GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
(RAILWAY BOARD)

No. 2020/C&IS/Project/Proposals/Umbrella 2020-21/2 Pt.1. New Delhi, Dated: 11.08.2021

The General Manager,
Northern Railway, New Delhi.

Sub:- Sanction of the work "NTES Infrastructure Replacement and Modernization".

Ref:- CRIS's letter No. 2020/CRIS/NDLS-HQ/CC/Proj/Workpropsl/0360/Pt-1 dated 18.02.2021.

Approval of Board (M/O&BD, Member/Finance and Chairman & CEO) is hereby communicated for the work "**NTES Infrastructure Replacement and Modernization**" of Northern Railway at a cost of Rs. 9.34 Crore (Rupees nine crore and thirty four lakh only) chargeable to DRF under the sanctioned Umbrella '**Information Technology related works on Indian Railways**' (Pink Book Item No. 242 of 2020-21 under Northern Railway).

This work is now appearing as PB Item No. 247b of 2021-22 under Northern Railway.

Item-wise cost of the work is appended as "Annexure".

The Project Management Establishment (PME) and Implementation charges taken for the project being implemented by CRIS is under review in Railway Board. Any changes thereof, would need to be taken into account at the time of preparation/sanctioning of the Detailed Estimate of this work.

This issues with the concurrence of Finance Directorate of Ministry of Railways.

(Kuldeep Singh) 11/8/21
Director/Mech Engg(C&IS)

No. 2020/C&IS/Project/Proposals/Umbrella 2020-21/2 Pt.1. New Delhi, Dated: 11.08.2021

Copy to :

1. The Principal Financial Adviser, Northern Railway, New Delhi.
2. Principal Director of Audit, Northern Railway, New Delhi.
3. The Dy. Comptroller and Auditor General of India (Railways), Room No. – 224, Rail Bhawan, New Delhi.

For Member Finance

Copy to :

1. The Chief Administrative Officer(PIS), Northern Railway, IRCA Building, New Delhi.
2. Managing Director/CRIS, Chanakyapuri, New Delhi.
3. F(X)-II and Budget Branches of Railway Board.

13/8/21

O/C - issue for w.e. PL 2nd Sept

Annexure

No. 2020/C&IS/Project/Proposals/Umbrella 2020-21/2 Pt.1. New Delhi, Dated: 11.08.2021

NTES Infrastructure Replacement and Modernization

S. No.		Item Description	Qty.	Basic Unit rate (Exclusive of GST, Rs.)	Total Base Amount (Without GST) (Rs.)
1	**Skills Development (of Resources & Customers) Costs**				
	1.1	Red hat Jboss Application Administration II	1	700,000	700,000
	1.2	Red Hat Server Hardening	1	600,000	600,000
	1.3	Red Hat Enterprise Performance Tuning	1	600,000	600,000
		Sub Total (1) :			**1,900,000**
2	**Implementation and Data Mgt. Costs**				
	2.1	Installation & Commissioning and OEM on site support @ 5% of total hardware and software costs i.e. item nos. 3, 4 & 5	5%	-	3,070,347
		Sub Total (2) :			**3,070,347**
3	**SYSTEM SOFTWARE (Sys-SW) Costs including ATS**				
	3.1	Database Software	16	356,200	5,699,200
	3.2	Cache Server Software (Master & Slave, in pair)	4	1,500,000	6,000,000
	3.3	Application server licenses	4	931,563	3,726,252
	3.4	OEM Man Days	50	46,000	2,300,000
		Sub Total (3) :			**1,77,25,452**
4	**HARDWARE Systems Costs including Support**				
	4.1	Total Storage (GB)	7,600	489	3,716,400
	4.2	Total Memory (GB)	1,536	1,747	2,683,392
	4.3	Total vCPU (For Critical Production)	168	30,541	5,130,888
	4.4	Total vCPU (For Development)	26	11,446	297,596
	4.5	Total Backup Storage (GB)	12,000	146	1,752,000
	4.6	Total RHEL OS VM	22	26,761	588,742
		Sub Total (4) :			**1,41,69,018**
5	**Network Equipment /Infrastructure Costs (FOIS /UTN, RCIL, open to Internet Option)**				
	Implementation of Network & Security Infrastructure for additional 250 Mbps (200 Mbps to cater peak load & 100 Mbps for 139 and Display Services) at RIDC				

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	5.1	Common RIDC network & Security Infrastructure setup cost (per 02 Mbps)	125	211,017	2,63,77,125
	5.2	License cost of servers/OS instance for SIEM, VA, NMS, HIPS etc	9	45,000	405,000
	Communication links charge				
	5.3	Annual lease line hiring charges (02x04Mbps) between IRCA-New Delhi DC & RIDC, Chankyapuri	4	6,336	25,344
	5.4	Annual lease line hiring charges (02x04Mbps) between CSTM DC & RIDC, Chankyapuri	4	116,328	465,312
	5.5	Annual lease line hiring charges (02x04Mbps) between MAS DC & RIDC, Chankyapuri	4	116,328	465,312
	5.6	Annual lease line hiring charges (02x04Mbps) between HWH DC & RIDC, Chankyapuri	4	159,000	636,000
	5.7	Annual internet lease line hiring charges (03x83Mbps) at RIDC	125	9,107	1,138,375
		Sub Total (5) :			**2,95,12,468**
6	Application and System Audit				
	6.1	Application Security Audit	1	700,000	700,000
	6.2	Vulnerabilty Analysis	1	100,000	100,000
	6.3	Onsite Consultancy Charges for Security Audit	2	54,000	108,000
		Sub Total (6) :			**908,000**
7	**Facilities (Civil & Electrical) Costs**				
	7.1	Electrical capital cost	4	330,000	1,320,000
		Sub Total (7) :			**1,320,000**
8	**Project Development & Management (Establishment) charges**				
	8.1	Helpdesk (24*7, 4*1 man year i.e 48 months) (Months)	48	69,090	3,316,320
		Sub Total (8) :			**3,316,320**
		Total - (1 to 8) :			**7,19,21,605**
9	**D & G Charges on above (1 to 8)**				
	9.1	ICT Innovation @3%			2,157,648
	9.2	Quality/ ISO - Certifications @2%			1,438,432
	9.3	CRIS Internal IT Systems (H/W & S/W) and Information security @ 2%			1,438,432
	9.4	Procurement Services @ 2%			1,438,432
	9.5	Contingency Charges @ 1%			719,216
		Sub Total (9):			**7,192,160**
		Total - (1 to 9) :			**7,91,13,765**
		GST (@18% on 1 to 9)			**1,42,40,478**
		Grand Total (including GST@18% on 1 to 9) :			**9,33,54,243**
		Rounded Off			**Rs. 9.34 Crore**

11/8/21