



DIRECTORATE GENERAL, CRPF
EAST BLOCK-7, SECTOR-1, R.K PURAM, NEW DELHI-66
e-mail : digeqpt@crpf.gov.in Tele No. 011-26109038



No. B.V-7/2025-26-C(TLE)-Q

Dated, the 28 Aug'2025

To

1. The DsG: AR, BSF, CISF, ITBP, NSG, SSB and BPR&D
2. Director, DCPW

Subject: QRs/TDs OF "TACTICAL LINE EXCHANGE" REGARDING.

I am directed to refer to the subject mentioned above and to say that the QRs/TDs of "**Tactical Line Exchange**" have been approved by DG CRPF after due deliberations as per recommendations of CAPF's sub-group of technical experts and experts from DCPW.

2. QRs/TDs of "**Tactical Line Exchange**" forwarded earlier vide letter No. IV-21011/8/2010-Prov-I dated 15/07/2010 stand rescinded.

This is for favour of information and further needful action please.

Encl:-As above

(Megh Raj)

DIG (Equipment)
Communication & IT Branch
Directorate General C R P F

No. B.V-7/2025-26-C(TLE)-Q

Dated, the 28 Aug'2025

Copy to:-

1. Mr. Deepak Kumar, Technical Director, North block, MHA (e-mail ID: deepakg@gov.in) with request to upload the QRs/TDs of "Tactical Line Exchange" on MHA website and QRs/TDs of "Tactical Line Exchange" forwarded earlier vide letter No. IV-21011/8/2010-Prov-I dated 15/07/2010 stand rescinded please.

Encl:-As above

(Megh Raj)

DIG (Equipment)
Communication & IT Branch
Directorate General C R P F

QRs/ TDs of Tactical Line Exchange

Sl No.	Parameters	Specifications	Trial Directives
1	Switch Board Capacity	15 Lines expendable up to 32 Lines	BOO will check practically.
2	Ringling Range	Ring to and from Magneto subscriber through line loop resistance of 10 Kilo Ohm	BOO will check practically.
3	Speech Range	Operator to subscriber and subscriber to subscriber voice should be audible	Firm will submit OEM Certificate.
4	Indicator sensitivity	Indicator LED Should light up or message on display should come when operated through a maximum of 10 Kilo Ohms series resistance when connected to a standard magneto hand generator & while Battery operated	BOO will check practically and physically.
5	Signalling range	Frequency 16 to 50 Hz	BOO will check practically.
6	Open circuit ringing voltage	75-90 V \pm 5%	BOO will check practically
7	Magneto exchange working	A loop resistance of 3500 Ohm having minimum 10 Kilo Ohm insulation resistance.	BOO will check practically.
8	Auto exchange working	DC loop resistance of 1000 Ohm having insulation resistance of minimum 50 Kilo Ohm.	BOO will check practically.
9	Cross talk (300Hz-3400Hz)	Better than 60 dB down measuring at 1000 Hz.	BOO will check practically.
10	Insulation resistance between line & Earth	Insulation resistance should not be less than 100 Mega Ohms under normal Atmospheric conditions.	BOO will check practically.
11	Power Supply	Exchange should Operate on AC Mains as well as 24 /12 V DC with automatic change over. System should have internal/External FCBC (Float cum Boost Charger)	BOO will check practically and physically.
12	Environment Specifications	Equipment should complied JSS 5555 Standards. i) Temp. Range- Operating : -10°C to +55°C Storage: -20°C to +70°C ii) Humidity: upto 95% at +40°C	BOO will check practically and Firm will submit certificate of Govt. Lab or NABL/ILAC accredited laboratory.
13	Interface	System should provide working E-Carrier (E1 PRI) for providing Telecommunication Services, IP Interface & interface for Radio (HF/VHF/UHF)	BOO will check practically and Firm will submit certificate of Govt. Lab or NABL/ILAC accredited laboratory.
14	Redundancy	Central Processing Unit (CPU) & Power Supply Unit (PSU) of the system should be in hot standby mode.	BOO will check physically.

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[Handwritten signatures and initials]

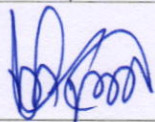
Sl No.	Parameters	Specifications	Trial Directives
15	Weight	Less than 25 Kg approx, without accessories.	BOO will check practically.
16	<p>Additional Features: -</p> <p>i) Exchange should be ruggedized and will meet Electromagnetic Interference (EMI)/Electromagnetic Compatibility(EMC) requirement as per MIL-STD-461D/E (Supported by certificate of Govt. Approved Lab)</p> <p>ii) Configuration: - All ports of the ruggedized exchange should be field programmable without laptop/PC through operator console. The console should have a large backlit/fluorescent display with alpha numeric characters.</p> <p>iii) One port Global System for Mobile Communication (GSM) with Latest technology.</p> <p>iv) Upgradation:-The exchange should have facility for upgradation of number of subscriber ports</p> <p>v) Ruggedized:-</p> <p>a) Storage device must be suitable ruggedized.</p> <p>b) Firm should provide leak proof Electric Connectors i.e. Battery leads, cords with nylon cover etc. of ISI Std.</p> <p>c) Equipment must sustain cross country mobility.</p> <p>d) Efficient thermal management.</p> <p>e) The modules & cards of the exchange should be secured to the slots so that there is no dislocation of the cards during move/transportation.</p> <p>vi) Built in Test Equipment (BITE):-Cards level system Diagnostics on the operator console display (power on self-test, Online &Offline Diagnostics)</p> <p>vii) Earthing:-The exchange should be able to work on field type of earthing.</p> <p>viii)Safety features:-The equipment must have protection against the following:-</p> <p>a) DC Reverse voltage</p> <p>b) Over voltage</p> <p>c) Current and voltage Surges due to lightening etc.</p> <p>d) Short/open Circuit</p> <p>e) Fuses & other safety features to prevent any danger to the operating & repairing personnel</p> <p>f) Audio-Visual alarm to indicate critical failures., warning alarm should be separated from basic use alarm(like Ring) (02 alarm devices/buzzer should be used for different purpose) with different sound</p> <p>ix) The equipment should compatible with the existing EPABX.</p>		BOO will check practically and Firm will submit certificate of Govt. Lab or NABL/ILAC accredited laboratory.



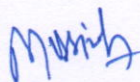




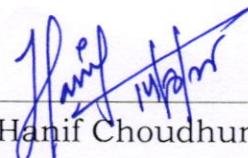

Sl No.	Parameters	Specifications	Trial Directives
	<p>x) Non-Blocking:-The switch should be a totally non-blocking, even when the switch is loaded to its maximum capacity.</p> <p>xi) Auto dialling to establish call, Auto extension for connecting this exchange with junction line should be built in.</p> <p>xii) The firm will have to supply spare parts for maintenance of switch boards for a period of 10 years when needed by the users.</p> <p>xiii) Training for 5 working days shall be provided by the firm at all consignee places for installation/handling/maintenance of exchange.</p>		<p>BOO will check practically and Firm will submit certificate of Govt. Lab or NABL/ILAC accredited laboratory</p>



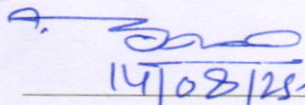
(Nb/Sub Mohinder Singh)
Assam Rifles



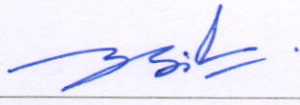
(AC III M.K. Singh)
NSG



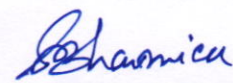
(Hanif Choudhury)
AC(Exe), CISF



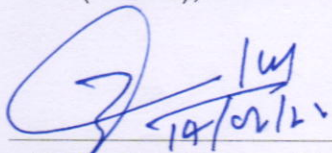
(Sanjay Mathur)
AC(Comn), SSB



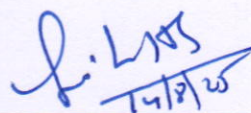
(Ujjwal Kumar Singh)
AC(QR), CRPF



(Sibuprasad Bhowmick)
AC, ITBP



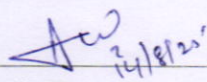
(Chandra Prakash)
DC, BSF



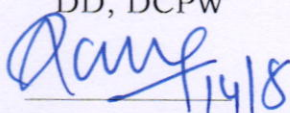
(H.S. Srihari)
DD, DCPW



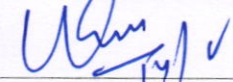
(Megh Raj)
DIG (Eqpt), CRPF



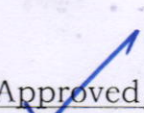
Amit Taneja
DIG (Comn), CRPF

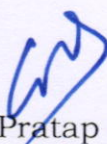


(Vijay Kumar)
IG (Comn & IT), CRPF



(Vitul Kumar, IPS)
SDG (OPS), CRPF

 Approved/Not Approved



(Gyanendra Pratap Singh, IPS)
DG, CRPF