

## Proforma for Tender Schedule

Tender No: **55-09-5094**

Tender Notice No: IRPMU/10/002

Date: 24.02.2010

Due on: 19.04.2010

Cost of Tender Documents: **INR 1000/-**

Earnest Money to be Deposited: **INR 42900/-**

S. No.	Description	Qty	Unit	Consignee	Materials required at
1.	Cab Radio for GSM-R network as per technical specification attached	04	Nos	SSE/TELE/IRPMU/ NNO	NEW DELHI
	<b>Total</b>	<b>04</b>	<b>Nos</b>		

### **Conditions:**

- 1. Inspection:** RITES/Consignee
- 2. Validity:** the validity of offer should be minimum 90 days from the date of tender opening failing which firm's offer will be treated commercially unresponsive.
- 3.** Instructions to tenderers and special condition of contract booklet are given in tender documents.
- 4.** The firm should attach latest copies of purchase orders received from other railways along with the offer.
- 5.** (a) Price/purchase preference: - The purchaser reserves the option to give a purchase/price preference to the offers from public sector/or from small scale/cottage industries units over those from other firms, in accordance with the policies of the government from time to time. The price preference above can not however be taken for granted and every endeavour need be made by them to bring down cost and achieve competitiveness.  
(b) In case firm registered with NSIC for tendered item, wants to avail price preference over large scale unit as per extant Govt. policy, they should clearly claim the price preference in their offer along with the copy of NSIC certificate in support of their claim. The firm who does not claim specifically price preference in their offer will not be considered for price preference.
- 6. Cartel Formation:**
  - (a)** Wherever all or most of the approved firms quote equal rates and cartel formation is suspected. Railways reserve the right to place order on one or more firms with exclusion of the rest without assigning any reasons whatsoever.
  - (b)** Firms are expected to quote for a quantity not less than 50% of tendered quantity. Offers for quantity less than 50% of quantity will be considered unresponsive and shall become liable to be rejected. This however will be without any prejudice to railways right to distribute the tendered quantity & place order on one or more firms.
  - (c)** The firms who quote in cartel be warned that their names are likely to be deleted from list of approved sources.
- 7.** In supercession to Clause no. 12.2 of "Instruction to tenderers & special condition of contract" purchase reserves the right to increase or decrease order quantity upto 30% during the currency of contract.
- 8. Earnest Money:** (i) the amount of Earnest Money Deposit will be two percent (2%) of the estimated Tender value subject to ceiling of Rs. 5 Lakhs for Tenders valuing upto Rs 10 Crores and of Rs. 10 Lakhs for Tenders valuing above Rs. 10 Crores

[This is in modification to what is mentioned in existing clause 4.1 in Tender Document (Instruction to Tenderers)]

(ii) The under noted categories of tenderers need not deposit earnest money:

- (a) Vendors registered with NSIC upto the monetary limit of their registration for the items tendered.
- (b) Vendors registered with this Railway upto the monetary limit of their registration for the items tendered /trade groups of the items tendered.
- (c) Vendors on approved list of RDSO/Production units /CORE/this Railway etc, for those specific items for which they are on approved list.
- (d) Manufacturers and their accredited agents.
- (e) Other Railway, Govt. Department.

(This is in modification to what is mentioned in existing clause 4.4 in Tender Document – Instructions to Tenderers)

(iii) Earnest Money Deposit shall remain valid for a period of 45 days beyond the final offer validity period.

(iv) The refund/return of Earnest Money Deposit to the unsuccessful tenderers becomes due as soon as the tenders are decided, (possibly within 30 days after expiry of final offer validity), & to the successful tenderers on receipt of Security Money.

(This is in modification to what is mentioned in existing clause 4.5 in Tender Document – Instructions to Tenderers)

**9. Security Deposit:** (i) The amount of Security Deposit will be 10% of total value of stores for which tender has been accepted subject to maximum of Rupees 10 Lakhs for Acceptance of tender valuing upto Rs. 10 Crores & Rs. 20 Lakhs for Acceptance of Tenders valuing above Rs. 10 Crores. (This is in modification to what is mentioned in clause 1.1 of Tender Document – Special Conditions of Contract)

(ii) Security Deposit for due fulfillment of contract for supply of stores will not be taken from:-

(A) For safety items:- Vendors registered with NSIC upto the monetary limit of their registration for the items for which Acceptance of Tender is issued.

(B) For other than safety items:-

(a) Vendors registered with NSIC upto the monetary limit of their registration for the item for which Acceptance of tender is issued.

(b) Vendors registered with Railways upto the monetary limit of their registration for the item/ Trade Groups of the items for which Acceptance of tender is issued,

OR

Vendors on approved list of RDSO /Production Units/ CORE / this Railway etc. for those specific item for which they are on approved list.

OR

Other Railways, Govt. departments,

-----On their specific request and on merits of the case as considered by the purchaser.

(This is in modification to what is mentioned in existing clause 1.3 in Tender Document--- Special Condition of Contract)

(iii) The usual Security Deposit shall, however, be furnished in case the Acceptance of Tenders are issued on unregistered/ unapproved firms or for items for which a particular firm is not registered /approved.

(iv) Security Deposit shall remain valid for a minimum period of sixty days beyond the date of completion of all contractual obligations of supplier.

- (v) The refund and return of Security Deposit to the successful supplier becomes due when the contract (i.e. all contractual obligations) is satisfactorily completed in accordance with terms & conditions of the contract. Purchaser's decision in this regard shall be final and binding on the supplier (the refund/return of S.D. is possibly within 60 days after completion of all contractual obligations)

(This is in modification to what is mentioned in existing clause 1.5 in Tender Document --- Special Conditions of Contract)

**10. Price Basis & Evaluation Criteria: Tender Document** – Instruction to Tenderers Para 6.5 is added as under:

Para: 6.5: - Unless indicated otherwise in a tender floated for more than one item (s) and /or Consignee(s), the criteria for evaluation of offer for deciding the inter –se position, shall be based on the offer value arrived at in accordance with Para 6.1 & 6.2 above for individual item(s) and / or for individual consignee(s) as the case may be.

**11. Acceptance of Tender** : - Tender Document- Instructions to Tenderers Sub Para 12.1.1 in Para no. 12.1 is added as under: -

**Para12.1.1** wherever the splitting of the quantity to be ordered is considered necessary, pre-decided split ordering shall be adopted.

**12.1.1.1** In all such cases, the tender documents will contain specific quantity distribution ratio. The purchaser reserves the right to distribute the procurable quantity on one or more of the eligible tenderers in the ratio indicated in the tender documents. Zone of consideration of such eligible tenderers will be the right of the purchaser.

**12.1.1.2** Whenever such distribution/splitting of the tendered/procurable quantity is made, the quantity distribution will depend upon the differential of rates quoted by the tenderers (other aspects i.e. adequate capacity-cum-capability, satisfactory past performance of the tenderers, outstanding orders load for the Railway making the procurement etc. being same/similar). For example: if the differential of the rates between the L-1 and L-2 eligible vendors is 5% then the distribution of quantity will be approximately in the ratio 55:45(55% for the L-1 tenderer). If the price differential is 3%, then the distribution of quantity will be approximately in the ratio 53:47 (53% for the L-1 tenderer) and so on.

**12.1.1.3** The rate of the highest eligible tenderer within the zone of consideration has to be, per se, reasonable to the purchaser.

**12.1.1.4** In the cases of inadequate capacity-cum-capability, dissatisfactory past performance, large quantity of outstanding orders (liquidation of which will take very long time) etc; the purchaser shall have the right to distribute the procurable quantity amongst tenderers with due consideration to these constraints and in such a manner as would ensure timely supply of materials in requisite quantity to meet the needs of operation, maintenance, safety etc. of the Railways, regardless of inter-se ranking of the tenderers and in a fair and transparent manner with due conformity to the Principal of natural Justice and Equity.

**12.** Tender documents are not transferable. Tender submitted on other than prescribed tender document shall be liable to be rejected.

**13.** Firm's offer not accompanied with complete tender Document duly signed on all pages will be liable to be rejected.

**14.** Complete description of item and other tender conditions are available in the tender documents.

**15.** Drawing / specification wherever indicated can be had from RDSO, Lucknow, or concerned department of N C Railway on payment of its cost, which is non- refundable.

16. (a) Price/purchase preference:- The purchaser reserves the option to give a purchase/price preference to the offers from public sector/or from small scale /cottage industries units over those from other firms, in accordance with the policies of the government from time to time. The price preference above can not however be taken for granted and every endeavor need be made by them to bring down cost and achieve competitiveness.
- (b) In case firm registered with NSIC for tendered item, wants to avail price preference over large scale unit as per extant Govt. policy, they should clearly claim the price preference in their offer along with the copy of NSIC certificate in support of their claim The firm who does not claim specifically price preference in their offer will not be considered for price preference.
17. Allocation for cost of tender Documents and drawing is Z-650 and for Earnest Money Deposit (EMD) is "deposit misc stores 00844523".
18. Payment to firms will be made through ECS/EFT.

For Controller of Stores.  
For and on behalf of President of India.

**IRPMU**

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1. BASIC RATE PER UNIT.....
2. EXCISE DUTY.....
3. SALE TAX.....
4. Freight up to Destination.....
5. P&F Charges if any.....
6. Delivery Period.....
7. Terms of Payment.....
8. Please provide following Bank detail for Payment through ECS.  
Bank Name..... Branch Name.....  
Account No..... A/C Type.....  
MICR Code.....
9. We hereby agree to hold this offer open for acceptance for a period of 90 days from the date of opening of the tender. We shall be bound by the communication of acceptance dispatched within the prescribed time.
10. We hereby declare that in quoting the above price, we have taken into account entire credit on inputs available under MODVAT Scheme. We further agree to pass on such additional duty set off as may become available in future in respect o inputs us in manufacture of final products on the date of supply by way of reduction of and advised the purchaser accordingly.
11. Following other documents are enclosed along with the offer: -
  - (a) Performance Statement
  - (b) Check sheet duly filled in & signed.It is hereby certified that our offer is to supply stores strictly in accordance with “the Schedule of requirements “and according to the terms of tender. We agree to above by the IRS conditions of contract. Instruction to the tenders & Special conditions of Contract contained in North Central Railways Stores Pamphlet No. 1 (Rev.2000) and conditions of the Tender in accordance with the terms of tender Document, if the contract is awarded to us.

SIGNATURE OF TENDERER

NAME OF THE FIRM/ADDRESS & SEAL

Name of the Contact Person: .....

Telephone No.....

FAX No.....

## SPECIFICATIONS FOR CAB RADIO

1. The terminal is meant for use by the driver of a train and by ERTMS/ETCS. This has fulfill basic services, facilities and features as specified in EIRENE specification.
2. All terminals shall be capable of operation in frequency indicated below:-

S.No.	Frequency Pair	UP Link Frequency (MHz)	Dn Link Frequency (MHz)
1.	F1	907.8	952.8
2.	F2	908.0	953.0
3.	F3	908.2	953.2
4.	F4	908.4	953.4
5.	F6	908.8	953.8
6.	F7	909.0	954.0
7.	F8	909.2	954.2
8.	F9	909.4	954.4

3. All terminals shall be of the following power classes:

Radio Type	Power Class	Power (W)
Cab Radio	2	8

4. **SERVICES AND FACILITIES:**

The GSM tele services are to be supported for each type of terminals as per EIRENE Specifications.

Features	Cab Radio
Display of calling user identity	M
Display of called user identity	M
Restriction of display of user identity	O
Closed user group	M
Call forwarding <ul style="list-style-type: none"><li>- Unconditional</li><li>- If user busy</li><li>- If not reply</li><li>- If not reachable</li></ul>	M O O O
Call Hold	M
Call waiting	M
Call barring	M
Auto answer service	M
Call supervisory information	M
Functional addressing	M
Location dependent addressing	M
Direct Mode	O
Shunting Mode	M
Multiple driver communications with the same train	M

Railway emergency calls	M
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M = Mandatory                      O = Optional                      N/A = Not applicable.

If a Railway emergency call set up from a radio is unsuccessful, the radio shall automatically re-attempt the call set up until the call set up is successful, a retry timer expires (duration 30sec.) or the user abandons the call.

**5. MMI REQUIREMENTS:**

- a) A service availability indication shall be provided to radio users as defined in GSM 02.07
- b) The user shall be prevented from entering direct mode in GSM service available.
- c) If the attempt to establish a Railway emergency call is not successful after 2 seconds, an indication shall be provided to the user of the status of the establishment request procedure.

**6. ENVIRONMENTAL REQUIREMENTS:**

6.1 All mobile equipment shall comply with all environmental, EMC and physical specifications defined in the GSM standard, and conform to safety of information technology equipment including Electrical Business equipment, 1993 plus amendments.

6.2 The categories of requirements as follows:

**a) Climatic conditions:-**

	<b>Cab Radio</b>
Operating temp.	-20 ° to 70° C
Storage temp.	-40 °C
Humidity	95%
Solar radiation	1200W/m <sup>2</sup>
Altitude	-100m to 1800m

**b) Mechanical conditions:-**

The equipment mounted inside the train, the Cab shall be capable of withstanding the following maximum levels of sinusoidal vibration.

**(d) ELECTRICAL:**

i) Cab Radio

An emergency power supply shall be provided which will enable the driver's radio to continue to operate for 6 hours in the event of failures of the train's main power supply.

ii) The Cab radio equipment shall be capable of withstanding the following changes to the main and backup power supplies without interrupting normal operation.

- Voltage fluctuations up to +/- 15% of nominal supply voltage.
- 20% over voltage for up to 10 seconds.

- Other transient effects according to (IEC571 parts 1-3)

**7. DUTY CYCLE:** Duty Cycle for the mobiles shall be as under:

	<b>General purpose radio</b>
Point to point calls	20%
Group calls	5%
Standby	75%

**8. NON- INTERFERENCE TO OTHER RAILWAY SYSTEM:**

The electromagnetic emission generated by the mobiles train radio system shall not interfere with the normal operation of any on-train or ground-based system as listed hereunder:

- Signalling relays and contracts;
- Power transformers
- Track circuits (A/C track circuits, Jeumont track circuit 83 & 1/3 frequency track circuit and Audio frequency track circuit)
- Axle counters
- Train describers
- Other radio equipment
- Radar speed measurement equipment
- Switched mode power supplies
- Telecommunication circuits
- Electronic locking systems
- Solid state interlocking systems.

**9. TESTING PROCEDURE :**

Specific environmental test procedures to be followed for mobile equipment shall include the following tests as defined in the (IEC-68) series:

- a) Cold;
- b) Dry heat;
- c) Damp heat (cyclic);
- d) Vibration;
- e) Corrosive atmospheres;
- f) Air pressure;
- g) Change of temperature;
- h) Fire hazard.

**10. FUNCTIONAL REQUIREMENTS OF MOBILE RADIOS:**

The following functions will be provided.

- (i) **Driver Call related functions:**
  - Call controller
  - Call other drivers in area

- Send Railway emergency call
- Confirm receipt of Railway emergency call
- Communicate with other drivers in same train
- Call train staff
- Call other authorized users
- Receive incoming voice call
- Terminate call
- Receive text messages
- Enter /leave shunting mode
- Enter /leave direct mode
- Monitor calls to other on trains/user devices

**(ii) Other driver related functions:**

- Powering up radio
- Switch radio MMI on and off
- Select language
- Adjust loudspeaker volume
- Select mobile radio network
- Register and deregister train running number
- Register and deregister on train users
- Register and deregister stock number
- Store/retrieve numbers and their details
- Invoke supplementary services
- Invoke tests

**(iii) Other Cab Radio functions**

- Automatic connection of incoming calls to appropriate on train users or devices (conductor, public address system, data system etc.
- Automatic establishment of outgoing calls initiated by on train users or devices
- Automatic handling of calls of varying properties.
- Send to the controllers a signal on activation of driver's safety device.
- Transient Railway emergency call event identification to train-born recorder.

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