

Scope of Work

1. Name of Work: Up-gradation / modification of “ESSAE” Make existing EIMWB of Jabalpur Division installed at Dundi (DDCE), Mehgaon (MEGN), Kachhpura (KEQ), Gosalpur (GSPR) and Gadarwara (GAR) for provision of wheel wise load measurement and elimination of WAG-12 LOCO as per RDSO specification WD-29-MISC-19 (Rev.1) along with commissioning and stamping of weighbridge from Legal Metrology, W&M Department, 18% GST etc. through OEM/OEM Authorized service provider on single tender basis.
2. Place of Work: Jabalpur Division
3. Period – The work shall be started within 15 days from the issue of LoA and should be completed within 06 months from the issue of LoA.
4. Supervisory and labor cost shall be in scope of Contractor.
5. Any item/component/software required for modification will be in the scope of the contractor.
6. Trenching and refilling for cable routing, laying cable through respective conduit pipe and termination of cable will be in the scope of contractor, if required.
7. While laying the cable in the periphery of the weigh zone and the track the route map shall be appraised to the concerned SSE/C&W to avoid cable cut and other damages to the Railway.
8. During course of attending the modification if railway power is utilized the same will be provided free of cost.
9. While attending the modification work if any damages done to the Railway property, the appropriate cost will be recovered from the contractor.
10. The accessories which are installed in and around the weigh zone area should not infringe and shall comply the rules of SOD in Railways.
11. No additional charges will be paid for transportation of requisite material to accomplish above contract.
12. Railway will provide line/site clearance for installation of material and cable routing on written request from the contractor.
13. Railway will provide test wagon for calibration and stamping of system on written request from the contractor.
14. The contractor shall perform work irrespective of Holidays and weekend rests and should complete the work within 06 months.
15. Any failure of weighment due to malfunction of new software / non-weighment of wheel wise load / non-elimination of WAG-12 loco will be treated as Breakdown and will be covered as per terms and conditions of the existing AMC of the concerned weighbridge.
16. If any technical glitches in the new software arises, the repair / replacement shall be attended and rectified by the contractor without any additional charges, the maintenance will be in scope of existing AMC of concerned EIMWB.
17. Cost of travel and lodging and boarding of the service engineers is to be borne by the contractor and no extra payment or arrangement in this regard is to be made by the Railway. Railways will not accept non-availability of transportation as an excuse for delay in attending the breakdowns and calculating the penalty.

18. No advance payment shall be made. Single payment will be made submission of completion certificate and commissioning certificate signed by Railway representative. Bill paying authority shall be Sr. DFM JBP and bill passing authority shall be Sr. DME (Frt) JBP.
19. Maintenance period for this work will be 03 months after successful commissioning. Security Deposit will be released after maintenance period.
20. This contract shall be governed by GCC Works 2022 with all amendments thereof.
21. Modification work for installation and commissioning of wheel wise load measurement and WAG-12 elimination in EIMWB shall be applicable only for EIMWBs installed with older specification (prior to RDSO specification no. WD-29-MISC-19 (Rev-1) issued in Oct. 2021) and not equipped with this facility.
22. Work shall be undertaken on turnkey basis which will incorporate all hardware, software, other items and all incidental costs etc. required for commissioning of this facility in EIMWB to the satisfaction of WCR.
23. Requirement of existing EIMWB downtime for this modification shall be clearly specified in the offer.
24. Accuracy level of wheel wise load measurement shall be clearly specified in the offer submitted by OEM. Accuracy level should be within $\pm 1\%$. This accuracy level is under finalization with RDSO, modification work may be undertaken; however, commissioning shall await finalization of accuracy levels by RDSO.
25. Post changes (if any) in the existing software, only one application software should be available in-line with the existing arrangement i.e. application software either available at local machine or at cloud server of CRIS.
26. OEM must ensure that commissioning of wheel wise load measurement facility will not adversely affect any existing functionality of EIMWB. An undertaking to this effect shall be submitted with the offer.
27. Wheel-wise load measurement data for last 200 rakes should be stored in the system.
28. Existing protection levels such as lightening & transient protection, environmental protection and software application protection etc. as applicable for the existing EIMWB will remain unchanged post-commissioning of this facility.
29. During the process of capturing the wheel wise data, there shall be no copy of data stored in local PC which is in a readable or accessible format by any other means other than the authorized software application.
30. There shall be no option for operator to edit/modify/delete any of the wheel wise weighment data as captured and stored in application software.
31. In case the PC is disconnected from the weighing console, the wheel wise data report should be directly printed through the existing serial of digitizer port using online printer.
32. Any requirement of legal metrology re-certification arising due to above modification work shall be clearly specified in the offer and incidental legal meteorology certification cost etc. related to this modification shall be part of rate discussed under para 22 above.
33. This facility should be checked and calibrated on annual basis preferably during the prescribed annual calibration-cum-certification exercise for EIMWB. However, based on requirement of WCR/breakdown etc., OEM should undertake this exercise as advised by WCR.

34. Model format for commissioning of this facility and regular reporting to WCR are as under which can be suitably modified later by the WCR to suit local requirement.

A. Format for commissioning / checking of wheel-wise load measurement:

1	Location of Weighbridge / Division / Railway															
2	Railway / Private															
3	OEM of EIMWB															
4	RDSO Specification no. through which EIMWB was purchased															
5	Date of Commissioning of EIMWB															
6	Date of Commissioning / checking of wheel-wise measurement facility															
7	Checking parameters															
i	Gross weight of test wagon used (test wagon must have valid calibration certificate)															
ii	Corresponding wheel-wise weight								Measured value							
	L1	L2	L3	L4	R1	R2	R3	R4	l1	l2	l3	l4	r1	r2	r3	r4
iii	Accuracy level = $(l1-L1)/L1$ and so on Should be within $\pm 1\%$															
<p>N. B. – 1. For example, 100 t gross test van, L1 to R4 values shall be $100/8 = 12.5t$</p> <p>2. l1 to r4 are actual measured value through application software.</p> <p>3. Identification/Numbering of wagon wheels as per RB letter no. 2022/M(N)/951/28-Part (1) E-3401455 dated 03-08-2022.</p>																

Name, Designation & Signature of EIMWB OEM

Name, Designation & Signature of Railway Representative

B. Format for reporting of wheel-wise load measurement data:

1	Location of Weighbridge / Division / Railway																			
2	Report date & time																			
3	Rake ID / Train No.																			
4	Commodity																			
5	Wheel-wise load measurement report																			
6	Wagon no.	Type of wagon	Position from locomotive	Gross weight in tonne	Wheel-wise load in tonnes								Weight difference							
					L1	L2	L3	L4	R1	R2	R3	R4	L1-R4	L2-R3	L3-R2	L4-R1	Bogie 1 (leading) (LHS to RHS)	Bogie 2 (trailing) (LHS to RHS)	Wagon (LHS to RHS)	
1																				
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				

Note: Identification/Numbering of wagon wheels as per RB letter no. 2022/M(N)/951/28-Part (1) E-3401455 dated 03-08-2022.