GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
(RAILWAY BOARD)

No. 2016/C&IS/Project/Near Site DR-FOIS/135 **New Delhi, Dated: 11 .04.2017**

The General Manager,
Northern Railway,
New Delhi.

Sub:- Sanction for the work of "Near Site Disaster Recovery setup for FOIS".

Ref:- CRIS's letter No. 2016/CRIS/NDLS-HQ/CC/Project/0228/Pt-1 dated 24.10.2016.

A new work "**Near Site Disaster Recovery setup for FOIS**" has been included in the Pink Book for the year 2017-18 as Item No. 218 of Northern Railway at the abstract cost of Rs. 11.32 Crore (Rupees eleven crore and thirty two lakh only).

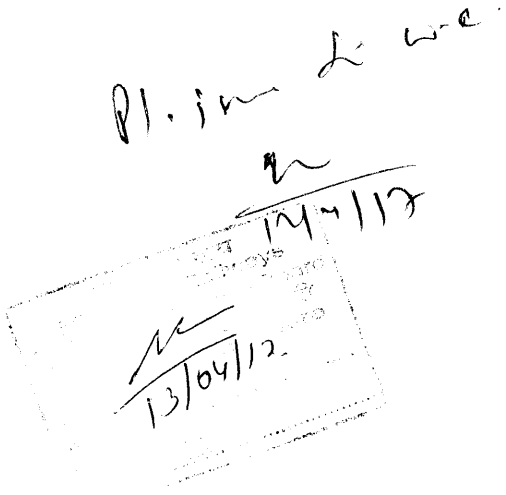
Item-wise break up of cost is appended as "Annexure".

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(Vinita Narera)
Director Electronics(C&IS)

Copy to :-

1. **The CCM/PM, Northern Railway, New Delhi.**
2. **Managing Director/CRIS, Chanakyapuri, New Delhi.**
3. **The CAO/FOIS, CRIS Complex, Chanakyapuri, New Delhi.**
4. **Director(Operations), CRIS, Chanakyapuri, New Delhi.**
5. **F(X)II and Budget Branches, Railway Board.**



Annexure

Break-up of cost of the work of "Near Site Disaster Recovery setup for FOIS "

Sl.	Work Item	Unit	Qty (Q1)	Rate (R1)	Q1*R1 (In Rs.)
1	**Skills Development (of Resources & Customers) Costs**				
1.1	DR Consultancy	Lumpsum	1	10,00,000.00	10,00,000.00
	Total for Skills Development (2)				**10,00,000**
2	**Implementation, Training and Data Mgt. Costs**				
2.1	DR Practices Training by OEMs	persons	15	8,00,000.00	120,00,000.00
2.2	Books & Journals	Lumpsum	1	5,00,000.00	5,00,000.00
2.3	Help desk Operation (3 shift) at Near Site	person-month	11	1,79,873.80	18,88,674.90
	Total Implementation & Training (3)				**143,88,675**
3	**SYSTEM SOFTWARE (Sys-SW) Costs**				
3.1	**System Software for Dev. & Staging (in CRIS) /for Pilot Development**				
3.1.1	RDBMS/Weblogic/Tuxedo Licenses for development (16 processor license)	Lic	4	10,00,000.00	40,00,000.00
	Sub Total : Pilot /Dev. Sys-SW (4.1)				**40,00,000**
3.2	**System Software for Production Systems**				
3.2.1	RDBMS/Weblogic/Tuxedo Licenses	Lic	4	10,00,000.00	40,00,000.00
3.2.2	Mgt. sys-SW for D-R monitoring	Lic	2	20,00,000.00	40,00,000.00
	Sub Total : Prod. Sys-SW (4.2)				**80,00,000**
	Sub Total : Sys-SW (4.1 + 4.2)				**120,00,000**
3.3	**System software Maintenance Costs (paid to OEMs)**				
3.3.1	Annual Technical Support (ATS) on Sys-SW, during the Project period	years	1	17,60,000.00	17,60,000.00
	Sub Total : Sys-SW Maintenance (4.3)				**17,60,000**
	Total : System SW (4.1 + 4.2 + 4.3)				**137,60,000**
4	**HARDWARE Systems Costs**				
4.1	**Development /Pilot /Testing /Staging Environment**				
4.1.1	Development, Pilot, Training & Staging System (Application - Tuxedo & Weblogic & DB)	Nos	2	30,00,000.00	60,00,000.00
4.1.2	Laptops /Desktops for Development & Support,	Nos	4	50,000.00	2,00,000.00
4.1.3	Ink Jet Printer /Plotter, All-in-one (for development team)	Nos	2	10,000.00	20,000.00
4.1.4	Desktop Softwares	Nos	4	30,000.00	1,20,000.00
	Sub Total of Dev. /Pilot HW (4.1)				**63,40,000.00**
4.2	**Production Environment**				
4.2.1	Database Servers	Nos	2	30,00,000.00	60,00,000.00

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4.2.2	SAN storage of 10 TB usable, upgradable to 100 TB usable, with connects to Systems	Nos	1	40,00,000.00	40,00,000.00
4.2.3	Installation & Commissioning services	%age of above 5	10	10,00,000.00	10,00,000.00
	Sub Total of HW Prod. (4.2)				**110,00,000.00**
	Total for System Hardware (5.1+5.2+5.3)				**173,40,000.00**
5	**Network Equipment /Infrastructure Costs (FOIS /UTN, RCIL, open to Internet Option)**				
5.1	Layer 2 Switch	Lumpsum	4	50,000.00	2,00,000.00
5.2	Core Switch	Mbps	2	40,00,000.00	80,00,000.00
5.3	Dark Fibre from PDC , Chanakyapuri to NDC	Mbps	1	400,00,000.00	400,00,000.00
	Sub Total NW Equipment / Infra				**482,00,000.00**
	Total NW equipment /Infra (6)				**482,00,000.00**
6	**Facilities (Civil & Electrical) Costs**		**If Facilities of CRIS Data-Center (D-C) to be shared /used.**		
6.1	Rooms, Cabins & Furniture for the Development & Support Team @ NearSite	Nos.	2	1,00,000.00	2,00,000.00
6.2	Data-Centre Energy Costs for 1 years, during Proj. phase.	1 Years	1	26,00,000.00	26,00,000.00
	Total for Facilities at CRIS (7)				**28,00,000.00**
7	**Project Management Establishment**				
7.1	**Phase 1 (Development of User & System Requirement Specifications, Designs) - BCP Plans**				
7.1.1	GGM /GM	person-months	1.0	3,34,214.15	3,34,214.15
7.1.2	CPE for BCP design	person-months	1.0	3,34,214.15	3,34,214.15
7.1.3	PPE for BCP design	person-months	1.0	2,56,877.80	2,56,877.80
7.1.4	SPE for BCP design	person-months	2.0	2,43,909.25	4,87,818.50
7.2	**Phase 2 (Development & Pilot Implementation of Software & Database System) - Testing**				
7.2.1	GGM /GM	person-months	1.0	3,34,214.15	3,34,214.15
7.2.2	CPE for Installation	person-months	1.0	3,34,214.15	3,34,214.15
7.2.3	PPE for Installation	person-months	4.0	2,56,877.80	10,27,511.20
7.2.4	SPE for Installation	person-months	4.0	2,43,909.25	9,75,637.00
7.3	**Phase 3 (Other Phases, e.g. Roll-out Implementation, Enhancements etc.) - Drills**				
7.3.1	GGM /GM /JGM	person-months	0.5	3,34,214.15	1,67,107.08
7.3.2	CPE for Drill planning and execution	person-months	0.5	3,34,214.15	1,67,107.08

7.3.3	PPE for Drill planning and execution	person-months	1.0	2,56,877.80	2,56,877.80
7.3.4	SPE for Drill planning and execution	person-months	1.0	2,43,909.25	2,43,909.25
7.4	Mid, Final & Closing Appraisals & Reports	person-months	0.5	3,34,214.15	1,67,107.08
7.5	Financial Management Support	person-months	0.5	3,34,214.15	1,67,107.08
7.6	HR Management Support	person-months	0.5	3,34,214.15	1,67,107.08
	Total of Project Management (8)				**54,21,023.53**
	Sub-Total for Project costs (1+2+3+4+5+6+7+8)				**1029,09,698.43**
9	**CRIS Charges on above :**				
9.1	R&D, PoCs, Evaluations, @ 3%	0.03			30,87,290.95
9.2	Quality / ISO - Certifications @ 2 %	0.02			20,58,193.97
9.3	CRIS Internal IT Systems (HW and SW) and Information Security @ 2 %	0.02			20,58,193.97
9.4	Procurement, Hiring, @ 2%	0.02			20,58,193.97
9.5	Contingencies @ 1 %	0.01			10,29,096.98
	Sub-Total CRIS Charges (kept max. 10 %)				**102,90,969.84**
	Grand Total of Project (1 to 8 + 9)				**1132,00,668.27**
	Rounded off				**Rs. 11.32 crore**
Note	Service Tax will be applicable as per GOI norms, over the above costs.				

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