Dedicated Freight Corridor Corporation of India Limited

(A Government of India Enterprise

PLANT AND EQUIPMENT WORKS ICB NO. PE P-6

Response to Queries (Query No. 273 to 321)

Following are the Employer's Clarifications to the perspective Bidders' queries, w.r.t. to the Pre-Bid meeting held on 22nd Dec. 2017 against Bid invitation notification no-2017/HQ/EN/PWC/PE P-6, Dated 01-12-2017 for Design, Manufacturing, Supply, Testing, Commissioning and Training of Plant and Equipment for Railway Track and Electric Over Head Equipment (OHE) on Dadri-Rewari-JNPT Network of Western Dedicated Freight Corridor package.

The aforesaid clarifications would not be a part of the Contract Agreement and no part of such clarifications can be reproduced, post award, by the successful Bidder/Contractor to drive home a point or can be cited as basis for any change in Bid process.

No.	Vol. No.	Page No.	Clause No.	Title	Questions/Requirement	DFCCIL Clarification
273		41- 44/172	Section2 3.2(e) (iii) Specific Experience in Manufactur e & Supply of Key machine	Experience in design, manufacturing, supply and commissioning of the following Key Machines:	Our potential supplier(s) do not comply with current requirement. Please kindly consider to change as per below. No.1)2)3)4)5) and 6) Please change "during last six (6) years" instead of last 3 years. No.3) Please add "minimum 05 nos. of Shoulder Ballast Cleaning Machine and or Ballast Cleaning Machine". No.7) Please change "during last five (5) years" instead of last 3 years. No.9)	In this direction, Item no-8 of Addendum no-8 may be referred.

					Please change "minimum 02 nos." instead of 03 nos. No.10) Please change "during last six (6) years" instead of last 5 years. No.14) Please change "during last seven (7) years" instead of last 5 years.	
274	II	8/223	Section8 Employer's Requireme nt General	4.Codes, Standards and Specifications-4.2 IEC61508	Our potential supplier(s) do not comply with IEC61508. IEC61508 is usually used for rolling stocks not maintenance machine. Please add also EN14033-3 and EN13849-1. Total 297 units of Key machines have been supplied with EN14033-3 and EN13849-1 in last 8 years.	In this direction, Item no-10 of Addendum no-8 may be referred.

275	II	8/223	Section8 Employer's Requireme nt General	4.Codes, Standards and Specifications-4.3 IEC61709	Our potential supplier(s) do not comply with IEC61709. IEC61709 is usually used for rolling stocks not maintenance machine. Please add also EN14033-3 and EN13849-1. Total 297 units of Key machines have been supplied with EN14033-3 and EN13849-1 in last 8 years.	In this direction, Item no-11 of Addendum no-8 may be referred.
276	II	8/223	Section8 Employer's Requireme nt General	4.Codes, Standards and Specifications-4.6 IP	Our potential supplier(s) do not comply with NEMA IEC60529. All switch boards will be according Ingress Protection (IP) rating IP 55. Please consider to add as minimum IP rating as IP55.Total 297 units of Key machines have been supplied with IP55 in last 8 years.	In this direction, Item no-34 of Addendum no-8 may be referred.
277	II	110/223	Section 9 9.3 Self-driven Recording and Measurem ent Cars	3.9 (a) "Steel for car body structure"	Our potential supplier(s) use standard steel which is protected against corrosion by surface treatment and painting according to ISO12944- 1 to 8. This standard has been applied since 2004 to all of our potential supplier(s)' track maintenance machines. Our supplier has delivered over 45 track	In this direction, Item no-12 of Addendum no-8 may be referred.

					inspection vehicles since 2004 and 20 of those vehicles are successfully in operation in countries with tropical and desert climatic conditions. Please consider adding standard steel protected by surface treatment and painting according to ISO12944 as alternative.	
278	II	110/223	Section 9 9.3 Self-driven Recording and Measurem ent Cars	3.12 (b) "Fatigue Life"	As requested by the international standard EN14033 for railbound construction and maintenance machines, our potential supplier(s) usually conduct(s) a static stability analysis of the frame and cabin by using a Finite-Element method. The standard EN14033 which refers to the standard EN12633 specifies the static loads vehicle bodies shall be capable of sustaining during their design life. This static analysis has been conducted by our potential supplier(s) for all track inspection vehicles delivered in the European Union since 2007 (9 units) and on customer request for other countries all around the world. Since many of our suppliers' track inspection vehicles are already in operation for over 20 years, the vehicles have been fatigue strength verified over time. The car body and cabin have even been improved over the last 40 years, thus making a fatigue life analysis redundant.	In this direction, Item no-13 of Addendum no-8 may be referred.

					Please consider to change this clause such as a static stress calculation of the car body and frame can be carried out instead of a fatigue life assessment	
279	II	113/223	Section 9 9.3 Self-driven Recording and Measurem ent Cars	3.19(h) (Single Piece Glass)	Our potential supplier(s) have manufactured double piece front windows with a central column for higher rigidity and safety in case of a crash (in compliance with EN14033), while still ensuring sight conditions according to UIC651. Double piece lookout glasses have been provided for more than 10 units in the last 4 years.	In this direction, Item no-14 of Addendum no-8 may be referred.
280	II	114/223	Section 9 9.3 Self-driven Recording and Measurem ent Cars	3.20 (e) Staff cabin	front windows. Both Recording Cars will have a separate sleeping room with four cushioned berths. However, only two additional folding berths can be provided for the ORC because of space issues. Please consider changing the clause such as only two additional folding berths can be provided for each car.	In this direction, Item no-15 of Addendum no-8 may be referred.
281	II	114/223	Section9 9.3 Self-driven Recording and	3.20 (f) Lavatory	Please also consider other environmentally friendly toilets with proven design with no night soil dropping on the track (e.g. incinerating toilets)	In this direction, Item no-16 of Addendum no-8 may be referred.

			Measurem			
222		444/000	ent Cars	0.00 (1)		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
282	II	114/223	Section9 9.3 Self-driven Recording and Measurem ent Cars	3.20 (h) Kitchen	For safety reasons our potential supplier(s) recommend to use electric hobs instead of LPG cylinders. Please consider to add electric hobs as an alternative.	In this direction, Item no-17 of Addendum no-8 may be referred.
283	II	115/223	Section9 9.3 Self-driven Recording and Measurem ent Cars	4.4 (b) Noise Level	Under those conditions it will be difficult for our supplier(s) to achieve 80 dB. Please change the maximum noise level to 85 dB.	In this direction, Item no-18 of Addendum no-8 may be referred.
284	II	116/223	Section9 9.3 Self-driven Recording and Measurem ent Cars	5.2 Fire Resistance	Our potential supplier(s) do not use GFRP panels, but they use panels which are fire resistant according to the latest European Standard EN 45545. Our potential supplier(s)'s panels are of proven design and have been used for all track inspection vehicles since 2014. Please consider to delete the term GFRP.	In this direction, Item no-19 of Addendum no-8 may be referred.
285	II	116/223	Section9 9.3 Self-driven Recording and Measurem ent Cars	5.4 (c) Glass Fiber reinforcement	Our potential supplier(s) will not use GFRP-panels, but they will still meet all the stated requirements. Our suppliers' panels are of proven design and have been used for all track inspection vehicles since 2014.	In this direction, Item no-20 of Addendum no-8 may be referred.

					Please consider to delete the term	
286	II	117/223	Section9 9.3 Self-driven Recording and Measurem ent Cars	5.4 (j) CAD data	glass fiber reinforced (GFRP). Our potential supplier(s) will make 3-D models with a CAD software, but they will only provide the drawings as hard-copy and/or PDF to the customer to ensure data protection. Please consider to accept	In this direction, Item no-21 of Addendum no-8 may be referred.
287	II	117/223	Section9 9.3 Self-driven Recording and Measurem ent Cars	5.7 (a) Steel pipe	Our potential supplier(s) do not use the material ASTM A 269, Gr. 304. They use stainless-steel pipes according to EN10216-5 and they only use elbows. Please consider to add other material in compliance with international standard and elbows.	In this direction, Item no-11 of Addendum no-6 dated 12-07-2018 may be referred.
288	II	117/223	Section9 9.3 Self-driven Recording and Measurem ent Cars	5.7 (b)	Our potential supplier(s) use single ferrules and different materials. Please consider to add single ferrule pipe fittings as an alternative to double ferrule pipe fittings and other material in compliance with an equivalent or better International standard.	
289	II	117/223	Section9 9.3 Self-driven Recording and Measurem ent Cars	5.7 (c)	Our potential supplier(s)'s brake hoses are according to UIC830-1. Please consider to add any other equivalent or better International standard.	

290	II	118/223	Section9 9.3 Self-driven Recording and Measurem ent Cars	5.11 Prototype test	Our potential supplier(s) will provide an example of a static stability analysis as described under clause 3.12 (b). Please consider to accept the static stability analysis of a recently delivered track inspection vehicle.	In this direction, Item no-22 of Addendum no-8 may be referred.
291	II	126/223	Section 9 9.3.1 Track Recording Car	8.4 (b) MMD Scan	Our potential supplier(s)'s clearance laser scanner operates with 250 revolutions per second. Thus, at a speed of 100 km/h the system scans approx. every 115 mm. This system has successfully been installed by our potential supplier(s) in the last 23 years with 26 units. Please consider to scan at least every 115 mm at speeds of 100 km/h.	In this direction, Item no-23 of Addendum no-8 may be referred.
292	II	128/223	Section 9 9.3.1 Track Recording Car	9.2 (h)Half rail profile and wear measurement system	Those accuracies cannot be achieved under real track conditions. Our potential supplier(s) always indicates the accuracies for real conditions. Please modify the specification as per below i. Lateral wear (Horizontal gauge side wear) 0.3 mm ii. Vertical wear 0.4 mm iii. 45° internal rail profile wear 0.4 mm iv. Rail roll over ± 0.5°	In this direction, Item no-27 of Addendum no-8 may be referred.

					v. Lip flow 0.4 mm	
293	II	128/223	Section 9 9.3.1 Track Recording Car	9.4 (a) Albedo Image	Our potential Supplier(s) do not understand what you mean by albedo image and how the image shall be taken. Please provide further information. We would propose to use the pictures of the obstacles taken by the driver's view video system. The images are synchronized with the track location. Thus, if an obstacle is detected, you can easily switch to the corresponding picture. If possible, please delete this clause.	In this direction, Item no-24 of Addendum no-8 may be referred.
294	II	129/223	Section 9 9.3.1 Track Recording Car	9.6 (d) System Performance	Please change the maximum speed from 120 km/h to 100 km/h as this is the requested measuring speed for the vehicle. Please also change the rail inspection longitudinal sample steps to 1mm or less. This is the standard frequency of our potential supplier's system which has been installed on 14 track inspection vehicles in the last 15 years.	In this direction, Item no-25 of Addendum no-8 may be referred.
295	II	129/223	Section 9 9.3.1 Track Recording Car	9.7 Switch Geometry	Our potential supplier(s)'s switch geometry measuring system has a resolution of 0.127 mm. Our potential supplier(s) always indicates the accuracies for real conditions. Under real track conditions the system can achieve	In this direction, Item no-28 of Addendum no-8 may be referred.

					a 95% reproducibility of 1 mm. This system has been installed on 38 units in last 23 years. Please consider to change as per below. The Switch Geometry Parameters reproducibility shall be: Resolution ≤ 0.13 mm and 95% Reproducibility ± 1.0 mm	
296	II	141/223	Section 9 9.3.2 OHE Recording Car	RIMTS Annexure1 8 Installation, Commissioning & Trial	Since installation of RIMTS have to been done IR's locomotives, our potential supplier(s) will not able to take a responsibility of installation. Please kindly modify to IR or the employer shall be responsible to install commission. Installation kits will be supplied.	In this direction, Item no-29 of Addendum no-8 may be referred.
297	II	143/223	Section 9 9.3.3 Inspection Vehicle	3 (c) Toilet	Please also consider other environmentally friendly toilets with proven design with no night soil dropping on the track (e.g. incinerating toilets).	In this direction, Item no-16 of Addendum no-8 may be referred.
298	II	143/223	Section 9 9.3.3 Inspection Vehicle	3 (d) Kitchen	For safety reasons our potential supplier(s) recommend to use electric hobs instead of LPG cylinders. Please consider to add electric hobs as an alternative.	In this direction, Item no-17 of Addendum no-8 may be referred.
299	II	143/223	Section 9 9.3.3 Inspection Vehicle	6. Lookout glass	Our potential supplier(s) recommend double piece front windows with a central column for higher rigidity and safety in case of a crash (in compliance with	In this direction, Item no-14 of Addendum no-8 may be referred.

					EN14033), while still ensuring sight conditions according to UIC651. Double piece lookout glasses have been provided for more than 10 units in the last 4 years. Please also consider double piece front windows.	
300		89 of 172	FORM I-B-2 Subclass (e) Item No. 170 of the Clarification No.3	Quality Manager and the Service Engineer	Referring to your kind clarifications in item No. 170 of the Clarification No.3, please allow us to have your confirmation by return that; (i) the Quality Manager (QM) and the Service Engineer (SE) can be nominated from the Specialist Manufacture(s) (SM), Other Manufacture(s) (OM), or any other third parties as well as Contractors' own staff; (ii) QM and SE are supposed to act as a single window of the Contractor to nothing but transfer the queries/answers between the Employer/the Engineer and SM/OM via telephone calls or emails, and; QM and SE can be stationed at Delhi NCR instead of the Site.	No Change is contemplated.
301	I	100 of 172	14.3 (C)	Payment of Retention money	We request you to accept release of retention money against BGs on	Refer ATB 14.3 (c) along with Sl. No.3 of Addendum No. 5 dated 22-06-2018.

302	I	110 of 172	PART II : Part B - Particular Conditions (PC) Cl.13.7	Adjustments for Changes in Legislation	quarterly basis. This practice has been followed in other WDFC contracts. It will ease out Contractor's cash flow. The clause only provides for the case where the Contractor benefits from any reduction in costs due to change in laws. It does not mention the procedure in case of any increase in the cost. Kindly modify the clause to also provide compensation to the Contractor towards any loss in case of increase in costs due to change in law.	In this direction PC 13.7 at Page 110/172 may be referred.
303	I	132 of 172	SCHEDUL E 4: 3.(e)	Payment Schedule	For Group B of P&E, 100% (one hundred percent) payment shall be due on issue of Taking Over Certificate for respective P&E of each Section. We request the Employer to follow the interim payment of 90% the Contract Price of the respective P&E upon delivery & the balance 10% after the issue of taking over certificate.	No Change is contemplated.
304	I	132 of 172	SECTION 6: FINANCIA L SUBMISSI ONS/Sche dule 4 Payment	Bank Guarantee	The current tender clause specifies that the Payments for Group A machines shall be made on submission of Bank Guarantee for an equivalent amount valid for a period of 56 days over the Scheduled Time of completion of the respective Section.	No Change is contemplated.

			Schedule/S L. NO . 3 (b)		These Bank Guarantees shall be released on certification by the Engineer on receipt in full and assembly at site of respective P&E. As a significant portion of the Contract qualifies for Group A, provision for additional Bank Guarantees for payments shall put additional financial burden on the Contractor. We request you to alternatively allow the payments against indemnity bond of same amount. This shall help in reducing the exposure of Contractor and ease out the financial burden. Similar practices are followed in many contracts of DMRC.	
305	II	17 of 223	14.1	Receipt of the P&E at Site	We understand all the Contractor shall deliver all P&E to the Track Machine Depot (TMD) at Saradhana station of WDFC rail network. These machines are to shifted to different nominated TMDs, IMDs & SIMDs by the Employer at 49 different locations. Whether the testing & commissioning of P&E will be performed at TMD Saradhana before dispatch? Kindly confirm. Please also clarify whether the maintenance & other services during DNP will be required to be carried out at all 49 different	In this direction, Item no-30 of Addendum no-8 may be referred.

					locations or at a central depot like Saradhana.	
306	II	24 of 223	19.2	Defect Notification Period 19.2 Defect Liability	Please confirm that the cost of rectification resulting from accidents & derailment or reasons not attributable to the contractor shall not be borne by the contractor.	In this direction, GCC sub Clause 11.2 may be referred.
307	II	26 of 223	25.1 (a)	Provisional Speed Certificate from RDSO	The clause specifies that the Provisional speed certificate shall be issued by DFCCIL & the cost shall be borne by the Employer subject to the submission of dynamic vehicle simulation.	No change is contemplated in clause 25.1 (a).
					We understand that the cost of conducting the dynamic vehicle simulation test will also be borne by the Employer.	In this direction of sub-clause 25.2 Section 9, Item no-31 of Addendum no- 8 may be referred.
308	II	90 of 223	Section 9.2/ SI. No. 2.7	Water wagon and camping coaches	We understand that Supply & maintenance of Water wagon and camping coaches are in Employer's scope including any supply, required modifications, required approvals, speed certificates etc.	Clause 1.5 and 1.6 of Section 9.2 at page no. 88/223 is self- explanatory in this regard. As regards Speed Certificate, Refer SI.No.31 of Addendum No. 8
309	II	204 of 223	Section 9.7	VCMBS	Please kindly confirm. Kindly confirm the tentative location for VCMBS. We also observe that there is no separate payment milestone for these works. Please incorporate a suitable milestone in the price schedule.	Tentative location of VCMBS shall be decided and finalized during design review stage based on the criteria as given in clause 1 of Section 9.7.
310	III	69 & 70 of 79	Section 10	ATTACHMENT-12 (System Overview of the Signalling System)	We understand that all requirements of Signaling & Telecommunication Sub-Systems	Yes, the attachment is for information only for the Contractor to have knowledge of the system.

311	III	72, 73 & 74 of 79	Section 10	ATTACHMENT-13 (Scope and Purpose of Telecommunication System)	defined in Attachment 12 & 13 are being provided by other Interfacing contractors and is not included in the scope of PE P-6. These attachments are provided for information only. Please kindly confirm.	
312	II	27/223	Section 8 Employer's Requireme nts General Specificatio n	25.2 Sanction of vehicle for working over DECCIL network	The Contractor is required to engage an Independent Agency and/or Accessor to conduct oscillation test. However, such test shall normally be conducted under the responsibility of the owner of the machinery, and the Contractor, including any Specialist Manufacturers, usually do not and should better not engage Independent Agency and/or Accessor to conduct such test in order to secure the independency and reliability of third party assessment. Therefore, it is requested that the Employer would engage an Independent Agency and/or Accessor to conduct oscillation test. Please note that, when the Employer arrange the oscillation test, the Contractor will provide necessary technical support required by the Employer as much as possible. Please kindly modify this condition so that the Employer shall arrange an Independent Agency and/or	In this direction, Item no-31 of Addendum no-8 may be referred.

					Accessor to conduct oscillation test at the Employer's cost.	
313	II	136/223	Section 9.3.2 OHE Recording Car(ORC)	6 Supplier Experience	The catenary wire video system with "automatic detection" is a pilot project for our potential supplier. Our potential supplier will provide references of the catenary wire video system without automatic detection of the same sub-supplier which our potential supplier has already installed on numerous track inspection vehicles. Please kindly accept to erase the term "and having functionality for automatic detection". Our potential supplier has supplied over 200 measuring cars all around the world.	No Change is contemplated.
314	II	163/233	Section 9.4.3 Bridge Inspection Vehicle clause 4.2	Bridge Inspection Platform	Our potential supplier(s) would like to offer bridge inspection platform with below dimensional. This platform is also met for bridges of WDFC line. This type of platform had been supplied 12units since 2015 in the world including India. Please kindly accept below dimensional. a. Maximum Horizontal range:22 meters b. Maximum Lowering depth:14 meters	In this direction, Item no-32 of Addendum no-8 may be referred.

					c. Platform width:1 meters d. Maximum Load on the platform:280kg e. Maximum load on the telescopic platform: 280kg f. Rotation of the platform: Infinite g. Working height of pneumatic/hydraulic lift: 22meters h. Maximum lowering depth for pier inspection: 14.5meters	
315	II	197/233 And No.7 of Addend um No.3	Section 9.6 Rail cum road based vehicle with motorized elevated working platform(M EWP)	A-3 and A-5	Our potential supplier's 4x4 trucks need to be much heavier than 16 tones which is the maximum 4x4 truck available on Indian market. In India only 6x4 is available with total weight (including pay load) suitable to match the DFC technical specification Please kindly accept below vehicleThe vehicle shall have minimum 4 wheel drive systems, not all wheelThe make of the road vehicle shall preferably be any one of MAN, Renault, Volvo or any other reputed Indian brand and minimum with 4 wheel drive for easy negotiation, not all wheel.	In this direction, Item no-33 of Addendum no-8 may be referred.
316	I	22 of 172	ITP 17.1 (j)	Client's Certificates The Bidder shall submit Client's Certificate from the Specialist	It is difficult for most of the European specialist Manufacturers to obtain the certificate of supply from government clients. Hence we request you to accept documentary evidence in support of the Specialist	No Change is envisaged

			Manufacturer in support of the Bidder's claim of the Experience in respect of Form EXP 3.	Manufacturer's claim of the Experience in the form of Purchase order copies/Supply Order copies/Self validated declaration also. Accordingly, We request you to rephrase the clause as: The Bidder shall submit Purchase order copies/Supply Order copies/Self validated declaration/ Client's Certificate from the Specialist Manufacturer in support of the Bidder's claim of the Experience in respect of Form EXP 3.	
317	28 of 172	ITP 40.1	Finalization of Specialist Manufacture In case more than one Specialist Manufacturer are qualified during evaluation for Key Machines, the Contractor shall finalize only one amongst the qualified Specialist Manufacturer before signing of the Contract Agreement	It is too stringent to finalize all the Specialist Manufacturers before signing of the Contract Agreement and may not be feasible. Contractor shall require sufficient time for approval process as per internal corporate policy to finalize the Manufacturer. Accordingly, we request you to allow the contractor to finalize the Specialist Manufacturer from any of the qualified manufacturers after signing the contract. The client shall be informed before placing the purchase order on the finalized Manufacturer.	No Change is envisaged

318	I	28 of 172	ITP 40.1	Finalization of Specialist Manufacture In case more than one Specialist Manufacturers are qualified during evaluation for Key Machines, the Contractor shall finalize only one amongst the qualified Specialist Manufacturer before signing of the Contract Agreement.	can be a situation during the finalization stage of vendor wherein one or both the manufacturers proposed in the bid back out. In such a scenario, bidder shall be allowed to propose new alternate manufacturer provided that the alternate manufacturer meets the eligibility criteria as well as the technical specifications as mentioned in the document. Kindly confirm.
319	I	28 of 172	ITP 40.1	Supply of P&E from Specialist Manufacture In case more than one Specialist Manufacturer are qualified during evaluation for Key Machines, the Contractor shall finalize only one amongst the qualified Specialist Manufacturer before signing of the Contract Agreement.	As per the scope of works, Contractor needs to supply some machines in multiple quantities which are follows: SI. No. Plant and Equipment 11 Rail bound mobile vehicle for Civil Engineering Works with MMU Equipment 12 Tower Wagon 8-wheeler 14 Rail cum Road Multi Utility Vehicle with MMU Equipment 18 Rail cum Road based Vehicle with Motorized Elevated Working Platform (MEWP) 20 Ballast Hopper Wagon with remote control discharge We request you to allow the contractor to supply the above machines from more than one

					Suppliers. This shall allow the contractor to meet the delivery timelines and also ensure timely supply of Machines even if one Manufacturer fails. In such a scenario, Contractor shall be able to adjust the quantity to be supplied by each supplier so as to maintain the project delivery timelines. Necessary maintenance spares, tools & tackles for each make shall be supplied by the contractor and the same shall be included in the bid price.	
320	I	28 of 172	ITP 40.1	Supply of P&E from Specialist Manufacture In case more than one Specialist Manufacturer are qualified during evaluation for Key Machines, the Contractor shall finalize only one amongst the qualified Specialist Manufacturer before signing of the Contract Agreement.	We understand that the qualified specialist manufacturer can supply the equipment from any of its manufacturing unit/subsidiary/JV in the world. Kindly confirm	Please refer Bid Forms 'MAN', I-B-1 & I-B-3 at page no-60, 87 & 92 of 172 of Vol-1 of the Bid document.
321	I	41 of 172	Section 2/ Clause 3.2 '(e) (iii) (1)		In other WDFC (EMP-4, EMP-16) projects, Eligibility criteria for vendors is: Specific experience of having supplied only 20% of the	

				manufacturing, supply and commissioning of the following Key Machines:	quantities required for the project in last 7 years. Considering the above, we request you to modify the eligibility criteria for Specialist Manufacturers on the same lines so that the number of qualified suppliers can be increased leading to competitiveness, avoiding monopoly situation etc. Further, with the present eligibility criteria for some of the machines, even one manufacturer for some Key machines is not meeting the eligibility criteria. Accordingly, we propose to modify the eligibility criteria for the Key machines as follows:	
321/1	I	41 of 172	Section 2/ Clause 3.2 '(e) (iii) (1)		Manufacture & Supply of minimum 01 no. Continuous Tamping Machine with integrated dynamic stabilizer during last five (5) years (Calendar/Financial) (For 4.1 of Schedule 3 of Section 6)	For Q no-321 & 321/1-14. As already conveyed during DFCCIL clarification to Q no-273, In this direction, Item no-8 of Addendum no-8 may be referred.

321/2	I	41 172	of	Section 2/ Clause 3.2 '(e) (iii) (2) Addendum No. 2 dated 09.04.2018	Specific Experience in Manufacture & Supply of Key Machines Manufacture & Supply of minimum 10 nos. of Ballast Regulating Machine during last three (3) years (Calendar/Financial) (For 4.2 of Schedule 3 of Section 6)	Manufacture & Supply of minimum 01 no. Ballast Regulating Machine during last five (5) years (Calendar/Financial) (For 4.2 of Schedule 3 of Section 6)	
321/3	I	41 172	of	Section 2/ Clause 3.2 '(e) (iii) (3)	Specific Experience in Manufacture & Supply of Key Machines. Manufacture & Supply of minimum 05 nos. of Shoulder Ballast Cleaning Machine during last three (3) years (Calendar/Financial) (For 4.3 of Schedule 3 of Section 6)	01 no. Shoulder Ballast Cleaning Machine during last five (5) years (Calendar/Financial) (For 4.3 of	
321/4	I	42 172	of	Section 2/ Clause 3.2 '(e) (iii) (4)	Specific Experience in Manufacture & Supply of Key Machines Manufacture & Supply of minimum 10 nos. of Points & Crossing Tamping Machine during last three (3) years(Calendar/Finan	Manufacture & Supply of minimum 01 no of Points & Crossing Tamping Machine during last five (5) years(Calendar/Financial) (For 4.4 of Schedule 3 of Section 6)	

224/5		10			cial) (For 4.4 of Schedule 3 of Section 6)	
321/5		42 172	of	Section 2/ Clause 3.2 '(e) (iii) (5)	Specific Experience in Manufacture & Supply of Key Machines Manufacture & Supply of minimum 10 nos. of Dynamic Stabilizer during last three (3) years (Calendar/Financial) (For 4.5 of Schedule 3 of Section 6)	Manufacture & Supply of minimum 01 no. of Dynamic Stabilizer during last five (5) years (Calendar/Financial) (For 4.5 of Schedule 3 of Section 6)
321/6	I	42 172	of	Clause 3.2 '(e) (iii) (6)	Manufacture & Supply of minimum 10 nos. of Duomatic Two Sleepers Continuous Tamping Machine during last three (3) years (Calendar/Financial) (For 4.6 of Schedule 3 of Section 6)	Continuous Tamping Machine during last five (5) years (Calendar/Financial) (For 4.6 of Schedule 3 of Section 6)
321/7	I	42 172	of	Section 2/ Clause 3.2 '(e) (iii) (7)	Specific Experience in Manufacture & Supply of Key Machines Manufacture & Supply of minimum 05 nos. of Mobile Rail Grinding Machine during last	Manufacture & Supply of minimum 01 no. Mobile Rail Grinding Machine during last five (5) years (Calendar/Financial) (For 4.7 of Schedule 3 of Section 6)

				three (3) years (Calendar/Financial) (For 4.7 of Schedule 3 of Section 6)	
321/8	I	43 o 172	Section 2/ Clause 3.2 '(e) (iii) (8)		Manufacture & Supply of minimum 01 no. of self-propelled Track cum OHE Measurement and Recording Car to any Electrified Section of any Railway during last five (5) years (Calendar/Financial) (For 4.8, 4.9 & 4.10 of Schedule 3 of Section 6)
321/9	I	43 o 172	Section 2/ Clause 3.2 '(e) (iii) (9)	Specific Experience in Manufacture & Supply of Key Machines Manufacture & Supply of minimum 03 nos. of self-propelled OHE Monitoring and Recording Car to any Electrified Section of any Railway during last five (5) years (Calendar/Financial)	Manufacture & Supply of minimum 01 no. of self-propelled OHE Monitoring and Recording Car to any Electrified Section of any Railway during last five (5) years (Calendar/Financial) (For 4.9 of Schedule 3 of Section 6)

004/40		40		On altimated	(For 4.9 of Schedule 3 of Section 6)	Manufacture 0 Oursland with
321/10		43 172	of	Section 2/ Clause 3.2 '(e) (iii) (10) Addendum No. 2 dated 09.04.2018	Specific Experience in Manufacture & Supply of Key Machines Manufacture & Supply of minimum 25 nos. of rail bound self-propelled 4/8-wheeler tower wagon or AC/DC/AC-DC EMUs/MEMUs/DEMU s or locomotive (diesel/electric), or self-propelled rail mounted cranes (with any type of transmission)/track machines (self-propelled) during last five (5) years (Calendar/Financial) (For 4.11, 4.12 & 4.13 of Schedule 3 of Section 6)	05 nos. of rail bound self-propelled 4/8-wheeler tower wagon or AC/DC/AC-DC EMUs/MEMUs/DEMUs or locomotive (diesel/electric), or self-propelled rail mounted cranes (with any type of transmission)/track machines (self-propelled) during last five (5) years (Calendar/Financial) (For 4.11, 4.12 & 4.13 of Schedule 3 of Section 6)
321/11	I	44 172	of	Section 2/ Clause 3.2	Specific Experience in Manufacture & Supply	

			'(e) (iii) (11)	of Key Machines Manufacture & Supply of minimum 25 nos. of Rail cum Road Vehicle for maintenance of OHE during last five (5) Years (calendar/Financial). (For 4.18 of Schedule 3 of Section 6)	maintenance of OHE during last five (5) Years (calendar/Financial). (For 4.18 of Schedule 3 of Section 6)	
321/12	I	44 o 172	Section 2/ Clause 3.2 '(e) (iii) (12)	Specific Experience in Manufacture & Supply of Key Machines Manufacture & Supply of minimum 10 nos. of Wheel Impact Load detector (WILD) during last three (3) Years (calendar/Financial). (For 4.19 of Schedule 3 of Section 6)	Manufacture & Supply of minimum 01 Wheel Impact Load detector (WILD) during last five (5) Years (calendar/Financial). (For 4.19 of Schedule 3 of Section 6)	
321/13	I	44 o 172	Section 2/ Clause 3.2 '(e) (iii) (13)	Specific Experience in Manufacture & Supply of Key Machines Manufacture & Supply of minimum 10 nos. of Hot Axle & Hot Wheel (HAHW) Detector during last three (3) Years (calendar/Financial). (For 4.19 of Schedule 3 of Section 6)	Manufacture & Supply of minimum 01 no. of Hot Axle & Hot Wheel (HAHW) Detector during last five (5) Years (calendar/Financial). (For 4.19 of Schedule 3 of Section 6)	

321/14	I	44	of	Section 2/	Specific Experience in	Manufacture & Supply of minimum
		172		Clause 3.2	Manufacture & Supply	01 OHE Rehabilitation/Renewal
				'(e) (iii)	of Key Machines	Equipment during last five (5) Years
				(14)	Manufacture & Supply	(calendar/Financial). (For 4.21 of
					of minimum 03 nos. of	Schedule 3 of Section 6)
					OHE	, and the second
					Rehabilitation/Renewa	
					I Equipment during last	
					five (5) Years	
					(calendar/Financial).	
					(For 4.21 of Schedule	
					3 of Section 6)	