

Notice No.2022/Elect(Dev)/440/5

Notice Inviting Bid

for

Manufacturing and Maintenance of

12000 hp Electric Locomotives



MAKE FOR THE WORLD

under

AATMA-NIRBHAR BHARAT

Date of Issue: 04.05.2022

Ministry of Railways

Government of India



GOVERNMENT OF INDIA (भारत सरकार) MINISTRY OF RAILWAYS (रेल मंत्रालय) RAILWAY BOARD (रेलवे बोर्ड)



NOTICE INVITING BID

Notice No.:2022/Elect/Dev./440/5

Date 04.05.2022

Project: Manufacturing and Maintenance of 800 (eight hundred) 12000 hp Electric Locomotives.

The President of India, represented by Ministry of Railways, Director Electrical Engineering (Development), Railway Board (the "Authority"), having its principal office at Rail Bhavan, Raisina Road, New Delhi-110001, India is engaged in the development of Railways and related infrastructure, and as part of this endeavour, the Authority has decided to undertake Manufacture and Maintenance of 800 (eight hundred) 12000 hp Electric Locomotives, through single stage two packet bidding system and has to carry out the Bidding process for selection of a Bidder to whom the Project may be awarded. A brief description of the Project may be seen in the Information Memorandum of the Project at the Authority's website (www.indianrailways.gov.in) Brief particulars of the Project are as follows:

"Manufacture and supply of 800 Electric Locomotive of 12000 horse power, twin Bo-Bo configuration (the "Locomotive") spread over a period of 10 (ten) years at <u>Banaras Locomotive Works</u>, <u>Varanasi</u> by the selected bidder and Maintenance at nominated Government Depots over Indian Railways on the basis of a long term manufacture and maintenance contract (the "Project")".

The Bidding Documents can be viewed/downloaded from official portal of the Railway website https://ireps.gov.in from 09.05.2022. Bidder must submit its Technical Bid and Financial Bid at https://ireps.gov.in on or before upto 10.08.2022 at 11:00 hours IST. Bids received online shall be opened on 10.08.2022 at 11:30 hours IST.

Bid submitted through any other mode shall not be entertained. Power of Attorney and Joint Bidding Agreement etc. shall be submitted physically by the Bidder on or before 10.08.2022 at 11:00 hours IST. Please note that the Authority reserves the right to accept or reject all or any of the Bids without assigning any reason whatsoever.

For further details please contact:

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Website: <u>indianrailways.gov.in</u>

Information Memorandum

- 1. 12000 hp, 8 axles, twin Bo-Bo configuration Locomotive to be utilized all over Indian Railways Routes and DFC Routes for hauling 6000T load with average speed of 75 kmph by single loco (Grade: 1 in 200).
- **2.** <u>Project Title</u>: Long Term Manufacture-Cum-Maintenance Agreement of 12000 hp Electric Locomotive by selecting a Technological Partner through transparent bidding process.
- 3. <u>Manufacturing Unit</u>: Banaras Locomotive Works (BLW), Varanasi, Uttar Pradesh by upgrading of existing facilities and developing of additional facilities as required.
- 4. Locomotive to be manufactured at Banaras Locomotive Works (BLW), Varanasi, Uttar Pradesh, using Railway Manpower.
- 5. Nominated Government Maintenance Depots for Maintenance with holding capacity of 300 at Kanpur(U.P.), 250 at Sabarmati (Gujrat) and 250 at Tuglakabad (Delhi).

6. Supply Period :

Accounting Year	Yearly to be supplied	Cumulative Supply
1 st Year (2023-24)	5	5
2nd Year (2024-25)	35	40
3 rd Year (2025-26)	60	100
4th Year (2026-27)	100	200
5 th Year (2027-28)	100	300
6th Year (2028-29)	100	400
7th Year (2029-30)	100	500
8th Year (2030-31)	100	600
9th Year (2031-32)	100	700
10th Year (2032-33)	100	800
Total	800	

7. Obligations of the Government:

- i. The Government will hand over sites for developing the manufacturing and maintenance facilities.
- ii. The Government will provide an adequate number of its staff at the manufacturing unit and at Government maintenance depots as per Good Industry Practice.
- iii. The Government shall arrange water and electricity for the Manufacturing and Maintenance Site at free of cost.

8. Obligations of the Technological Partner:

- i. The Technological Partner will upgrade the existing facilities and develop the additional facility at Manufacturing Site and Maintenance Site as required, at its own cost and expense.
- ii. The Technological Partner shall maintain all the infrastructures, facilities and equipment installed at Manufacturing Unit and Maintenance Depots utilising for manufacturing and maintenance purpose.

9. Locomotive Maintenance Period:

Year	Accounting Year	To be Supplied	Cumulative Supply	Kanpur	Sabarmati	Tuglakabad
Appointment Year	2022-23	0	0	X	X	Х
1st Year	2023-24	5	5	5	X	X
2nd Year	2024-25	35	40	40	X	X
3rd Year	2025-26	60	100	100	X	X
4th Year	2026-27	100	200	200	X	X
5th Year	2027-28	100	300	300	X	X
6th Year	2028-29	100	400	Scheduled Waintenance 250 250	100	X
7th Year	2029-30	100	500		200	X
8th Year	2030-31	100	600		50	
9th Year	2031-32	100	700		150	
10th Year	2032-33	100	800		250	
11th Year	2033-34	X	X		Scheduled Maintenance	
12th Year	2034-35		РОН-	5		led
13th Year	2035-36	X	РОН-	40		Scheduled Maintenance
14th Year	2036-37	X	РОН-	100	100	
15th Year	2037-38	X	РОН-	200		I

16th Year	2038-39	x	РОН-	300		
17th Year	2039-40	X	РОН-		100	
18th Year	2040-41	X	РОН-	Scheduled Maintenance	200	
19th Year	2041-42	Х	РОН-		250	50
20th Year	2042-43	Х	РОН-	chec		150
21st Year	2043-44	X	РОН-	S		250
22nd Year	2044-45	X	РОН-		d .ce	
23rd Year	2045-46	X	РОН-	5	dule	
24th Year	2046-47	X	РОН-	40	Scheduled Maintenance	d .ce
25th Year	2047-48	X	РОН-	100	S Ma	Scheduled Maintenance
26th Year	2048-49	X	РОН-	200		
27th Year	2049-50	X	РОН-	300		S Má
28th Year	2050-51	X	РОН-		100	
29th Year	2051-52	X	РОН-		200	
30th Year	2052-53	X	РОН-		250	50
31st Year	2053-54	X	РОН-			150
32nd Year	2054-55	X	РОН-			250
33rd Year	2055-56	X	X	d ce		
34th Year	2056-57	Х	X	dule ena		
35th Year	2057-58	X	X	Scheduled Maintenance		
36th Year	2058-59	X	X	Σ	Scheduled Maintenance	
37th Year	2059-60	Х	X		hedı nten	മ
38th Year	2060-61	Х	X		Scl Mai	Scheduled Maintenance
39th Year	2061-62	X	X			Scheduled Aaintenanc
40th Year	2062-63	X	X			Sc] Mai
41st Year	2063-64	X	X	X		
42nd Year	2064-65	Х	X	Х		
43rd Year	2065-66	X	X	X		
44th Year	2066-67	X	X	X	X	
45th Year	2067-68	X	X	X	Х	
				35 Years	35 Years	35 Years

POH at Kanpur Depot

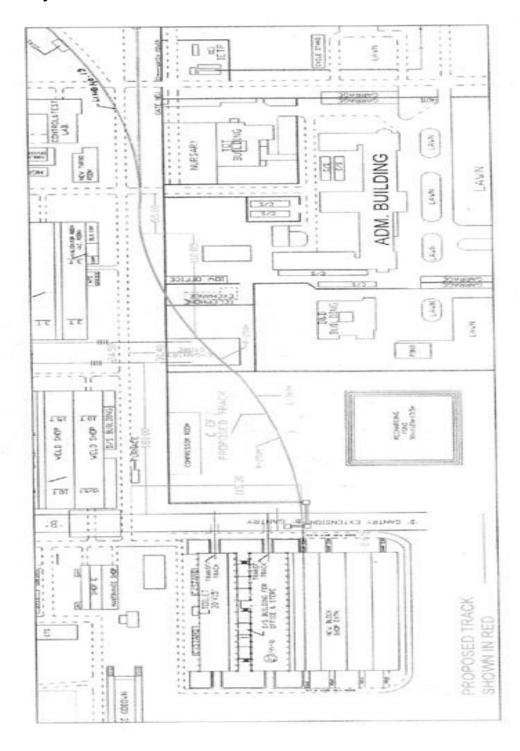
POH at Sabarmati Depot

POH at Tuglakabad Depot

10. Equity Participation by IR: Nil.

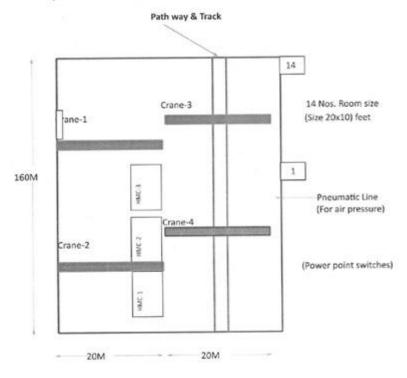
11. <u>Bidding Process:</u> Single stage two packet bidding process.

12.BLW Layout:

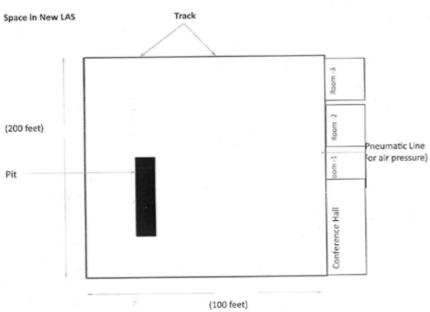


Manufacturing of Traction motors for 9000 HP new technology electric freight locomotive

Space in New Block Shop

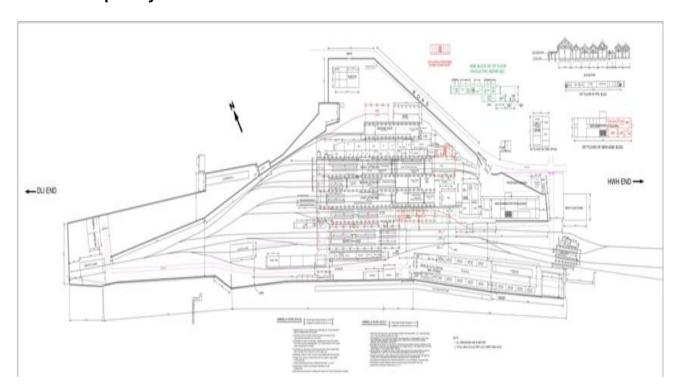


- Four Nos. EOT Crane, Rating 15/5 T Each.
- · Five nos. jack, Rating 35 T (Each)
- · Pneumatic line (For air pressure)
- Fourteen Nos. Rooms Size 20x10 feet.
- Power Point Plugs & Switches
- HMC 1,2,3 with 1200mm X 1200mm envelope size 4/5 Axis



- One No. EOT Crane, Rating 5T.
- · Pneumatic line (For air pressure)
- Three Nos. Rooms and one Conference Hall currently under use.
- Power Point Switches

13. Kanpur layout:



Infrastructure and Facility available at ELS/CNB/NCR

S/N	Description	Existing	Will be available after implementation of sanctioned
			umbrella work
1.	Covered Shed Area	11,986 square meter	13,849.96 square meter
2.	Total Area	76,424 square meter	76,424 square meter
3.	Track Lines	11 Nos	11 Nos
4.	Bays	5 Nos	5 Nos
5.	Details of Pits	In Inspection Bay (Total – 13 Nos Pits)	In Inspection Bay (Total – 17 Nos Pits)
		6 Pits (27.5 Length X 1.5 Width X 1.2 Depth in Mtrs.)	6 Pits (27.5 Length X 1.5 Width X 1.2 Depth in Mtrs.)
		3 Pits (25 Length X 1.5 Width X 1.2 Depth in Mtrs.)	7 Pits (25 Length X 1.5 Width X 1.2 Depth in Mtrs.)
		4 Pits (27.9 Length X 1.5 Width X 1.2 Depth in Mtrs.)	4 Pits (27.9 Length X 1.5 Width X 1.2 Depth in Mtrs.)
		In Heavy Lifting Bay (Total – 06 Nos Pits)	In Heavy Lifting Bay (Total – 06 Nos Pits)
		1 Pit (43 Length X 1.5 Width X 1.2 Depth in Mtrs.)	1 Pit (43 Length X 1.5 Width X 1.2 Depth in Mtrs.)
		3 Pit (19.5 Length X 1.5 Width X 1.2 Depth in Mtrs.)	3 Pit (19.5 Length X 1.5 Width X 1.2 Depth in Mtrs.)
		1 Pit (22.9 Length X 1.5 Width X 1.2 Depth in Mtrs.)	1 Pit (22.9 Length X 1.5 Width X 1.2 Depth in Mtrs.)
		1 Pit (11.8 Length X 1.5 Width X 1.2 Depth in Mtrs.)	1 Pit (11.8 Length X 1.5 Width X 1.2 Depth in Mtrs.)
		In Medium Lifting Bay (Total – 02 Nos Pits)	In Medium Lifting Bay (Total – 02 Nos Pits)
		1 Pits (18.5 Length X 1.5 Width X 1.2 Depth in Mtrs.)	1 Pits (18.5 Length X 1.5 Width X 1.2 Depth in Mtrs.)
		1 Pits (20 Length X 1.5 Width X 1.2 Depth in Mtrs.)	1 Pits (20 Length X 1.5 Width X 1.2 Depth in Mtrs.)
		In Medium Lifting Bay (Total – 02 Nos Pits)	In Medium Lifting Bay (Total – 02 Nos Pits)
		2 Pits (23.4 Length X 1.5 Width X 1.2 Depth in Mtrs.)	2 Pits (23.4 Length X 1.5 Width X 1.2 Depth in Mtrs.)
		2 Nos pit wheel lathe	3 Nos pit wheel lathe
6.	Covered Shed Loco	23	27
	capacity		
7.	Homing Capacity	175	225
8.	Holding	255 (as on 01.02.2022)	300
9.	Rooms in service building	65 Nos	62 Nos

14. Tuglakabad layout:



Infrastructure and facilities available at Diesel Shed, Tughalakabad

	Infrastructure and facilities available at Diesel Sned, Tugnalakabad					
S.	Description	Status				
No.						
1.	Covered shed Area	15314.5 Sq. M				
2.	Total Area	1,10,000 Sq. M				
3.	Track lines	12				
4.	Bays	5				
5.	Details of pits	Goods Bay- 60M Long two Lines Mail Bay- 60M Long Two Lines HHP Shed- 65M Long Four Lines HR Bay – (60M x 2) One line Bogie Shed 30M, 37M, 28M long three lines				
6.	Covered Shed loco capacity	27				
7.	Homing capacity	175				
8.	Holding as on 25.02.2022.	273 (11 types of Diesel + Electric locomotives)				
9.	Rooms in Service building	36				

15. Sabarmati layout:

