

No.: RDSO-TI0LKO(OHE)/97/2020-O/o PED/TI/RDSO

Date: 19.01.2022

Sub: Reason document for Draft STR No. TI/STR/032 Rev. '1' for Self Propelled Mechanized Machine Vehicles and self-propelled 8WDETC.

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1. Draft STR STR No. TI/STR/032 Rev. '1' for Self Propelled Mechanized Machine Vehicles and self-propelled 8WDETC was uploaded on RDSO website on 13.10.2020 for one month for seeking comments and suggestions.
2. Following comments/suggestions have been received so far and are summarized below:

Clause No.	Particular/Description of daft STR No. TI/STR/032 Rev. '1'	Comments received from	RDSO's Remark
Title of STR	SCHEDULE OF TECHNICAL REQUIREMENT FOR THE SELF PROPELLED MECHENISED MACHINE VEHICLES (Self-Propelled Multi-Purpose Utility Vehicle, Self-Propelled Auger, Self-Propelled Wiring Train & Mast Erection Machine Vehicle & Self-propelled 8-Wheeler Diesel Electric Inspection & Maintenance OHE Car Under Slung Type – 8W DETC) WITH DIESEL ELECTRIC/DIESEL HYDRAULIC (UNDER SLUNG) TRANSMISSION FOR OPERATION ON BROAD GAUGE (1676 MM) FOR USE ON OHE WORKS	-	<ul style="list-style-type: none"> <li>The wording of title description is re-arranged and corrected to make the title short (i.e. mechanized vehicles name details have been shifted to para-1.0- scope).</li> </ul>
Page-2	Amendment history table.	-	<ul style="list-style-type: none"> <li>Amendment history updated by mentioning clause Nos. of STR which are modified during the revision of this STR (No. TI/STR/032).</li> </ul>
1.1 (Scope)	The Self-Propelled Mechanised Machine Vehicles with Electric/Diesel hydraulic type are used for erection of new OHE, digging foundations, Erection of Mast and 8-Wheeler Inspection & Maintenance OHE car (8W DETC) for periodical inspection, patrolling and maintenance of traction overhead equipment (OHE) also to attend OHE break down, restoration etc. It is also required to erect small lengths of catenary and contact wire by way of repairs of damaged OHE.	-	<ul style="list-style-type: none"> <li>This para has been reviewed again and redrafted for more clarity as:            "This Schedule of Technical Requirement (STR) supersedes the STR No. TI/STR/030 Rev'0' (August, 2011), as the requirement of STR No. TI/STR/030 Rev'0' (August, 2011) has been merged into this STR".</li> </ul>
1.2 (Scope)	The Schedule of Technical Requirement (STR) mentioned hereunder is issued to serve as a guide to manufacturers (called the "firm" hereafter) of Self-Propelled Mechenised Machine Vehicles and 8W DETC for OHE works should be read in conjunction with the following Specifications and with latest National & International standards.	-	<ul style="list-style-type: none"> <li>This para has been reviewed again and modified by adding new line "to assess the manufacturing capability of manufacturer" for more clarity about the scope of this STR.</li> <li>Further, Mechanized machine vehicles name details have been shifted here from the title description.</li> </ul>

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2.1	The firm should have currently valid ISO-9001-2015 certification issued by an approved agency with the activity desired clearly mentioned in the scope of certification. The firm shall have a Quality Manual indicating the extent of control over production.	-	<ul style="list-style-type: none"> <li>This para has been reviewed again and modified for more clarity.</li> </ul>
2.2	A system of regular submission of rejection details of material giving rejection rate, cause of rejection, corrective action taken etc. on quarterly basis should be followed by the firm.	-	<ul style="list-style-type: none"> <li>This para has been reviewed again and modified for more clarity.</li> </ul>
2.5	The testing and measuring equipment shall be duly calibrated and the validity of calibration should be current and verified by physically checking the calibration certificate issued by the Calibration Agency from whom it was calibrated.	-	<ul style="list-style-type: none"> <li>This para has been reviewed again and wording corrected for more clarity.</li> </ul>
2.6	The firm shall have a system of easy traceability of the product from manufacturing stage to finished product stage. Stamped identification marking with serial number of beam should be used for this purpose.	-	<ul style="list-style-type: none"> <li>This para has been reviewed again and modified for more clarity.</li> </ul>
3.0 & 4.0, 5.0, 6.0 & 7.0	Quality Assurance Plan (QAP)	-	These para have been reviewed again and modified & renumbered for more clarity.
<b>Annexure-II (Testing Facilities):</b>			
Annexure-II (S.N. 1 to 4)	<ol style="list-style-type: none"> <li>Motorised Meggar (500V)= 01 No.</li> <li>Meggar (500V)=01 No.</li> <li>Motorised Meggar (1000V)= 01 No.</li> <li>Meggar (1000V)= 01 No.</li> </ol>	-	<ul style="list-style-type: none"> <li>This para has been reviewed again and new term "Insulation Resistance Tester (IR Tester)" is used in place of "Meggers" since, Megger is a proprietary term.</li> <li>Digital type Insulation Resistance Tester is mentioned in place of Motorised type Meggers based on advancement of technology.</li> <li>Further, the quantity is specified as 02 Nos. (in place of total 4 Nos. meggarers), as 02 Nos. Digital Insulation Resistance tester (of specified test voltage range) can serve the requirement.</li> </ul>
Annexure-II (S.N. 5)	Testing facilities for Aux. Machines before mounting* (Qty.=01 No.)	-	This para has been reviewed again and is deleted based on experience gained during development of 8WDETC as there is no such auxiliary machines fitted (on DETC) with main machines (like Traction Motor, Engine, Traction Alternator, Rectifier etc.)

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Clause No.	Particular/Description of daft STR No. TI/STR/032 Rev. '1'	Comments received from	RDSO's Remark
Annexure-II, (S.N. 13)	Universal Testing Machine with graphical recording facilities for conducting tensile tests.  (capacity =40 tonne, Qty.=01 No.)	M/s Phooltas Transrail Ltd., Patna: 1.) Some of the companies engaged in the production of such vehicles as well as new entrants may find it difficult to invest in all the testing facilities specified in Annexure-II, hence outsourcing of the same from NABL accredited laboratories should	Partially accepted. <ul style="list-style-type: none"><li>All tests of Annexure-II are not acceptable for outsourcing. However, some of the tests of Annexure-II are permitted for outsourcing. Most of the in-house tests are likely to be used for routine tests on each vehicle.</li><li>The test at S.N.-13 (<b>universal testing machine</b>) is permitted to be outsourced from any Government Lab/NABL accredited Laboratories.</li></ul>
Annexure-II (S.N.23)	Water Load Box Test set up (for Water Load test of Engine & Alternator set) [capacity- 300KW or more] Qty.=01 No.	continue to be permitted. Since the tests to be carried out as per the specifications will have to be done, it should not matter they are done in-house or out-sourced.  2.) In case of out-sourcing of all the tests is not permitted, testing facilities mentioned at serial nos. 13 and 23 should also be added in out-sourced items.	Out sourcing of the test facility mentioned at S.N.23 (i.e. Water Load Box test), is not accepted since, this test is performed as routine test of power pack and is done in-house on each vehicle. However, capacity of Water Load Box Test set up is corrected as Minimum 250 KW.
Annexure-II (S.N.-20)	High Voltage Tester (HV Tester)  (Capacity=3KV/5KV)	-	Capacity of HV Tester is corrected as "Minimum 3KV" in place of "3KV/5KV" based on experience gained during development of 8WDETC.
Annexure-II (S.N.-24)  (New para)	----	-	New para:  New para is added for " <b>Bogie Load Testing facility</b> " for carrying out Bogie load test, based on experience gained during development of 8WDETC.
Annexure-II	*Testing facility mentioned at S.N. 5, 12, 16, 17, & 18 above, may be outsourced from NABL accredited Laboratories.	-	Provision for "A Government Laboratory" is added for outsourcing of Testing facilities with existing provision of "NABL accredited Laboratories".
Annexure-III	Jigs, Fixtures & Gauges as required should be available in sufficient quantity or be procured within 6 months of awarding of contract. Some of them are as below.	-	<ul style="list-style-type: none"><li>This para has been reviewed again and modified for more clarity.</li></ul>

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