**GOVERNMENT OF INDIA**
**MINISTRY OF RAILWAYS**
**RAILWAY BOARD**

**No. 2014/C&IS/Project/14-15/WP/64/Pt.I** **New Delhi, Dated 29/10/2014**

**The General Manager,**
**Northern Railway,**
**New Delhi.**

**Sub :- Sanction for the work of "Proliferation of Parcel Management System on all stations of Indian Railways (Up to A1, A and B Category)".**

**Ref:- Board's letter of even number dated 19.08.2014.**

Vide Board's letter referred to above, sanction of the above mentioned work at the cost of Rs. 17.52 crore was communicated. Now item-wise break-up of cost for the sanctioned work is attached as 'Annexure'.

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

Vinita.
**(Vinita Narera)**
**Director Electronics(C&IS)**

**No. 2014/C&IS/Project/14-15/WP/64/Pt.I** **New Delhi, Dated :29/10/2014**

**Copy to:-**

i. **The FA & CAO, Northern Railway, New Delhi.**
ii. **Principal Director of Audit, Northern Railway, New Delhi.**
iii. **The Dy. Comptroller and Auditor General of India (Railways), Room No. – 224, Rail Bhawan, New Delhi.**

**For Financial Commissioner/Railways.**

**Copy to :-**

1. **The CCM/PM, Northern Railway, New Delhi.**
2. **F(X)-II and Budget Branches of Railway Board.**
3. **Managing Director/CRIS, Chanakyapuri, New Delhi.**
4. **GM/PMS, CRIS, Chanakyapuri, New Delhi.**

and B Category)

| | Cost of Equipments Chargeable to DF | | | |
|---|---|---|---|---|
| | **Cost of Hardware, Software and Networking Equipments at Central site CRIS** | | | |
| | Item | **Qty** | **Unit Cost** | **Total Cost** |
| 1 | Upgradation/Replacement of San Storage 10 TB | 1 | 1500000 | 1500000 |
| 2 | Remote control management software | 1000 | 4500 | 4500000 |
| 3 | PCs for Database administrators, developers and Network engineers | 4 | 50000 | 200000 |
| 4 | Operating System Red Hat Linux Adv server and ATS charges for servers | 2 | 100000 | 200000 |
| 5 | Application server licence | 2 | 1241057 | 2482114 |
| 6 | Database server with RAC & ATS | 3 | 4000000 | 12000000 |
| 7 | Multifuction device | 2 | 15000 | 30000 |
| 8 | Laptop | 4 | 100000 | 400000 |
| **(A)** | Hardware and System Software Cost (CRIS) | | | **2,13,12,114** |
| **B** | Cost of Networking equipments at Central site CRIS AND UTNDC Updragation | | | 8396941 |
| **A+B** | **Cost of hardware, software & networking equipment for central site CRIS** | | | **2,97,09,055** |
| | Cost estimate for hardware at stations | Nodes | Unit price | Amount (Rs) |
| 1 | Thin client including 20 % spare (A1, and A and B class station=387) | 1461 | 28750 | 4,20,03,750 |
| 2 | UPS (including 20% spares) | 1461 | 4000 | 58,44,000 |
| **(C)** | **Total hardware for stations** | | | **4,78,47,750** |
| | Networking equipment cost for A1 and A class stations | 150 | 182400 | 2,73,60,000 |
| | Networking cost for B class and other stations | 237 | 124511 | 2,95,09,107 |
| **(D)** | **Networking equipmenmt for A1 class and A class other stations** | 387 | | **5,68,69,107** |
| | **Total C+D** | | | **10,47,16,857** |
| | **Total A+B+C+D** | | | **13,44,25,912** |
| **E** | Total cost of management, implementation and training at CRIS and 387 stations | 1 | 32736847 | 32736847 |
| **A to E** | **Total (A+B+C+D+E)** | | 32418847 | **16,71,62,759** |
| | **Manpower cost for monitoring and manning network at CRIS and 387 stations** | | | |
| | Contigency charges @ 1% | | | 13,44,259 |
| | Procurement charges @ 5 % | | | 67,21,296 |
| | **Overhead Charges @20%** | | | |
| | **R&D Charges @7.5%** | | | |
| **F** | **Total** | | | **80,65,555** |
| **A to F** | **Total CRIS charges including overhead charges (A+B+C+D+E+F)** | | | **17,52,28,314** |

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**GOVERNMENT OF INDIA**
**MINISTRY OF RAILWAYS**
**RAILWAY BOARD**

**No. 2014/C&IS/Project/14-15/WP/64/Pt.I** **New Delhi, Dated : /10/2014**

**The General Manager,**
**Northern Railway,**
**New Delhi.**

**Sub :- Sanction for the work of "Upgradation of passenger reservation system infrastructure – procurement of addl. Itanium servers".**

**Ref:- Board's letter of even number dated 19.08.2014.**

Vide Board's letter referred to above, sanction of the above mentioned work at the cost of Rs. 14.50 crore was communicated. Now item-wise break-up of cost for the sanctioned work is attached as 'Annexure'.

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

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**(Vinita Narera)**
**Director Electronics(C&IS)**

**No. 2014/C&IS/Project/14-15/WP/64/Pt.I** **New Delhi, Dated : /10/2014**

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3. **Managing Director/CRIS, Chanakyapuri, New Delhi.**
4. **GM/PRS, CRIS, Chanakyapuri, New Delhi.**

| S.No. | Item | Qty | Rate | Cost (Rs.) |
|---|---|---|---|---|
| **1** | **Hardware Cost** | | | |
| 1.1 | 1 Way Itanium blade servers with 2 CPU (quad core for each four sites so 4 machines) | 4 Nos. | 1734441 | 6937764 |
| 1.2 | SAN storage of 30 TB with two controllers | 4 Nos. | 10642422 | 42569688 |
| 1.3 | SAN storage of 30 TB with four controllers | 2 Nos. | 11242422 | 22484844 |
| 1.4 | Tape Library Autoloader – 48 Nos. Slots, with 2 Nos. LTO-5 Drives, and 48 Nos. LTO – 5 Cartridges | 4 Nos. | 1467476.4 | 5869905.6 |
| | **Sub Total of H/W (1)** | | | **77862201.6** |
| **2** | **System Software Cost** | | | |
| 2.1 | OVMS HAOE for 2 way itanium blade (including RTR) | 8 Lic | 980448 | 7843584 |
| 2.2 | Backup Automation Software | 4 Lic | 1043539.2 | 4174156.8 |
| | **Sub Total of Prod. Sys-SW (2)** | | | **12017740.8** |
| | **Total (1 + 2)** | | | **89879942.4** |
| **3** | **Data Centre (facility Civil and Electrical Cost)** | | | |
| 3.1 | Power/UPS cost | 35 KVA | 8995000 | 8995000 |
| | **Total 1 to 3** | | | **98874942.4** |
| **4** | **Service Cost** | | | |
| 4.1 | Bidder Support cost for 3 years supplied Hardware and Software (Bidder support charge is calculated @ 8% of the BOM and above this service tax @ 12.36% added) | | | 24267580.13 |
| 4.2 | Implementation Charges | | | 4500000 |
| 4.3 | Data migration (from old storage to new storage) Migration cost – 100 OEM Man days Approx. | | | 5000000 |
| 4.4 | Replication Solution Implementation – OEM | | | 2000000 |
| 4.5 | Installation Charge | | | 4500000 |
| | **Total of Service Cost (4)** | | | **40267580.13** |
| **5** | **Standard Cost** | | | |
| 5.1 | Contingencies | | | 1000000 |
| 5.2 | R&D @ 7.5% on software | | | 901330.56 |
| 5.3 | Procurement @ 5% on Hardware | 0.05 | | 3893110.08 |
| 5.4 | Consumables @ 1% | 0.01 | | |
| | **Total Standard Cost (5)** | | | **5794440.64** |
| 6 | CRIS General Overheads on Standard costs @ 20% | 0.2 | | |
| | **Grand Total (1+2+3+4+5+6)** | | | **144936963.2** |
| | **Rounded off** | | | **Rs. 14.50 Crore** |

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**GOVERNMENT OF INDIA**
**MINISTRY OF RAILWAYS**
**RAILWAY BOARD**

**No. 2014/C&IS/Project/14-15/WP/64/Pt.I** **New Delhi, Dated : 3 /10/2014**

**The General Manager,**
**Northern Railway,**
**New Delhi.**

**Sub :-** **Sanction for the work of "Implementation of Integrated Payroll and Accounting System on 11 Zonal Railways".**

**Ref:-** **Board's letter of even number dated 19.08.2014.**

Vide Board's letter referred to above, sanction of the above mentioned work at the cost of Rs. 21.09 crore was communicated. Now item-wise break-up of cost for the sanctioned work is attached as 'Annexure'.

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

Vinita.

**(Vinita Narera)**
**Director Electronics(C&IS)**

**No. 2014/C&IS/Project/14-15/WP/64/Pt.I** **New Delhi, Dated : /10/2014**

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**For Financial Commissioner/Railways.**

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2. **Director(AR)/Railway Board, New Delhi.**
3. **F(X)-II and Budget Branches of Railway Board.**
4. **Managing Director/CRIS, Chanakyapuri, New Delhi.**

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**Annexure**

**Abstract Cost Estimate for implementation of IPAS on 11 Zonal Rlys**

| S.No. | Work Item | Abstract Cost (in Rs.) |
|---|---|---|
| 1 | Application Software development | 20944638 |
| 2 | Implementation, Training and Data Management cost | 61237231 |
| 3 | System Software | 77406714 |
| 4 | Hardware | 28720000 |
| | **Sub Total** | **188308583** |
| 5 | Contingency 1% | 1883086 |
| 6 | Consumables 1% | 1883086 |
| 7 | CRIS Charges 10% | 18830858 |
| | **Grand Total** | **210905613** |

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**MINISTRY OF RAILWAYS**
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**No. 2014/C&IS/Project/14-15/WP/64/Pt.I** **New Delhi, Dated : /10/2014**

**The General Manager,**
**Northern Railway,**
**New Delhi.**

**Sub :- Sanction for the work of "Roll out of Phase-II of networking system of security control rooms over Indian Railways RPF Security Management System (RSMS)".**

**Ref:- Board's letter of even number dated 19.08.2014.**

Vide Board's letter referred to above, sanction of the above mentioned work at the cost of Rs. 16.16 crore was communicated. Now item-wise break-up of cost for the sanctioned work is attached as 'Annexure'.

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

**(Vinita Narera)**
**Director Electronics(C&IS)**

**No. 2014/C&IS/Project/14-15/WP/64/Pt.I** **New Delhi, Dated : /10/2014**

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**For Financial Commissioner/Railways.**

**Copy to :-**

1. **The CCM/PM, Northern Railway, New Delhi.**
2. **F(X)-II and Budget Branches of Railway Board.**
3. **DIG/Policy & TS, Railway Board.**
4. **Managing Director/CRIS, Chanakyapuri, New Delhi.**

Annexure

## Break up of cost of RSMS Project

| S.No. | Item | Cost (Rs.) |
|---|---|---|
| 1 | Project management cost | 7200000.00 |
| 2 | Training cost | 8301596.00 |
| 3 | Implementation cost | 11252394.00 |
| 4 | Total software system cost | 5675000.00 |
| 5 | Customisation cost | 11424348.00 |
| 6 | Hardware cost | 79753143 |
| 7 | Total cost of civil & electrical estimate | 8342000.00 |
| 8 | S&T Cost | 17265000 |
| 9 | Establishment & D&G charges | 12429482.97 |
| | **Total cost** | **161642963.97** |

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**No. 2014/C&IS/Project/14-15/WP/64/Pt.I** **New Delhi, Dated :  /10/2014**

**The General Manager,**
**Northern Railway,**
**New Delhi.**

**Sub :- Sanction for the work of "Archiving internet access integration with other applications using TIBCO and Link Optimization for CMS Application".**

**Ref:- Board's letter of even number dated 19.08.2014.**

Vide Board's letter referred to above, sanction of the above mentioned work at the cost of Rs. 37.50 crore was communicated. Now item-wise break-up of cost for the sanctioned work is attached as 'Annexure'.

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

**(Vinita Narera)**
**Director Electronics(C&IS)**

**No. 2014/C&IS/Project/14-15/WP/64/Pt.I** **New Delhi, Dated :  /10/2014**

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2. **Managing Director/CRIS, Chanakyapuri, New Delhi.**
3. **CAO/FOIS, CRIS Complex, Chanakyapuri, New Delhi.**
4. **The CCM/PM, Northern Railway, New Delhi.**

| Break up of cost of the work of Upgradation of CMS central server setup with archiving, internet access, integration with other application using TIBCO and link optimisation for CMS application | | | | |
|---|---|---|---|---|
| | | As Sanctioned | | |
| S.No. | Item | Rate (Rs.) with Tax | Qty. | Amount |
| A | **Production Hardware** | | | |
| 1 | Power 7, 10 core RISC Server 4 GB per core RAM 2*300 GB HDD, 2*4 NIC, 2 HBA, AIX 6.1 | 3974451 | 2 | 7948902 |
| 2 | Power 7.2 core RISC Server 4 GB per core RAM, 2*300 GB HDD, 2*4 NIC, 2 HBA, AIX 6.1 | 1260000 | 2 | 2520000 |
| 3 | Two CPU Intel Xeon E72870 or latest, minimum 10 core/processors, preloaded with 60GB @133 MHz Registered DDR-3 ECC Memory, Upgradation to 1 TB, Min 4x600GB SCSI/SAS with min. 15k RPM hardware morrored, Should have min 8 slots for 2.5" HS SAS/SATA Drives Archiving Internet access TIBCO | 1921384 | 6 | 11528304 |
| 4 | Two CPU Intel xeon E72870 or latest, minimum 4 core/processors | 603434 | 2 | 1206868 |
| 5 | KVM console (16 Port) | 95487 | 2 | 190974 |
| 6 | SAN Switch (48 port) | 1306494 | 2 | 2612988 |
| 7 | SAN Storage V7000(7.2TB RAW including 3 solid state drives) | 2597854 | 1 | 2597854 |
| 8 | Server Racks | 53296 | 1 | 53296 |
| 9 | Installation and Commissioning by OEM | 1500000 | 1.5 | 2250000 |
| | **Total Production Hardware (A)** | | | **30909186** |
| (B) | **Production System Software** | | | |
| 10 | Application Server WAS | 8027 | 435 | 3491745 |
| 11 | RDBMS License | 20278 | 880 | 17844640 |
| 12 | IBM Tivoli storage manager 10 value units lic | 2244 | 138 | 309672 |
| 13 | IBM Tivoli storage manager storage area networks 10 processor value units (PVUS) License | 7749 | 80 | 619920 |
| 14 | IBM Archiving tool Optim | 11068 | 800 | 8854400 |
| 15 | RHEL server premium (1-2 sockets)(Upto unlimited guests) 3 years subscription with (L1-L3) support from Red Hat | 573670 | 6 | 3442020 |
| 16 | High Availability (1-2 sockets) with 3 years support | 70451 | 4 | 281804 |
| 17 | Red hat Enterprise virtualization for servers, (2 Socket) premium 3 years subscription with (L1-L3) | 264499 | 10 | 2644990 |
| 18 | RHEL server premium (1-2 sockets)(1d guest) 3 years subscription with (L1-L3) support from Red Hat | 229363 | 6 | 1376178 |
| 19 | TIBCO Active matrix business works | 3755520 | 2 | 7511040 |
| 20 | TIBCO Enterprise message servfice | 7511040 | 2 | 15022080 |
| 21 | TIBCO Active Mastrix Adapter for database | 1502208 | 4 | 6008832 |
| 22 | TIBCO Hawk | 751104 | 2 | 1502208 |
| 23 | TIBCO Business event | 7511040 | 2 | 15022080 |
| | **Total Production Software (B)** | | | **83931609** |
| (C) | **Network CRIS** | | | |
| 24 | Network(CRIS) datacom equipment for FOIS network for field location (Routers, LAN Extenders, Modems etc.) for upgradation of Central Server setup for all functionalities | 71189770 | 1 | 71189770 |
| 25 | Cost to be shared for upcoming network and security infrastructure including internet bandwidth at RIDC, CRIS | 883961 | 1 | 883961 |
| 26 | Network Manpower | 4724507 | 1 | 4724507 |
| 27 | Annual recurring charges of network and security infrastructure at RIDC, CRIS | 221322 | 1 | |
| | **Sub Total (C)** | | | **76798238** |
| (D) | **Aplication Development** | | | |
| 28 | Development cost for new modules software enhancements, integration and DW development (inhouse or outsourced) (Yearly) for upgradation of central server setup, internet access, integration, archiving, etc. | 12172945 | 1 | 12172945 |

Vinita

| Break up of cost of the work of Upgradation of CMS central server setup with archiving, internet access, integration with other application using TIBCO and link optimisation for CMS application | | | | |
|---|---|---|---|---|
| | | As Sanctioned | | |
| S.No. | Item | Rate (Rs.) with Tax | Qty. | Amount |
| 29 | Cost for database management/development w.r.t. software enhancements, integration and DW development (inhouse or outsourced) (Yearly) for upgradation of central server setup, internet access, integration, archiving, etc. | 4339780 | 1 | 4339780 |
| 30 | Training for various SW/HW | 2934000 | 1 | 2934000 |
| 31 | Contribution towards CRIS Central Enterprise vide data Warehousing initiated by FOIS | 21227870 | 1 | 21227870 |
| | **Sub Total (D)** | | | **40674595** |
| **(E)** | **Development & Staging Software & Hardware** | | | |
| 31 | PC for development and testing activity | 60677 | 8 | 485416 |
| 32 | Laserjet all in one | 24150 | 4 | 96600 |
| 33 | Rational Clear Case | 46967 | 3 | 140901 |
| | Rational Suit ATS and IBM performance tester pack for 1500 concurrent item | 1760400 | 0.7 | 1232280 |
| 35 | Rational Application Developer | 178442 | 3 | 535326 |
| | Cost of hardware for trial of new devices like breath analyzer, biometric etc. | 500000 | 1 | 500000 |
| | Cost of related software for the HW items required for trial | 500000 | 1 | 500000 |
| | Development (Software) of client aplication for limited off line functionality (Both Linux and Windows) | 1400000 | 1 | 1400000 |
| | Training on RHEL Administration and virtualization | 58053 | 12 | 696636 |
| | **Sub Total (E)** | | | **5587159** |
| **(F)** | **Coaching Crew Scheduling/Optimization** | | | |
| 36 | Hardware | 1732500 | 1 | 1732500 |
| 37 | Optimization S/W | 53972766 | 1 | 53972766 |
| 38 | ATS for 2nd and 3rd Year | 24935418 | 1 | |
| 39 | Development Services | 76284000 | 1 | 76284000 |
| | **Sub Total (F)** | | | **131989266** |
| **(H)** | **Total (A+B+C+D+E+F+G)** | | | **369890053** |
| **(I)** | **Hardware for Lobby Terminal Support System (TSS) equipment** | | | |
| | Kiosk with computer client, touch screen, 320 GB HDD, 2 GB RAM as per spec. with provision for other peripherals like BA device, biometric device, camera etc. or kiosk with thin client, touch screen, 4 GB ROM, 2 GB RAM, as per spec. with provision for other peripherals like BA device, biometric device, camera etc. | 69718 | 67 | 4671106 |
| | 500 VA UPS | 3000 | 76 | 228000 |
| | Printer normal | 5000 | 51 | 255000 |
| | **Sub Total for Lobby TSS** | | | **5154106** |
| **(J)** | **Total (H+I)** | | | **375044159** |
| **(K)** | **Contingency @ 1% of (J)** | | | |
| | **Grand Total (J+K)** | | | **375044159** |
| | **Rounded off** | | | **Rs. 37.50 crore** |

Vinita