
7. Until a formal agreement is prepared and executed, acceptance of this tender shall constitute a binding contract between us subject to modifications, as may be mutually agreed to between us and indicated in the letter of acceptance of my/our offer for this service.
8. Our bid is submitted by person authorized to do so. Authorization, duly notarized is placed along with the tender.
9. I/We have submitted the details related to our company/Partnership firm as per the instructions given in Part-I of GCC-2022.
10. I/We have gone through and understood the provisions related to the "Integrity Pact" and "Conflict of Interest." I/We hereby declare that there is no conflict of interest in the submission of our bid. I/We also understand that the Railway Administration reserves the right to take necessary action as per tender conditions. I/We hereby declare that our offer is responsive, and I/We have submitted all the documents required for adjudging the responsiveness of our offer. The details are as per Annexure-VII of GCC. However, the Railway will be entitled to take a final call on this subject.

SEAL AND SIGNATURE OF THE BIDDER

Note: To be signed and uploaded by the authorized signatory of the bidder on its letterhead; otherwise, the tender will not be treated as responsive.

## WEST CENTRAL RAILWAY

## TENDER FORM (First Sheet)

Tender No. \_\_\_\_\_

Name of Work \_\_\_\_\_

To

The President of India

Acting through the \_\_\_\_\_ Railway

I/We \_\_\_\_\_ have read the various conditions to tender attached hereto and agree to abide by the said conditions. I/We also agree to keep this offer open for acceptance for a period of \_\_\_\_\_ days from the date fixed for closing of the tender and in default thereof, I/We will be liable for forfeiture of my/our "Bid Security". I/We offer to do the work for \_\_\_\_\_ Railway, at the rates quoted in the attached bill(s) of quantities and hereby bind myself/ourselves to complete the work in all respects within \_\_\_\_\_ months from the date of issue of letter of acceptance of the tender.

2. I/We also hereby agree to abide by the Indian Railways Standard General Conditions of Contract, with all correction slips up-to-date and to carry out the work according to the Special Conditions of Contract and Specifications of materials and works as laid down by Railway in the annexed Special Conditions/Specifications, Standard Schedule of Rates (SSOR) with all correction slips up-to-date for the present contract.

3. A Bid Security of ₹ \_\_\_\_\_ has already been deposited online/ submitted as Bank Guarantee bond. Full value of the Bid Security shall stand forfeited without prejudice to any other right or remedies in case my/our Tender is accepted and if:

- (a) I/We do not submit the Performance Guarantee within the time specified in the Tender document;
- (b) I/We do not execute the contract documents within seven days after receipt of notice issued by the Railway that such documents are ready; and
- (c) I/We do not commence the work within fifteen days after receipt of orders to that effect.

4. (a) I/We am/are a Startup firm registered by ..... Department of Industrial Policy and Promotion (DIPP) and my registration number is ..... valid upto ..... (Copy enclosed) and hence exempted from submission of Bid Security.

5. We are a Labour Cooperative Society and our Registration No. is ..... with ..... and hence required to deposit only 50% of Bid Security.

6. Until a formal agreement is prepared and executed, acceptance of this tender shall constitute a binding contract between us subject to modifications, as may be mutually agreed to between us and indicated in the letter of acceptance of my/our offer for this work.

Signature of Contractor(s)

Date \_\_\_\_\_

Address of the Contractor(s)

**FORMAT FOR CERTIFICATE TO BE SUBMITTED / UPLOADED BY TENDERER ALONGWITH THE  
TENDER DOCUMENTS**

I..... (Name and designation)\*\*appointed as the attorney/authorized signatory of the tenderer,  
M/s..... (hereinafter called the tenderer) for the purpose of the Tender documents for the work of ..... as per the tender No. .... of .....(Railway)\*\*, do hereby solemnly affirm and state on the behalf of the tenderer including its constituents as under:

1. I/we the tenderer (s) am/are signing this document after carefully reading the contents.
2. I/We the tenderer(s) also accept all the conditions of the tender and have signed all the pages in confirmation thereof.
3. I/we hereby declare that I/we have downloaded the tender documents from Indian Railway website [www.ireps.gov.in](http://www.ireps.gov.in) . I/we have verified the content of the document from the website and there is no addition, no deletion or no alteration to the content of the tender document. In case of any discrepancy noticed at any stage i.e. evaluation of tenders, execution of work or final payment of the contract, the master copy available with the railway Administration shall be final and binding upon me/us.
4. I/we declare and certify that I/we have not made any misleading or false representation in the forms, statements and attachments in proof of the qualification requirements.
5. **I/We also understand that my/our offer will be evaluated based on the documents/credentials submitted along with the offer and same shall be binding upon me/us.**
6. **I/We declare that the information and documents submitted along with the tender by me/us are correct and I/we are fully responsible for the correctness of the information and documents, submitted by us.**
7. I/we certify that I/we the tenderer(s) is/are not blacklisted or debarred by Railways or any other Ministry / Department of Govt. of India from participation in tender on the date of submission of bids, either in individual capacity or as a HUF/ member of the partnership firm/LLP/JV/Society/Trust.
8. I/we understand that if the contents of the **certificate** submitted by us are found to be forged/false at any time during process for evaluation of tenders, it shall lead to forfeiture of the Bid Security **and may also lead to any other action provided in the contract including** banning of business for a period of upto **two** year. Further, I/we (insert name of the tenderer) \*\*.....and all my/our constituents understand that my/our offer shall be summarily rejected.
9. I/we also understand that if the contents of the **certificate** submitted by us are found to be false/forged at any time after the award of the contract, it will lead to termination of the contract, along with forfeiture of Bid Security/Security Deposit and Performance guarantee **and may also lead to** any other action provided in the contract including banning of business for a period of upto **two** year.
10. I/We have read the clause regarding restriction on procurement from a bidder of a country which shares a land border with India and certify that I am/We are not from such a country or, if from such a country, have been registered with the competent Authority. I/We hereby certify that I/we fulfil all the requirements in this regard and am/are eligible to be considered (evidence of valid registration by the competent authority is enclosed)

SEAL AND SIGNATURE  
OF THE TENDERER

Place:  
Dated:

\*\*The contents in Italics are only for guidance purpose. Details as appropriate are to be filled in suitably by tenderer.

**ANNEXURE-V(A)**

Reference -Para 6.1 of ITT

**(This certificate is to be given by attorney/authorized signatory/each member of Partnership firm/Joint Venture (JV) / Hindu Undivided Family (HUF) / Limited Liability Partnership (LLP) etc.)**

I/We.....(Name), attorney/authorized signatory of the .....  
(constituent firm/constituent partner) and member/partner of the  
.....(tendering firm) hereby solemnly affirm and state as under:

1. I/we certify that ..... (constituent firm/constituent partner) is/are not blacklisted or debarred by Railways or any other Ministry / Department of Govt. of India from participation in tender on the date of submission of bids, either in individual capacity or as a HUF/ member of the partnership firm/LLP/JV/Society/Trust.

2. I/We have read the clause regarding restriction on procurement from a bidder of a country which shares a land border with India and certify that I am/We are not from such a country or, if from such a country, have been registered with the competent Authority.

I/We hereby certify that I/we fulfil all the requirements in this regard and am/are eligible to be considered (evidence of valid registration by the competent authority is enclosed),

SEAL AND SIGNATURE  
OF THE CONSTITUENT FIRM/CONSTITUENT PARTNER

Place:

Dated:

## GENERAL DETAILS OF TENDERING FIRM

SN	Item Description	Item Details	Page No.
1.	Name of the Bidder		
2.	Constitution of Bidder <sup>1</sup> (Tick as applicable)	Company/Partnership Firm/ JV	
3.	Full Name of Company/Partnership Firm/JV (as the case may be)		
4.	Year of Formation/Incorporation		
5.	Act under which Bidder is Registered		
6.	Registration Details		
7.	Registered Office Address		
8.	PAN No.		
9.	GSTIN No.		
10.	Registered Address		
11.	Communication Address along with Telephone, Fax, and Email Address		
12.	In case of Joint Venture (JV), MoU and other details		

## Notes:

1. Please submit the supporting documents demonstrating the status of the Applicant/Bidder as a legal entity corresponding to its constitution, such as a certificate of incorporation along with the Memorandum and Articles of Association for a Pvt./Public Ltd. Company, a copy of the partnership deed, etc.
2. Please submit a copy of the registration certificate as applicable. PAN card and GSTIN certificate should also be enclosed.
3. Details and documents regarding the Constitution of the Bidder must be submitted.

**SEAL AND SIGNATURE OF THE BIDDER**

**END OF DOCUMENT**