GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
(RAILWAY BOARD)

No. 2008/C&IS/UTS/"E"category/ECR/10 **New Delhi, Dated : 23.12.2008**

The General Managers,
All Indian Railways.

Sub : Extension of Unreserved Ticketing Systems at 'E' category stations.

Ref: (i) CRIS's letter No. CRIS/TC/UTS/NET/ Pt.III dated 23.12.2008 (copy enclosed).
(ii) Board's letter No. 2008/C&IS/UTS/'E' Category/SCR/1 dated 23.10.2008.

****

Enclosed please find herewith Rate Contract for supply, transportation to the site, installation, acceptance testing, commissioning and three year on site comprehensive warranty maintenance of Routers, Switches, VoIP devices and LAN extenders as well as the rate contract for supply and three year comprehensive warranty maintenance of Modems finalized by CRIS and take necessary action for timely commissioning of UTS locations. Targets for commissioning up to 31.03.2009 have already been communicated vide Board's letter No. 2007/C&IS/Talking Points/GM's Conf/11 dated 13.05.2008.

(Chhatrasal Singh)
Director(C&IS)

DA: As above.

Copy to :- Managing director, CRIS, Chanakyapuri, New Delhi.

रेलवे सूचना प्रणाली केन्द्र
(रेल मंत्रालय भारत सरकार का संगठन)

CENTRE FOR RAILWAY INFORMATION SYSTEMS
(An Organisation of the Ministry of Railways, Govt. of India)

No. CRIS/TC/UTS/NET/Part-III. Dated: 23.12.08

Director/C&IS,
Railway Board,
Rail Bhavan,
New Delhi.

Sub: **Extension of UTS at category 'E' stations sanctioned under WP- 2007-08.**

CRIS has finalized the rate contracts for supply, transportation to the site, installation, acceptance testing, commissioning and three year on site comprehensive warranty maintenance of Routers, Switches, VoIP devices and LAN extenders as well as the rate contract for supply and three year comprehensive warranty maintenance of Modems for implementation of the subject work. Please find enclosed the copies of the said RCs for information and further necessary action.

Raman Bansal
A.G.M./Telecom

Encl: As above.

चाणक्यपुरी, नयी दिल्ली–110021
CHANAKYAPURI, NEW DELHI-110021
टेलीफोन / TELEPHONE : 24104525, 24106717 फैक्स / FAX : 91-11-26877893

रेलवे सूचना प्रणाली केन्द्र

(रेल मंत्रालय भारत सरकार का संगठन)

CRIS

CENTRE FOR RAILWAY INFORMATION SYSTEMS

(An Organisation of the Ministry of Railways, Govt. of India)

R.C.NO: 2008/CRIS/1112627 **Dated: 22-12-2008**

M/s HCL Infosystems Ltd.
E-4,
Sector 11
Noida: 201 301
UP

SUB :- Rate Contract for Supply, Transportation to the site, installation, acceptance testing, commissioning and 03 year on-site comprehensive warranty maintenance of Routers, Switches, VoIP Devices and LAN Extenders

Ref: CRIS Tender NO: 2008/CRIS/349

With reference to the above, yur offer is accepted for Rate Contract for Supply, Transportation to the site, installation, acceptance testing, commissioning and 03 year on-site comprehensive warranty maintenance of Routers, Switches, VoIP Devices and LAN Extenders with following terms and conditions:

1	Scope of Work	Rate Contract for Supply, Transportation to the site, installation, commissioning with 03 year on-site comprehensive Warranty Maintenance of Routers, Switches, VoIP Devices and LAN Extenders (specification as per Annexure A & BOM as per Annexure B) for expansion of UTS (Unreserved Ticketing System) Network of Indian Railways. The supplier shall ensure smooth & seamless integration of the supplied equipment with the existing UTS network of the Zonal Railways.

Item No.	Name of Item	Unit	Make/ Model	HCL Infosystem All inclusive unit price
1.	Router (03 LAN/30 x 02 Mbps WAN + 01 Channelised STM1 port; 800 Kpps)	Nos.	CISCO 7206	15,66,404
1.1	Router (03 LAN / 24 x 02 Mbps WAN + 01 Channelised STM1 port; 800 Kpps)	Nos.	CISCO 7206	14,41,248
1.2	Router (03 LAN/30 x02 Mbps WAN , 800 Kpps)	Nos.	CISCO 7206	8,44,997
1.3	Router (02 LAN/24 x02 Mbps WAN , 450 Kpps)	Nos.	CISCO 3845	4,22,051
1.4	Router (02 LAN /16 x 02 Mbps WAN ;300 Kpps	Nos.	CISCO 3825	2,84,485
1.5	Router (02 LAN /08 x 02 Mbps (v.35) WAN +08x02 Mbps (G.703) WAN ports;300 Kpps	Nos.	CISCO 3825	4,02,622

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CHANAKYAPURI, NEW DELHI-110021
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1.6	Router (02 LAN / 12x02 Mbps WAN; 300 Kpps)	Nos.	CISCO 3825	2,39,370
1.7	Router (02 LAN /08 x 02 Mbps WAN ;100 Kpps	Nos.	CISCO 2811	93,111
1.8	Router (02 LAN /04 x 02 Mbps WAN ;50 Kpps	Nos.	CISCO 1841	51,204
1.9	24 Port Layer -3 Switch	Nos.	CISCO 3560	1,18146
1.10	24 Port Layer -2 Switch	Nos.	CISCO 2960	17,221
1.11	LAN Extender	per pair	CTC/Atrie	11,253
1.12	VoIP Gateway 02 FXS Port	Nos.	SNOM SI TA 20	8,076
1.13	VoIP Gateway 04 FXS Port	Nos.	SNOM SI TA 40	14,520
1.14	Resident Engineer for 24x7x365 for 3 Years	Nos.		33,15,995

2	Duties & taxes	VAT 4% & Service Tax 12.36% included in the above prices
3	Delivery	All equipment shall be delivered within 6/8 weeks from the date of placement of supply order
4	Payment Terms	80% of the value of complete equipment supplied shall be paid by the purchaser on receipt of material by consignee in good conditions and upon furnishing the following documents: i) Certificate of receipt of complete equipment in good conditions by the consignees in terms of the contract. ii) Preliminary test certificate as per Annexure C1 issued by consignee. iii) Submission of PWG Bond for 20% of the value of contract for a period up to 3 months beyond the last date of warranty period. Balance 20% shall be paid after installation and commissioning of the equipment to the satisfaction of the consignee and upon furnishing the following documents: i) Final Certificate of successful commissioning of complete equipment issued by consignee (annexure C2) as per the inspection and acceptance procedure given in the purchase order. ii) Confirmation of the validity of PWG Bond of 20% of the value of the contract for a period up to 3 months beyond the last date of warranty period.
5	FOR	All the equipment pertaining to Zonal Railways shall be delivered to the consignee at Zonal Railways HQ Offices. However, the supplier shall intimate the consignee of concerned Railways at least one week in advance, the likely date of delivery at data centre to ensure timely physical inspection, preliminary testing and configuration of equipment and then supplier shall carry the equipment to the field locations given in the supply order for Installation, Commissioning & final testing as per ATP.
6	Validity of Rate Contract	Above prices are valid for placement of supply order for One Year from the date of issue of Rate contract.
7	Placement of Supply Order	As & when required, Supply order for above items as per prices and terms & conditions of Rate contract will be placed by Purchase Office/CRIS/New Delhi only or as authorized by MD/CRIS.
8	Local taxes	Local taxes/Octroi exemption certificate, Road Permit will be issued by the consignee. In case consignee fails to issue the Local taxes/Octroi exemption certificate/Road Permit within 21 days from the date of receipt of request from supplier, the Octroi will be paid extra against documentary evidence.
9	Post Warranty AMC Charges	10% of product cost (all inclusive) per year for 4th year & 5th year. The scope of services to be provided during AMC and the associated SLA shall be the

<table>
<tr><td></td><td></td><td>same as specified for the 03 year warranty support. CRIS reserves the right to enter into AMC after satisfactory completion of Warranty period. If firm refuses to enter in to AMC on completion of warranty period at quoted rates firm's PWG BG is liable to be forfeited.</td></tr>
<tr><td>10</td><td>Warranty Period & Support (SLA) during Warranty Period</td><td>The warranty would be valid for a period of 03 years from the date of final acceptance of the equipment by Railways or 42 months from the date of delivery to the original consignee, whichever is earlier.
The vendor shall post their Resident Engineers in three shifts (24x7x365) in the UTS/PRS Datacenters for providing support to the sites of Rly. Zones covered by the relative Datacenter as per the table given below:
<table>
<tr><th>S. No.</th><th>UTS Datacenter</th><th>Zones covered</th><th>No. of Resident Engineers.</th></tr>
<tr><td>1</td><td>New Koila Ghat, Kolkata</td><td>ER, NFR</td><td>1 Engineer in each of the 3 shifts</td></tr>
<tr><td>2</td><td>New Koila Ghat, Kolkata</td><td>ECoR, SECR, SER</td><td>1 Engineer in each of the 3 shifts</td></tr>
<tr><td>3</td><td>CSTM, Mumbai</td><td>CR, WCR</td><td>1 Engineer in each of the 3 shifts</td></tr>
<tr><td>4</td><td>Churchgate Mumbai</td><td>WR</td><td>1 Engineer in each of the 3 shifts</td></tr>
<tr><td>5</td><td>MMC, Chennai</td><td>SR, SWR</td><td>1 Engineer in each of the 3 shifts</td></tr>
<tr><td>6</td><td>Secunderabad</td><td>SCR</td><td>1 Engineer in each of the 3 shifts</td></tr>
<tr><td>7</td><td>IRCA, New Delhi</td><td>NR, NWR, NCR</td><td>1 Engineer in each of the 3 shifts</td></tr>
<tr><td>8</td><td>Patna</td><td>ECR</td><td>1 Engineer in each of the 3 shifts</td></tr>
<tr><td>9</td><td>Gorakhpur</td><td>NER</td><td>1 Engineer in each of the 3 shifts</td></tr>
</table>
The Resident Engineers should posses B.E./B.Tech or equivalent /higher qualifications. The OEM of the offered products shall certify that the Resident Engineers proposed by the supplier have adequate experience for operation, maintenance and day to day troubleshooting tasks on the offered products.

All the equipment shall have on-site warranty support i.e. the repair / replacement of faulty units during the warranty period has to be ensured at the respective site after the complaint is lodged at the nearest customer support office.
• All the complaints for which site visit is not required and can be attended remotely through telephonic support or NMS, should be attended within 03 hours of lodging the complaint with the vendor's resident engineer at the respective PRS/UTS Datacenter or nearest customer support office.
• Failure to attend the fault at the respective site within stipulated time frame of 03 hours shall call for penalty @ Rs. 500 per hour subject to a maximum of 10% of the cost of the unit.

• All the complaints for which site visit is required, shall be attended 07 days a week and within 48 hours of lodging the complaint with the vendor's resident engineer at the respective PRS/UTS Datacenter or nearest customer support office.
• In case of Routers and Switches, Failure to repair / replace the faulty equipment at the respective site within stipulated time frame of 48 hours shall call for penalty @ Rs. 1000 per day subject to a maximum of 10% of</td></tr>
</table>

		the cost of the unit. • In case of VoIP Devices and LAN Extenders, Failure to repair / replace the faulty equipment at the respective site within stipulated time frame of 48 hours shall call for penalty @ Rs. 200 per day subject to a maximum of 10% of the cost of the unit. • The bidder shall provide a complaint Escalation mechanism for escalated complaints during the warranty period.
11	Inspection & Acceptance procedure	Physical Inspection and preliminary testing shall be done by the respective consignee in the presence of representatives of the supplier and will comprise of the following: a. Physical verification of equipment as per the supply contract. b. Physical inspection of the equipment for any physical damage. c. "Power on self test" for all equipments to ascertain that no equipment is dead on arrival. d. Physical verification of software media and documentation as per purchase order. e. A preliminary test certificate as per **Annexure –C1** will be prepared by consignee in 4 copies out of which one copy each shall be handed over to the supplier, Manager Purchase and Project Manager, CRIS. At Zonal Rly Headquarter, The supplier shall configure all the equipment as per configuration templates worked out in coordination with CRIS. Please refer Annexure- E of the tender document, which gives an overview of the Unified Ticketing Network (UTN) of the Indian Railways. After physical inspection, preliminary testing and configuration of equipment at Zonal Rly Hqrs, the supplier shall carry the equipment to the field locations given in supply order for Installation, Commissioning and Final Acceptance Testing as per Acceptance Test Procedure (ATP) given in **Annexure-A.** The Final Acceptance Certificate shall be issued by the respective consignee, only after continuous satisfactory performance of all the installed equipment for 15 days. The Final Acceptance Certificate as per **Annexure –C2** will be prepared by consignee in 4 copies out of which one copy each shall be handed over to the supplier, Manager Purchase and Project Manager, CRIS.
12	Installation & Commissioning	Installation and commissioning of equipment shall be done at consignee's site by the supplier.
13	Documentation	One Set of manuals and support documents with each equipment shall be supplied to consignee. All the equipment must be accompanied by original documentation and full set of accessories given by the manufacturer.
14	Training	The vendor shall provide 05 days training for about 15 persons, at each Zonal Rly. Hq offices related to operations and maintenance of the equipment supplied. The curriculum of the Training shall be worked out in coordination with CRIS.
15	Consignee	The list of consignee & site given in the supply order will be indicative and CRIS reserves the right to change the quantity, locations, delivery schedule for the equipment prior to despatch.
16	Other terms & Condition	As per General Conditions of Contract of CRIS

17. Force Majeure

If at any time, during the continuance of this contract, the performance in whole or in part by either party or any obligation under this contract shall be prevented or delayed by reason of any war, or hostility, acts of

the public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restriction, strikes, lockouts or act of God (hereinafter referred to as events) provided notice of happenings of any such eventuality is given by either party to the other within 21 days from the date of occurrence thereof, neither party shall by reason of such event be entitled to terminate this contract nor shall either party have any such claim for damages against the other in respect of such non-performance or delay in performance, and deliveries under the contract shall be resumed as soon as practicable after such event may come to an end or cease to exist and the decision of the purchaser as to whether the deliveries have been so resumed or not shall be final and conclusive provided further that if the performance in whole or part of any obligation under this contract is prevented or delayed by reason of any such event for a period exceeding 60 days either party may at his option, terminate the contract provided also that if the contract is terminated under this clause, the Purchaser shall be at liberty to take over from the Successful tenderer at a price to be fixed by the purchaser with mutual consent which shall be final. All unused, undamaged and acceptable materials bought out components and stores in course of manufacture in possession of the Successful tenderer at the time of such termination of such portions thereof as the purchaser may deem fit excepting such materials bought out components and goods as the Successful tenderer may with the concurrence of the Purchaser select to retain.

18. Submission of documents:

18.1 Please send by courier 2 copies each of the following documents immediately on dispatch of material.

18.2 Commercial invoice indicating material, price, no of packages etc. Dispatch particulars including RR/GR.

18.3 Detailed packing lists must indicate the contents of each Box. Manufacturer's test and inspection certificate.

18.4 Guarantee certificate.

18.5 CRIS Inspection Certificate, if applicable.

19. Correspondence:

All correspondence pertaining to this order shall be addressed to :
Chief Purchase Manager/ CRIS (Attn: Sh V.K..JAIN)
CRIS ,)
Fax No+91-11-26877893
Tel No: +24104525, 24108717

20. Project Code: UTS

(V.K.JAIN)
Chief Purchase Manager

रेलवे सूचना प्रणाली केन्द्र

(रेल मंत्रालय भारत सरकार का संगठन)

CRIS

CENTRE FOR RAILWAY INFORMATION SYSTEMS

(An Organisation of the Ministry of Railways, Govt. of India)

R.C.NO: 2008/CRIS/1112628 **Dated: 22-12-2008**

M/s Wipro Ltd.(Infotech Division),
Plot No. 480-481,
Udyog Vihar,
Phase-III,
Gurgaon-122016

SUB :- Tender No 2008/CRIS/349 Rate Contract for Supply, Transportation to the site, installation, acceptance testing, commissioning and 03 year on-site comprehensive warranty maintenance of Routers, Switches, VoIP Devices and LAN Extenders

Ref :- Your offer dtd. 14th July 2008

With reference to the above, yur offer is accepted for Rate Contract for Supply, Transportation to the site, installation, acceptance testing, commissioning and 03 year on-site comprehensive warranty maintenance of Routers, Switches, VoIP Devices and LAN Extenders with following terms and conditions:

1	Scope of Work	Rate Contract for Supply, Transportation to the site, installation, commissioning with 03 year on-site comprehensive Warranty Maintenance of Routers, Switches, VoIP Devices and LAN Extenders (specification as per Annexure A & BOM as per Annexure B) for expansion of UTS (Unreserved Ticketing System) Network of Indian Railways. The supplier shall ensure smooth & seamless integration of the supplied equipment with the existing UTS network of the Zonal Railways.

Item No.	Name of Item	Unit	Make/ Model	Wpro Ltd All inclusive unit price
1.	Router (03 LAN/30 x 02 Mbps WAN + 01 Channelised STM1 port; 800 Kpps)	Nos.	CISCO 7206	15,33,466
2	Router (03 LAN / 24 x 02 Mbps WAN + 01 Channelised STM1 port; 800 Kpps)	Nos.	CISCO 7206	14,12,037
3	Router (03 LAN/30 x02 Mbps WAN , 800 Kpps)	Nos.	CISCO 7206	8,95,100
4	Router (02 LAN/24 x02 Mbps WAN , 450 Kpps)	Nos.	CISCO 3845	4,39,917

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CHANAKYAPURI, NEW DELHI-110021
टेलीफोन/TELEPHONE : 24104525, 24106717 फैक्स/FAX : 91-11-26877893

5	Router (02 LAN /16 x 02 Mbps WAN ;300 Kpps	Nos.	CISCO 3825	2,96,979
6	Router (02 LAN /08 x 02 Mbps (v.35) WAN +08x02 Mbps (G.703) WAN ports;300 Kpps	Nos.	CISCO 3825	4,13,550
7	Router (02 LAN / 12x02 Mbps WAN; 300 Kpps)	Nos.	CISCO 3825	2,49,795
8	Router (02 LAN /08 x 02 Mbps WAN ;100 Kpps	Nos.	CISCO 2811	98,461
9	Router (02 LAN /04 x 02 Mbps WAN ;50 Kpps	Nos.	CISCO 1841	55,441
10	24 Port Layer -3 Switch	Nos.	CISCO 3560	1,21,983
11	24 Port Layer -2 Switch	Nos.	CISCO 2960	17,971
12	LAN Extender	per pair	CTC/Atrie	10,930
13	VoIP Gateway 02 FXS Port	Nos.	SNOM SI TA 20	4,383
14	VoIP Gateway 04 FXS Port	Nos.	SNOM SI TA 40	7,361
15	Resident Engineer for 24x7x365 for 3 Years	Nos.		10,78,656

6.2	Duties & taxes	VAT 4% & Service Tax 12.36% included in the above prices
6.3	Delivery	All equipment shall be delivered within 6/8 weeks from the date of placement of supply order
6.4	Payment Terms	80% of the value of complete equipment supplied shall be paid by the purchaser on receipt of material by consignee in good conditions and upon furnishing the following documents: i) Certificate of receipt of complete equipment in good conditions by the consignees in terms of the contract. ii) Preliminary test certificate as per Annexure C1 issued by consignee. iii) Submission of PWG Bond for 20% of the value of contract for a period up to 3 months beyond the last date of warranty period. Balance 20% shall be paid after installation and commissioning of the equipment to the satisfaction of the consignee and upon furnishing the following documents: i) Final Certificate of successful commissioning of complete equipment issued by consignee (annexure C2) as per the inspection and acceptance procedure given in the purchase order. ii) Confirmation of the validity of PWG Bond of

<table>
<tr><td></td><td></td><td>20% of the value of the contract for a period up to 3 months beyond the last date of warranty period.</td></tr>
<tr><td>6.5</td><td>FOR</td><td>All the equipment pertaining to Zonal Railways shall be delivered to the consignee at Zonal Railways HQ Offices. However, the supplier shall intimate the consignee of concerned Railways at least one week in advance, the likely date of delivery at data centre to ensure timely physical inspection, preliminary testing and configuration of equipment and then supplier shall carry the equipment to the field locations given in the supply order for Installation, Commissioning & final testing as per ATP.</td></tr>
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<tr><td>6.7</td><td>Placement of Supply Order</td><td>As & when required, Supply order for above items as per prices and terms & conditions of Rate contract will be placed by Purchase Office/CRIS/New Delhi only or as authorized by MD/CRIS.</td></tr>
<tr><td>6.8</td><td>Local taxes</td><td>Local taxes/Octroi exemption certificate, Road Permit will be issued by the consignee. In case consignee fails to issue the Local taxes/Octroi exemption certificate/Road Permit within 21 days from the date of receipt of request from supplier, the Octroi will be paid extra against documentary evidence.</td></tr>
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The vendor shall post their Resident Engineers in three shifts (24x7x365) in the UTS/PRS Datacenters for providing support to the sites of Rly. Zones covered by the relative Datacenter as per the table given below:
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<tr><th>S. No.</th><th>UTS Datacenter</th><th>Zones covered</th><th>No. of Resident Engineers.</th></tr>
<tr><td>1</td><td>New Koila Ghat, Kolkata</td><td>ER, NFR</td><td>1 Engineer in each of the 3 shifts</td></tr>
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<tr><td>5</td><td>MMC, Chennai</td><td>SR, SWR</td><td>1 Engineer in each of the 3 shifts</td></tr>
</table></td></tr>
</table>

5	MMC, Chennai	SR, SWR	1 Engineer in each of the 3 shifts
6	Secunderabad	SCR	1 Engineer in each of the 3 shifts
7	IRCA, New Delhi	NR, NWR, NCR	1 Engineer in each of the 3 shifts
8	Patna	ECR	1 Engineer in each of the 3 shifts
9	Gorakhpur	NER	1 Engineer in each of the 3 shifts

The Resident Engineers should posses B.E./B.Tech or equivalent /higher qualifications. The OEM of the offered products shall certify that the Resident Engineers proposed by the supplier have adequate experience for operation, maintenance and day to day troubleshooting tasks on the offered products.

All the equipment shall have on-site warranty support i.e. the repair / replacement of faulty units during the warranty period has to be ensured at the respective site after the complaint is lodged at the nearest customer support office.

- **All the complaints for which site visit is not required** and can be attended remotely through telephonic support or NMS, should be attended within 03 hours of lodging the complaint with the vendor's resident engineer at the respective PRS/UTS Datacenter or nearest customer support office.
- Failure to attend the fault at the respective site within stipulated time frame of 03 hours shall call for penalty @ Rs. 500 per hour subject to a maximum of 10% of the cost of the unit.

- **All the complaints for which site visit is required,** shall be attended 07 days a week and within 48 hours of lodging the complaint with the vendor's resident engineer at the respective PRS/UTS Datacenter or nearest customer support office.
- In case of Routers and Switches, Failure to repair / replace the faulty equipment at the respective site within stipulated time frame of 48 hours shall call for penalty @ Rs. 1000 per day subject to a maximum of 10% of the cost of the unit.
- In case of VoIP Devices and LAN Extenders, Failure to repair / replace the faulty equipment at the respective site within stipulated time frame of 48 hours shall call for penalty @ Rs. 200 per day subject to a maximum of 10% of the cost of the unit.

		• The bidder shall provide a complaint Escalation mechanism for escalated complaints during the warranty period.
6.11	Inspection & Acceptance procedure	Physical Inspection and preliminary testing shall be done by the respective consignee in the presence of representatives of the supplier and will comprise of the following: a. Physical verification of equipment as per the supply contract. b. Physical inspection of the equipment for any physical damage. c. "Power on self test" for all equipments to ascertain that no equipment is dead on arrival. d. Physical verification of software media and documentation as per purchase order. e. A preliminary test certificate as per **Annexure –C1** will be prepared by consignee in 4 copies out of which one copy each shall be handed over to the supplier, Manager Purchase and Project Manager, CRIS. At Zonal Rly Headquarter, The supplier shall configure all the equipment as per configuration templates worked out in coordination with CRIS. Please refer Annexure- E of the tender document, which gives an overview of the Unified Ticketing Network (UTN) of the Indian Railways. After physical inspection, preliminary testing and configuration of equipment at Zonal Rly Hqrs, the supplier shall carry the equipment to the field locations given in supply order for Installation, Commissioning and Final Acceptance Testing as per Acceptance Test Procedure (ATP) given in **Annexure-A**. The Final Acceptance Certificate shall be issued by the respective consignee, only after continuous satisfactory performance of all the installed equipment for 15 days. The Final Acceptance Certificate as per **Annexure –C2** will be prepared by consignee in 4 copies out of which one copy each shall be handed over to the supplier, Manager Purchase and Project Manager, CRIS.
6.12	Installation & Commissioning	Installation and commissioning of equipment shall be done at consignee's site by the supplier.
6.13	Documentation	One Set of manuals and support documents with each equipment shall be supplied to consignee. All the equipment must be accompanied by original documentation and full set of accessories given by the manufacturer.
6.14	Training	The vendor shall provide 05 days training for about 15 persons, at each Zonal Rly. Hq offices related to operations and maintenance of the equipment supplied. The curriculum of the Training shall be worked out in coordination with CRIS.
6.15	Consignee	The list of consignee & site given in the supply order will be indicative and CRIS reserves the right to change the quantity,

		locations, delivery schedule for the equipment prior to despatch.
6.16	Other terms & Condition	As per General Conditions of Contract of CRIS

7. **Force Majeure**

If at any time, during the continuance of this contract, the performance in whole or in part by either party or any obligation under this contract shall be prevented or delayed by reason of any war, or hostility, acts of the public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restriction, strikes, lockouts or act of God (hereinafter referred to as events) provided notice of happenings of any such eventuality is given by either party to the other within 21 days from the date of occurrence thereof, neither party shall by reason of such event be entitled to terminate this contract nor shall either party have any such claim for damages against the other in respect of such non-performance or delay in performance, and deliveries under the contract shall be resumed as soon as practicable after such event may come to an end or cease to exist and the decision of the purchaser as to whether the deliveries have been so resumed or not shall be final and conclusive provided further that if the performance in whole or part of any obligation under this contract is prevented or delayed by reason of any such event for a period exceeding 60 days either party may at his option, terminate the contract provided also that if the contract is terminated under this clause, the Purchaser shall be at liberty to take over from the Successful tenderer at a price to be fixed by the purchaser with mutual consent which shall be final. All unused, undamaged and acceptable materials bought out components and stores in course of manufacture in possession of the Successful tenderer at the time of such termination of such portions thereof as the purchaser may deem fit excepting such materials bought out components and goods as the Successful tenderer may with the concurrence of the Purchaser select to retain.

8. Submission of documents:

8.1 Please send by courier 2 copies each of the following documents immediately on dispatch of material.
8.2 Commercial invoice indicating material, price, no of packages etc.
Dispatch particulars including RR/GR.
8.3 Detailed packing lists must indicate the contents of each Box.
Manufacturer's test and inspection certificate.
8.4 Guarantee certificate.
8.5 CRIS Inspection Certificate, if applicable.

33. Correspondence:

All correspondence pertaining to this order shall be addressed to :
Chief Purchase Manager/ CRIS (Attn: Sh V.K..JAIN)
CRIS ,)
Fax No+91-11-26877893
Tel No: +24104525, 24108717

22. Project Code: UTS

(V.K.JAIN)
Chief Purchase Manager

रेलवे सूचना प्रणाली केन्द्र

(रेल मंत्रालय भारत सरकार का संगठन)

CENTRE FOR RAILWAY INFORMATION SYSTEMS

(An Organisation of the Ministry of Railways, Govt. of India)

Annual Rate Contact P.O. No.2008/CRIS/RC/1112592 Dated: 19-11-2008

Modification of Purchase Order

M/s. HCL Infosystems Ltd.
E-4, Sector-II,
Noida-201301

Sub: Supply and 03 years comprehensive warrantymentenance of Modems at the Zonal HQ offices
Ref: Annual Rate Contract of even No. dtd. 14-11-2008

With reference to the above, Please read the model and make for 64Kbps Modem as Model "Wirespan 4000"of M/s. AtrieTecnology make. All other terms and conditions are remain unaltered.

(V.K.Jain)
Chief Purchase Manager

चाणक्यपुरी, नयी दिल्ली-110021
CHANAKYAPURI, NEW DELHI-110021
टेलीफोन/TELEPHONE : 24104525, 24106717 फैक्स/FAX : 91-11-26877893

रेलवे सूचना प्रणाली केन्द्र

(रेल मंत्रालय भारत सरकार का संगठन)

CRIS **CENTRE FOR RAILWAY INFORMATION SYSTEMS**
(An Organisation of the Ministry of Railways, Govt. of India)

Annual Rate Contract P/O No. 2008/CRIS/RC/11/4897
Date;- 14-11-2008

M/s

HCL INFOSYSTEMS LTD
E-4, Sector-11,
NOIDA-201301

SUB: - Tender No 2008/CRIS/350 opened on 18-06-2008 for Supply and 03 years comprehensive warranty maintenance of Modems at the Zonal HQ offices.

Ref: -(1) Your offer for the subject tender.
(2) Your Acceptance letter no- NIL Dated 30-10-2008

Your offer for Annual Rate Contract has been accepted with the following terms and conditions.

6.1	Scope of Work	Supply with 3 Years comprehensive Warranty Maintenance of 64/128 Kbps Modem Pair (V.35 & G703)
6.2	Unit Rate	Rs.8530/-
6.3	Unit	Per Pair
6.4	Validity of RC	Above prices are valid for placement of supply order for One Year from the date of issue of Rate contract.
6.5	Duties & taxes	Vat 4% extra
6.6	Delivery	Within 4 to 6 weeks from the date of supply order.
6.7	FOR	All the modem equipment shall be delivered to the respective Consignees at each of the Zonal Railway HQ offices. However, the consignee will arrange transport of the equipment from the consignee location i.e. (headquarters of zonal railways) to field sites (railway stations) for installation by Railways.
6.8	Octroi	Octroi exemption certificate/Road Permit will be issued by the consignee. In case consignee fails to issue the Octroi exemption certificate/Road Permit within 21 days from the date of receipt of request from supplier, the Octroi will be paid extra against documentary evidence.
6.9	Placement of Supply Order	Against this Rate Contact, supply order will be placed by Purchase Office/CRIS/New Delhi only or as authorized by MD/CRIS.
6.10	Payment Terms	80% of the value of complete equipment supplied shall be paid by the purchaser on receipt of material by consignees and upon furnishing the following documents: i) Certificate of receipt of complete equipment in good condition by the consignees.

चाणक्यपुरी, नयी दिल्ली-110021
CHANAKYAPURI, NEW DELHI-110021
टेलीफोन/TELEPHONE : 24104525, 24106717 फैक्स/FAX : 91-11-26877893

		ii) Submission of PWG Bond for the 20% value of contract for a period up to 3 months beyond the last date of warranty period. Balance 20% shall be paid after acceptance of the equipment to the satisfaction of the consignee and upon furnishing the following documents: i) Acceptance Test certificates as per proforma given in Annexure –C issued by the consignees. ii) Certificate issued by the consignees for successful completion of the training program related to operations & maintenance of the modem product.. iii) Confirmation of the validity of PWG Bond of 20% of the value of the contract for a period up to 3 months beyond the last date of warranty period.
6.11	Post Warranty AMC Charges	11.83% of basic cost per modem per year for 4th & 5th year. These rates are exclusive of service tax @12.36%, which will be extra. However, CRIS reserves the right to enter into AMC after satisfactory completion of Warranty period. If firm refuses to enter in to AMC on completion of warranty period at quoted rates firm's PWG BG is liable to be forfeited.
6.12	Warranty Period	36 months from the date of installation or 42 months from the date of supply of Modems. i) The bidder should have a support office at each of the Zonal Railway Hqr. locations specified vide Annexure B ii) The modems shall have back-to-bench warranty support i.e. the repair /replacement of faulty units during the warranty period has to be ensured at the respective Zonal Railway Hq. Offices after the complaint is lodged at the nearest customer support office. iii) Faulty modem equipment shall be attended at the Zonal Railway Hq offices within 48 hours of (excluding Sunday and National Holiday) lodging the complaint at the nearest customer support office. iv) Failure to repair / replace the faulty Modem equipment at the Zonal Railway Hqrs. within stipulated time frame of 48 hours shall call for penalty @ Rs.200 per day subject to a maximum of 10% of the cost of the unit. v) The firm shall provide a complaint Escalation mechanism for escalation of complaints during the warranty period. vi) The firm should attend each Zonal HQ office at least quarterly for preventive maintenance call.
6.13	Inspection & Acceptance procedure	(i) The physical inspection, testing & Acceptance of the modems shall be done at these Zonal offices by the respective consignees or their authorized representatives. (ii) Acceptance testing shall be done by consignee after receipt of the equipment, in the presence of representatives of the supplier as per the Acceptance test Procedure given in the Annexure A

		(Technical Specifications) and an Acceptance Test certificate as per proforma given in Annexure C will be prepared in 4 copies by the consignee and one copy each shall be handed over to the supplier, Manager Purchase/CRIS and Project Manager, CRIS. (iii) The supplier shall ensure smooth & seamless integration of their supplied equipment with the existing UTS network of the Zonal Railways.
6.14	Documentation	Firm will supply one set of original manuals, support documents and full set of accessories with each modem. Any software for installation of the equipment shall be supplied on a CD/VCD.
6.15	Training	The vendor shall provide 2 days training for 10 persons related to operations and maintenance of the equipment supplied at each Zonal Rly. Hq offices as specified in Annexure – B.
6.16	Consignee	As per supply order but installation sites are subject to changes prior to installation. However, such changes will be restricted to within a particular State. Any modification in the list of sites will be advised only by CRIS.
6.17	Other terms & Condition	As per General Conditions of Contract of CRIS

(Munish Arora)
Chief Manager Purchase

Copy to;- Consignee
Accounts Branch
Record File

Technical Specifications for 64 Kbps Modems (V.35 & G.703)

The modems should conform either to TEC Specifications no. IR/DCA – 18/03, Feb 2002 or to TEC Specifications no. IR/DCA – 18/04, Oct 2005 (TEC Specifications no. IR/DCA – 18/03, Feb 2002 - Re-affirmed in Oct 2005 also valid) with the following qualifications/addendum. In both cases the specifications pertaining to IEEE 802.3 Ethernet 10/100 Base Tx Interface viz. Clauses no. 2.1(iv), 2.3 ,7(v) and 1.1.1(vi), 1.5(v) respectively, mentioned in the Interface requirements of the above TEC specifications no. are not applicable.

1) *Clause no. 2 : Digital Interface :*

a) *Item 2.1 (iii) is not applicable*

b) *Item 2.2 : Speed Support*

The speed/s supported at Digital Interface/s shall be with any combination of 64 Kbps between 64 Kbps to 128 Kbps.

2) *Clause no. 7: Items to be Specified in the Interface Approval Certification :*

a) *Item 7(i) : Digital Interface/s supported in the equipment*

V.35 via 34-pin Female Connector with one modem
G.703 Co-directional interface with other modem in modem pair

b) *Item 7(ii) : Whether single pair, 2 pair or multi pair working*

2W unloaded twisted pair working

c) *Item 7(iii) : Highest bit rates of the digital interfaces supported*

The highest bit rate of digital interface supported shall be upto 128 Kbps

d) *Item 7(iv) : Maximum distance coverage*

On 0.5 mm diameter underground cable (unloaded), the modem should work upto a minimum of 5.5 kms of distance for 64Kbps data rate.

3) *Clause no. 8 : References :*

ITU – T recommendations K.21, G-703 and V.35 are applicable in this case.

4) The modem shall support following management / diagnostic features :

a) Front Panel indications for PWR(Power), TD(Transmit Data), RD (Receive Data), TEST (To indicate test mode), DCD (Data Carrier detect), Alarm / Error .

b) i) Local Analog Loop Test (for self test of modem)

ii) Local Digital Loop Test (to provide Loop test to the remote modem on local loop)

iii) Remote Digital Loop Test (to take Loop test from the remote modem on local loop) without requiring the manual assistance of any personnel at remote end

d) Built in Bit Error Test using test pattern conforming to ITU-T V.52 (511 test pattern) or ITU-T O.152 (to enable testing of the modems and the local loop)

5) In a modem pair, the modem with V.35 interface shall be operable on normal AC supply whereas the G.703 modem unit shall be operable with both AC and DC power supply , with AC or DC supply being used at any given point of time.

6) *Certification :*

Valid and duly attested copy of TEC approval certificate issued to the offered modem product for both V.35 & G.703 Interface units.

Acceptance Test Procedure for Modems :

1. Physical Inspection and Testing for compliance to Item nos. 2, 4 & 5 of the technical specifications except Item 2(c) & 2(d) :-

2. TEC approval certificate to verify compliance to Item nos. 1, 2(c), 2(d), 3 & 6 of the technical specifications :-

Annexure – B

List of Consignees and Zonal Railway Hqrs.

S.No.	Zone	Head Quarter	Consignee	Quantity (in Pairs)	
				64 Kbps	02 Mbps
1	ECoR	Bhubaneswar	CCM/PS		
2	SECR	Bilaspur	CCM/PS		
3	NCR	Allahabad	CCM/G		
4	CR	CSTM Mumbai	CCM/PM		
5	SCR	Secunderabad	CCM / PM		
6	SER	New Koilaghat	CCM/PS		
7	NFR	Maligaon	CCM/PS		
8	WR	Churchgate Mumbai	CCM/PM		
9	ER	New Koilaghat	CCM/PM		
10	SR	Chennai	CCM/PM		
11	NWR	Jaipur	CCM/PS		
12	NR	New Delhi	CCM/PM		
13	NER	Gorakhpur	CCM/PM		
14	WCR	Jabalpur	CCM/PS		
15	ECR	Patna	Store Incharge UTS Center Karbigahiya Site Patna Junction		
16	SWR	Hubli	CCM/PS		
			Total–>	**4972**	**7294**

रेलवे सूचना प्रणाली केन्द्र
(रेल मंत्रालय भारत सरकार का संगठन)

CRIS
CENTRE FOR RAILWAY INFORMATION SYSTEMS
(An Organisation of the Ministry of Railways, Govt. of India)

Annual Rate Contact P.O. No.2008/CRIS/RC/1112591 Dated: 19-11-2008

Modification of Purchase Order

M/s. Tulip Telecom Ltd.
C-160, Okhla Industria Area Phase-I
New Delhi-110020

Sub: Supply and 03 years comprehensive warrantymentenance of Modems at the Zonal HQ offices
Ref: Annual Rate Contract of even No. dtd. 14-11-2008

With reference to the above, Please read the model and make for 2 Mbps modem as Model"Nomus Gateway I/2M/2W/LX-2Mbps-2 wire with LCD front panel" of M/s. Nomus communication system make. All other terms and conditions are remain unaltered.

(V.K.Jain)
Chief Purchase Manager

चाणक्यपुरी, नयी दिल्ली-110021
CHANAKYAPURI, NEW DELHI-110021
टेलीफोन/TELEPHONE : 24104525, 24106717 फैक्स/FAX : 91-11-26877893

रेलवे सूचना प्रणाली केन्द्र

(रेल मंत्रालय भारत सरकार का संगठन)

CENTRE FOR RAILWAY INFORMATION SYSTEMS

(An Organisation of the Ministry of Railways, Govt. of India)

Annual Rate Contract P.O.No 2008/CRIS/RC/211/591
Date;- 14-11-2008

Fax - 91-11-41678002.

M/s

Tulip Telecom Ltd
C-160, Okhla Industrial Area Phase-I,
New Delhi-
110020

SUB: - Tender No 2008/CRIS/350 opened on 18-06-2008 for Supply and 03 years comprehensive warranty maintenance of Modems at the Zonal HQ offices.

Ref: -(1) Your offer for the subject tender.
(2) Your Acceptance letter no NIL dated 06-11-2008

Your offer for Annual Rate Contract has been accepted with the following terms and conditions.

6.1	Scope of Work	Supply with 3 Years comprehensive Warranty Maintenance of 2 Mbps G.SHDSL (nx64) Modem Pair (V.35 & G703) as per specification given in Annexure - A
6.2	Unit Rate	Rs.11925/-
6.3	Unit	Per Pair
6.4	Validity of RC	Above prices are valid for placement of supply order for One Year from the date of issue of Rate contract.
6.5	Duties & taxes	Inclusive of 4% VAT
6.6	Delivery	Within 4 to 6 weeks from the date of supply order.
6.7	FOR	All the modem equipment shall be delivered to the respective Consignees at each of the Zonal Railway HQ offices. However, the consignee will arrange transport of the equipment from the consignee location i.e. (headquarters of zonal railways) to field sites (railway stations) for installation by Railways.
6.8	Octroi	Octroi exemption certificate/Road Permit will be issued by the consignee. In case consignee fails to issue the Octroi exemption certificate/Road Permit within 21 days from the date of receipt of request from supplier, the Octroi will be paid extra against documentary evidence.
6.9	Placement of Supply Order	Against this Rate Contact, supply order will be placed by Purchase Office/CRIS/New Delhi only or as authorized by MD/CRIS.
6.10	Payment Terms	80% of the value of complete equipment supplied shall be paid by the purchaser on receipt of material by consignees and upon furnishing the following documents: i) Certificate of receipt of complete equipment in good condition by the consignees. ii) Submission of PWG Bond for the 20% value of contract for a

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CHANAKYAPURI, NEW DELHI-110021
टेलीफोन/TELEPHONE : 24104525, 24106717 फैक्स/FAX : 91-11-26877893

		period up to 3 months beyond the last date of warranty period. Balance 20% shall be paid after acceptance of the equipment to the satisfaction of the consignee and upon furnishing the following documents: i) Acceptance Test certificates as per proforma given in Annexure –C issued by the consignees. ii) Certificate issued by the consignees for successful completion of the training program related to operations & maintenance of the modem product. iii) Confirmation of the validity of PWG Bond of 20% of the value of the contract for a period up to 3 months beyond the last date of warranty period.
6.11	Post Warranty AMC Charges	11.83% of basic cost per modem per year for 4th & 5th year. These rates are exclusive of service tax @12.36%, which will be extra. However, CRIS reserves the right to enter into AMC after satisfactory completion of Warranty period. If firm refuses to enter in to AMC on completion of warranty period at quoted rates firm's PWG BG is liable to be forfeited.
6.12	Warranty Period	36 months from the date of installation or 42 months from the date of supply of Modems. i) The bidder should have a support office at each of the Zonal Railway Hqr. locations specified vide Annexure B ii) The modems shall have back-to-bench warranty support i.e. the repair /replacement of faulty units during the warranty period has to be ensured at the respective Zonal Railway Hq. Offices after the complaint is lodged at the nearest customer support office. iii) Faulty modem equipment shall be attended at the Zonal Railway Hq offices within 48 hours of (excluding Sunday and National Holiday) lodging the complaint at the nearest customer support office. iv) Failure to repair / replace the faulty Modem equipment at the Zonal Railway Hqrs. within stipulated time frame of 48 hours shall call for penalty @ Rs.200 per day subject to a maximum of 10% of the cost of the unit. v) The firm shall provide a complaint Escalation mechanism for escalation of complaints during the warranty period. vi) The firm should attend each Zonal HQ office at least quarterly for preventive maintenance call.
6.13	Inspection & Acceptance procedure	(i) The physical inspection, testing & Acceptance of the modems shall be done at these Zonal offices by the respective consignees or their authorized representatives. (ii) Acceptance testing shall be done by consignee after receipt of the equipment, in the presence of representatives of the supplier as per the Acceptance test Procedure given in the Annexure A (Technical Specifications) and an Acceptance Test certificate as

		per proforma given in Annexure C will be prepared in 4 copies by the consignee and one copy each shall be handed over to the supplier, Manager Purchase/CRIS and Project Manager, CRIS. (iii) The supplier shall ensure smooth & seamless integration of their supplied equipment with the existing UTS network of the Zonal Railways.
6.14	Documentation	Firm will supply one set of original manuals, support documents and full set of accessories with each modem. Any software for installation of the equipment shall be supplied on a CD/VCD.
6.15	Training	The vendor shall provide 2 days training for 10 persons related to operations and maintenance of the equipment supplied at each Zonal Rly. Hq offices as specified in Annexure – B.
6.16	Consignee	As per supply order but installation sites are subject to changes prior to installation. However, such changes will be restricted to within a particular State. Any modification in the list of sites will be advised only by CRIS.
6.17	Other terms & Condition	As per General Conditions of Contract of CRIS

(Munish Arora)
Chief Manager Purchase

Copy to;- Consignee
Record File
Accounts Branch

Annexure-'A'

Technical Specifications for 64 Kbps Modems (V.35 & G.703)

The modems should conform either to TEC Specifications no. IR/DCA – 18/03, Feb 2002 or to TEC Specifications no. IR/DCA – 18/04, Oct 2005 (TEC Specifications no. IR/DCA – 18/03, Feb 2002 - Re-affirmed in Oct 2005 also valid) with the following qualifications/addendum. In both cases the specifications pertaining to IEEE 802.3 Ethernet 10/100 Base Tx Interface viz. Clauses no. 2.1(iv), 2.3 ,7(v) and 1.1.1(vi), 1.5(v) respectively, mentioned in the Interface requirements of the above TEC specifications no. are not applicable.

1) *Clause no. 2 : Digital Interface :*

a) *Item 2.1 (iii) is not applicable*

b) *Item 2.2 : Speed Support*

The speed/s supported at Digital Interface/s shall be with any combination of 64 Kbps between 64 Kbps to 128 Kbps.

2) *Clause no. 7: Items to be Specified in the Interface Approval Certification :*

a) *Item 7(i) : Digital Interface/s supported in the equipment*

V.35 via 34-pin Female Connector with one modem
G.703 Co-directional interface with other modem in modem pair

b) *Item 7(ii) : Whether single pair, 2 pair or multi pair working*

2W unloaded twisted pair working

c) *Item 7(iii) : Highest bit rates of the digital interfaces supported*

The highest bit rate of digital interface supported shall be upto 128 Kbps

d) *Item 7(iv) : Maximum distance coverage*

On 0.5 mm diameter underground cable (unloaded), the modem should work upto a minimum of 5.5 kms of distance for 64Kbps data rate.

3) *Clause no. 8 : References :*

ITU – T recommendations K.21, G-703 and V.35 are applicable in this case.

4) The modem shall support following management / diagnostic features :

a) Front Panel indications for PWR(Power), TD(Transmit Data), RD (Receive Data), TEST (To indicate test mode), DCD (Data Carrier detect), Alarm / Error .

b) i) Local Analog Loop Test (for self test of modem)

ii) Local Digital Loop Test (to provide Loop test to the remote modem on local loop)

iii) Remote Digital Loop Test (to take Loop test from the remote modem on local loop) without requiring the manual assistance of any personnel at remote end

d) Built in Bit Error Test using test pattern conforming to ITU-T V.52 (511 test pattern) or ITU-T O.152 (to enable testing of the modems and the local loop)

5) In a modem pair, the modem with V.35 interface shall be operable on normal AC supply whereas the G.703 modem unit shall be operable with both AC and DC power supply , with AC or DC supply being used at any given point of time.

6) *Certification :*

Valid and duly attested copy of TEC approval certificate issued to the offered modem product for both V.35 & G.703 interface units.

<u>Acceptance Test Procedure for Modems</u> :

1. Physical Inspection and Testing for compliance to Item nos. 2, 4 & 5 of the technical specifications except Item 2(c) & 2(d) :-

2. TEC approval certificate to verify compliance to Item nos. 1, 2(c), 2(d), 3 & 6 of the technical specifications :-

Technical Specifications for G.SHDSL 2 Mbps (nx64 Kbps) 2 wire Leased Line Modems (V.35 & G.703)

The modems should conform either to TEC Specifications no. IR/DCA – 18/03, Feb 2002 or to TEC Specifications no. IR/DCA – 18/04, Oct 2005 (TEC Specifications no. IR/DCA – 18/03, Feb 2002 - Re-affirmed in Oct 2005 also valid) with the following qualifications/addendum. In both cases the specifications pertaining to IEEE 802.3 Ethernet 10/100 Base Tx Interface vide Clauses no. 2.1(iv), 2.3 ,7(v) and 1.1.1(vi), 1.5(v) respectively, mentioned in the Interface requirements of the above TEC specifications no. are not applicable.

1) *Clause no. 2 : Digital Interface :*

a) *Item 2.1 (iii) is not applicable*

b) *Item 2.2 : Speed Support*

The speed/s supported at Digital Interface/s shall be with any combination of 64 Kbps between 64 Kbps to 2048 Kbps.

2) *Clause no.7 : Items to be Specified in the Interface Approval Certification :*

a) *Item 7(i) : Digital Interface/s supported in the equipment*

V.35 via 34-pin Female Connector with one modem
G.703 interface with other modem in modem pair

b) *Item 7(ii) : Whether single pair, 2 pair or multi pair working*

2W unloaded twisted pair working

c) *Item 7(iii) : Highest bit rates of the digital interfaces supported*

The highest bit rate of digital interface supported shall be up to 2048 Kbps (nx64 Kbps, n = 1to 32)

d) *Item 7(iv) : Maximum distance coverage*

On 0.5 mm diameter underground cable (unloaded), the modem should work upto a minimum of 5.0 kms of distance for 2048 Kbps data rate.

3) *Clause no. 8 : References :*

ITU – T recommendations K.21, G-703 and V.35 are applicable in this case.

4) The modem shall support following management / diagnostic features :

a) Front Panel indications for PWR(Power), DATA(Transmit/Receive Data), TEST (To indicate test mode), SYNC (Status of DSL line / E1), AIS, ALARM / Error.

b) System status, configuration , diagnostics using LCD display & push buttons or using a Ethernet management interface through Web Telnet & SNMP .

c) ITU–T V.54 compliant loopback diagnostics :

i) Local Analog Loop Test (for self test of modem)

ii) Local Digital Loop Test (to provide Loop test to the remote modem on local loop)

iii) Remote Digital Loop Test (to take Loop test from the remote modem on local loop) without requiring the manual assistance of any personnel at remote end.

d) Built in BERT for test pattern generation & detection.

e) Embedded Operation Channel (EOC) for controlling and monitoring the remote unit, without interfering with the data transmission in compliance with ITU-T G.991.2 requirements.

f) E1 and SHDSL Line performance monitoring and statistics.

5) In a modem pair, the modem with V.35 interface shall be operable on normal AC supply whereas the G.703 modem unit shall be operable with both AC and DC power supply, with AC or DC supply being used at any given point of time.

6) Certification :

Valid and duly attested copy of TEC approval certificate issued to the offered modem product for both V.35 & G.703 interface units.

Acceptance Test Procedure for Modems :

1. Physical Inspection and Testing for compliance to Item nos. 2, 4 & 5 of the technical specifications except Item 2(c) & 2(d).
2. TEC approval certificate to verify compliance to Item nos. 1, 2(c), 2(d), 3 & 6 of the technical specifications.

Annexure – B

List of Consignees and Zonal Railway Hqrs.

S.No.	Zone	Head Quarter	Consignee	Quantity (in Pairs)	
				64 Kbps	02 Mbps
1	ECoR	Bhubaneswar	CCM/PS		
2	SECR	Bilaspur	CCM/PS		
3	NCR	Allahabad	CCM/G		
4	CR	CSTM Mumbai	CCM/PM		
5	SCR	Secunderabad	CCM / PM		
6	SER	New Koilaghat	CCM/PS		
7	NFR	Maligaon	CCM/PS		
8	WR	Churchgate Mumbai	CCM/PM		
9	ER	New Koilaghat	CCM/PM		
10	SR	Chennai	CCM/PM		
11	NWR	Jaipur	CCM/PS		
12	NR	New Delhi	CCM/PM		
13	NER	Gorakhpur	CCM/PM		
14	WCR	Jabalpur	CCM/PS		
15	ECR	Patna	Store Incharge UTS Center Karbigahiya Site Patna Junction		
16	SWR	Hubli	CCM/PS		
			Total-->	**4972**	**7294**

रेलवे सूचना प्रणाली केन्द्र

(रेल मंत्रालय भारत सरकार का संगठन)

CENTRE FOR RAILWAY INFORMATION SYSTEMS

(An Organisation of the Ministry of Railways, Govt. of India)

Annual Rate Contact P.O. No.2008/CRIS/RC/1112593 Dated: 19-11-2008

Modification of Purchase Order

M/s. CMC LTD.
Jeevan Vihar
IInd Floor,
3 Sansad Marg
New Delhi-110001.

With reference to the above, Please read the model and make for Modems as under : All other terms and conditions are remain unaltered.

64 Kbps – Model Realgain 2'
2 Mbps – Model Realgain 4'
of M/s. Realtime System Ltd.

(V.K.Jain)
Chief Purchase Manager

चाणक्यपुरी, नयी दिल्ली-110021
CHANAKYAPURI, NEW DELHI-110021
टेलीफोन/TELEPHONE : 24104525, 24106717 फैक्स/FAX : 91-11-26877893

रेलवे सूचना प्रणाली केन्द्र

(रेल मंत्रालय भारत सरकार का संगठन)

Annual Rate Contract P.O No:- 2008/CRIS/RC/1112593

CENTRE FOR RAILWAY INFORMATION SYSTEMS

(An Organisation of the Ministry of Railways, Govt. of India)

M/s
CMC Limited
Jeevan Vihar 2nd floor,
3 Sansad Marg
New Delhi. 110001.

Dated:- 14-11-2008

fax:- 91-11-23746025

SUB: - Tender No 2008/CRIS/350 opened on 18-06-2008 for Supply and 03 years comprehensive warranty maintenance of Modems at the Zonal HQ offices.

Ref: -(1) Your offer for the subject tender.
(2) Your Acceptance letter no- NIL Dated 04-11-2008

Your offer for Annual Rate Contract has been accepted with the following terms and conditions.

6.1	Scope of Work	Supply with 3 Years comprehensive Warranty Maintenance of (i) 64/128 Kbps Modem Pair (V.35 & G703) & (ii) 2 Mbps G.SHDSL (nx64) Modem Pair (V.35 & G703) as per specification given in Annexure - A
6.2	Unit Rate	(i) Rs.8530/- (ii) Rs.11925/-
6.3	Unit	Per Pair
6.4	Validity of RC	Above prices are valid for placement of supply order for One Year from the date of issue of Rate contract.
6.5	Duties & taxes	For item (i) Vat 4% extra & item (ii) inclusive of 4% VAT
6.6	Delivery	Within 4 to 6 weeks from the date of supply order.
6.7	FOR	All the modem equipment shall be delivered to the respective Consignees at each of the Zonal Railway HQ offices. However, the consignee will arrange transport of the equipment from the consignee location i.e. (headquarters of zonal railways) to field sites (railway stations) for installation by Railways.
6.8	Octroi	Octroi exemption certificate/Road Permit will be issued by the consignee. In case consignee fails to issue the Octroi exemption certificate/Road Permit within 21 days from the date of receipt of request from supplier, the Octroi will be paid extra against documentary evidence.
6.9	Placement of Supply Order	Against this Rate Contact, supply order will be placed by Purchase Office/CRIS/New Delhi only or as authorized by MD/CRIS.
6.10	Payment Terms	80% of the value of complete equipment supplied shall be paid by the purchaser on receipt of material by consignees and upon furnishing the following documents: i) Certificate of receipt of complete equipment in good condition by the consignees. ii) Submission of PWG Bond for the 20% value of contract for a period up to 3 months beyond the last date of warranty period.

चाणक्यपुरी, नयी दिल्ली-110021
CHANAKYAPUHI, NEW DELHI-110021
टेलीफोन/TELEPHONE : 24104525, 24106717 फैक्स/FAX : 91-11-26877893

		Balance 20% shall be paid after acceptance of the equipment to the satisfaction of the consignee and upon furnishing the following documents: i) Acceptance Test certificates as per proforma given in Annexure –C issued by the consignees. ii) Certificate issued by the consignees for successful completion of the training program related to operations & maintenance of the modem product. iii) Confirmation of the validity of PWG Bond of 20% of the value of the contract for a period up to 3 months beyond the last date of warranty period.
6.11	Post Warranty AMC Charges	11.83% of basic cost per modem per year for 4th & 5th year. These rates are exclusive of service tax @12.36%, which will be extra. However, CRIS reserves the right to enter into AMC after satisfactory completion of Warranty period. If firm refuses to enter in to AMC on completion of warranty period at quoted rates firm's PWG BG is liable to be forfeited.
6.12	Warranty Period	36 months from the date of installation or 42 months from the date of supply of Modems. i) The bidder should have a support office at each of the Zonal Railway Hqr. locations specified vide Annexure B ii) The modems shall have back-to-bench warranty support i.e. the repair /replacement of faulty units during the warranty period has to be ensured at the respective Zonal Railway Hq. Offices after the complaint is lodged at the nearest customer support office. iii) Faulty modem equipment shall be attended at the Zonal Railway Hq offices within 48 hours of (excluding Sunday and National Holiday) lodging the complaint at the nearest customer support office. iv) Failure to repair / replace the faulty Modem equipment at the Zonal Railway Hqrs. within stipulated time frame of 48 hours shall call for penalty @ Rs.200 per day subject to a maximum of 10% of the cost of the unit. v) The firm shall provide a complaint Escalation mechanism for escalation of complaints during the warranty period. vi) The firm should attend each Zonal HQ office at least quarterly for preventive maintenance call.
6.13	Inspection & Acceptance procedure	(i) The physical inspection, testing & Acceptance of the modems shall be done at these Zonal offices by the respective consignees or their authorized representatives. (ii) Acceptance testing shall be done by consignee after receipt of the equipment, in the presence of representatives of the supplier as per the Acceptance test Procedure given in the Annexure A (Technical Specifications) and an Acceptance Test certificate as per proforma given in Annexure C will be prepared in 4 copies by

		the consignee and one copy each shall be handed over to the supplier, Manager Purchase/CRIS and Project Manager, CRIS. (iii) The supplier shall ensure smooth & seamless integration of their supplied equipment with the existing UTS network of the Zonal Railways.
6.14	Documentation	Firm will supply one set of original manuals, support documents and full set of accessories with each modem. Any software for installation of the equipment shall be supplied on a CD/VCD.
6.15	Training	The vendor shall provide 2 days training for 10 persons related to operations and maintenance of the equipment supplied at each Zonal Rly. Hq offices as specified in Annexure – B.
6.16	Consignee	As per supply order but installation sites are subject to changes prior to installation. However, such changes will be restricted to within a particular State. Any modification in the list of sites will be advised only by CRIS.
6.17	Other terms & Condition	As per General Conditions of Contract of CRIS

(Munish Arora)
Chief Manager Purchase

Copy to;- Accounts Branch
Record Copy
Consignee

Annexure-'A'

Technical Specifications for 64 Kbps Modems (V.35 & G.703)

The modems should conform either to TEC Specifications no. IR/DCA – 18/03, Feb 2002 or to TEC Specifications no. IR/DCA – 18/04, Oct 2005 (TEC Specifications no. IR/DCA – 18/03, Feb 2002 - Re-affirmed in Oct 2005 also valid) with the following qualifications/addendum. In both cases the specifications pertaining to IEEE 802.3 Ethernet 10/100 Base Tx Interface viz. Clauses no. 2.1(iv), 2.3 ,7(v) and 1.1.1(vi), 1.5(v) respectively, mentioned in the Interface requirements of the above TEC specifications no. are not applicable.

1) *Clause no. 2 : Digital Interface :*

a) *Item 2.1 (iii) is not applicable*

b) *Item 2.2 : Speed Support*

The speed/s supported at Digital Interface/s shall be with any combination of 64 Kbps between 64 Kbps to 128 Kbps.

2) *Clause no. 7: Items to be Specified in the Interface Approval Certification :*

a) *Item 7(i) : Digital Interface/s supported in the equipment*

V.35 via 34-pin Female Connector with one modem.
G.703 Co-directional interface with other modem in modem pair

b) *Item 7(ii) : Whether single pair, 2 pair or multi pair working*

2W unloaded twisted pair working

c) *Item 7(iii) : Highest bit rates of the digital interfaces supported*

The highest bit rate of digital interface supported shall be upto 128 Kbps

d) *Item 7(iv) : Maximum distance coverage*

On 0.5 mm diameter underground cable (unloaded), the modem should work upto a minimum of 5.5 kms of distance for 64Kbps data rate.

3) *Clause no. 8 : References :*

ITU – T recommendations K.21, G-703 and V.35 are applicable in this case.

4) The modem shall support following management / diagnostic features :

a) Front Panel indications for PWR(Power), TD(Transmit Data), RD (Receive Data), TEST (To indicate test mode), DCD (Data Carrier detect), Alarm / Error .

b) i) Local Analog Loop Test (for self test of modem)

ii) Local Digital Loop Test (to provide Loop test to the remote modem on local loop)

iii) Remote Digital Loop Test (to take Loop test from the remote modem on local loop) without requiring the manual assistance of any personnel at remote end

d) Built in Bit Error Test using test pattern conforming to ITU-T V.52 (511 test pattern) or ITU-T O.152 (to enable testing of the modems and the local loop)

5) In a modem pair, the modem with V.35 interface shall be operable on normal AC supply whereas the G.703 modem unit shall be operable with both AC and DC power supply , with AC or DC supply being used at any given point of time.

6) *Certification :*

Valid and duly attested copy of TEC approval certificate issued to the offered modem product for both V.35 & G.703 interface units.

<u>Acceptance Test Procedure for Modems</u> :

1. Physical Inspection and Testing for compliance to Item nos. 2, 4 & 5 of the technical specifications except Item 2(c) & 2(d) :-

2. TEC approval certificate to verify compliance to Item nos. 1, 2(c), 2(d), 3 & 6 of the technical specifications :-

Technical Specifications for G.SHDSL 2 Mbps (nx64 Kbps) 2 wire Leased Line Modems (V.35 & G.703)

The modems should conform either to TEC Specifications no. IR/DCA – 18/03, Feb 2002 or to TEC Specifications no. IR/DCA – 18/04, Oct 2005 (TEC Specifications no. IR/DCA – 18/03, Feb 2002 - Re-affirmed in Oct 2005 also valid) with the following qualifications/addendum. In both cases the specifications pertaining to IEEE 802.3 Ethernet 10/100 Base Tx Interface vide Clauses no. 2.1(iv), 2.3 ,7(v) and 1.1.1(vi), 1.5(v) respectively, mentioned in the Interface requirements of the above TEC specifications no. are not applicable.

1) *Clause no. 2 : Digital Interface :*

a) *Item 2.1 (iii) is not applicable*

b) *Item 2.2 : Speed Support*

The speed/s supported at Digital Interface/s shall be with any combination of 64 Kbps between 64 Kbps to 2048 Kbps.

2) *Clause no.7 : Items to be Specified in the Interface Approval Certification :*

a) *Item 7(i) : Digital Interface/s supported in the equipment*

V.35 via 34-pin Female Connector with one modem
G.703 interface with other modem in modem pair

b) *Item 7(ii) : Whether single pair, 2 pair or multi pair working*

2W unloaded twisted pair working

c) *Item 7(iii) : Highest bit rates of the digital interfaces supported*

The highest bit rate of digital interface supported shall be up to 2048 Kbps (nx64 Kbps, n = 1to 32)

d) *Item 7(iv) : Maximum distance coverage*

On 0.5 mm diameter underground cable (unloaded), the modem should work upto a minimum of 5.0 kms of distance for 2048 Kbps data rate.

3) *Clause no. 8 : References :*

ITU – T recommendations K.21, G-703 and V.35 are applicable in this case.

4) The modem shall support following management / diagnostic features :

a) Front Panel indications for PWR(Power), DATA(Transmit/Receive Data), TEST (To indicate test mode), SYNC (Status of DSL line / E1), AIS, ALARM / Error.

b) System status, configuration , diagnostics using LCD display & push buttons or using a Ethernet management interface through Web Telnet & SNMP .

c) ITU–T V.54 compliant loopback diagnostics :

i) Local Analog Loop Test (for self test of modem)

ii) Local Digital Loop Test (to provide Loop test to the remote modem on local loop)

iii) Remote Digital Loop Test (to take Loop test from the remote modem on local loop) without requiring the manual assistance of any personnel at remote end.

d) Built in BERT for test pattern generation & detection.

e) Embedded Operation Channel (EOC) for controlling and monitoring the remote unit, without interfering with the data transmission in compliance with ITU-T G.991.2 requirements.

f) E1 and SHDSL Line performance monitoring and statistics.

5) In a modem pair, the modem with V.35 interface shall be operable on normal AC supply whereas the G.703 modem unit shall be operable with both AC and DC power supply, with AC or DC supply being used at any given point of time.

6) Certification :

Valid and duly attested copy of TEC approval certificate issued to the offered modem product for both V.35 & G.703 interface units.

Acceptance Test Procedure for Modems :

1. Physical Inspection and Testing for compliance to Item nos. 2, 4 & 5 of the technical specifications except Item 2(c) & 2(d).
2. TEC approval certificate to verify compliance to Item nos. 1, 2(c), 2(d), 3 & 6 of the technical specifications.

Annexure – B

List of Consignees and Zonal Railway Hqrs.

S.No.	Zone	Head Quarter	Consignee	Quantity (in Pairs)	
				64 Kbps	02 Mbps
1	ECoR	Bhubaneswar	CCM/PS		
2	SECR	Bilaspur	CCM/PS		
3	NCR	Allahabad	CCM/G		
4	CR	CSTM Mumbai	CCM/PM		
5	SCR	Secunderabad	CCM / PM		
6	SER	New Koilaghat	CCM/PS		
7	NFR	Maligaon	CCM/PS		
8	WR	Churchgate Mumbai	CCM/PM		
9	ER	New Koilaghat	CCM/PM		
10	SR	Chennai	CCM/PM		
11	NWR	Jaipur	CCM/PS		
12	NR	New Delhi	CCM/PM		
13	NER	Gorakhpur	CCM/PM		
14	WCR	Jabalpur	CCM/PS		
15	ECR	Patna	Store Incharge UTS Center Karbigahiya Site Patna Junction		
16	SWR	Hubli	CCM/PS		
			Total—>	**4972**	**7294**