

GOVERNMENT OF INDIA
(Ministry of Home Affairs)
DIRECTORATE GENERAL
CENTRAL RESERVE POLICE FORCE
EAST BLOCK-7, SEC-1, R.K. PURAM, NEW DELHI-110066
(Email:- comncell@crpf.gov.in Tele/Fax:011-26107493)

No. B.V-7/2020-21-C (EPABX)

Dated, the 10th December'2020

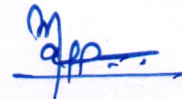
To

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|---|--|
| 1. DIG (Comn), ITBP
Block No. 2, CGO Complex
Lodhi Road, New Delhi-03 | 2. DIG (Comn), NSG
Meharam Nagar
Palam, New Delhi-37 |
| 3. DIG (Comn), SSB
East Block-V, R.K Puram
New- Delhi-66 | 4. AIG (Comn), CISF
Block No. 13, CGO, Complex
Lodhi Road, New Delhi-03 |
| 5. DIG (Prov), BSF
Block No. 10, CGO Complex
Lodhi Road, New Delhi-03 | 6. Liaison Office, Assam Rifle
Room No-171, North Block, MHA
New Delhi -01 |

Subject: Regarding QRs/TDs of Communication Equipments

Please find enclosed QRs/TDs of "EPABX System (16-512 lines)" as Annexure-"A" duly approved by the competent authority is forwarded herewith for further necessary action.

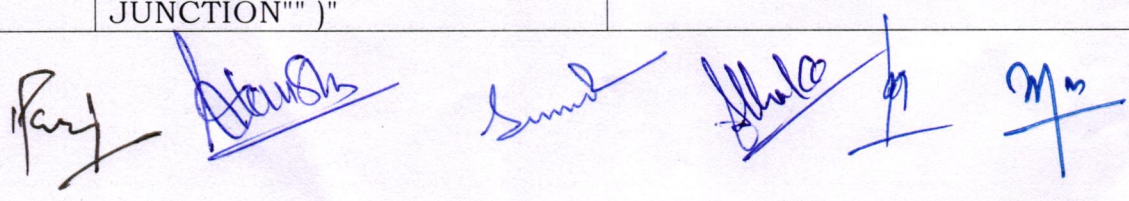
Encl: 1.QRs & TDs of "EPABX System (16-512 lines)"



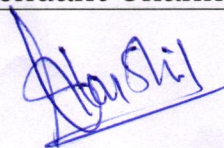
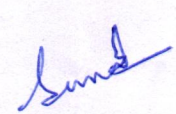
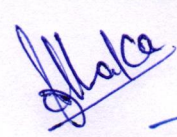
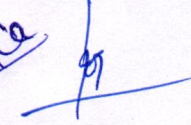
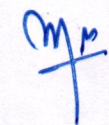
{P.R.Jha, DC (Comn)}
For DIG (Equipment)
Directorate General, CRPF

QRs of "EPABX System (16-512 lines)"

S.N	Parameter	Specification
1	EPABX system Implementation Technology/ Architecture	Hybrid (Microprocessor based also supporting SIP extension)
2	Number of Analogue Extensions / FXS Ports	16 to 512 (As per user requirement)
3	Expandable Up to (TDM / FXS Ports)	64 to 1024 (As per user requirement)
4	Number of Digital Extension Port	4 to 256 (As per user requirement)
5	Number of Analogue Junction/FXO ports	4 to 24 (As per user requirement)
6	Number of SIP Trunks	4 to 32 (As per user requirement)
7	Number of SIP Extensions	4 to 32 (As per user requirement)
8	MDF(Number of pair)	64 to 1024 (As per user requirement)
9	Integrated Protection Module(IPM)	YES
10	If YES, number of Integrated Protection Module (IPMs)	64 to 1024 (As per user requirement)
11	Type of Cards Supported	PRI, E1, Radio Interface, GSM, IP
12	Number of Ports per Card Supported	2 to 32 (As per user requirement)
13	Type of Gateways Supported	Universal Gateway, SIP, FXO, FXS, PRI, Radio, GSM, E1, NA
14	Number of Ports per Gateway Supported	2 to 32 (As per user requirement)
15	Type of Operator Console (optional)	Key phone based
16	Number of Operator Console	1 to 4 (As per user requirement)
17	Swap Component(optional)	Power supply unit
18	SIP extension (If Yes, Number of Software / Licenses shall be Commensurate /Equal to the Number of SIP Extension Offered under ""EXTENSION AND TRUNK / JUNCTION"")"	YES
19	"SIP trunk (If Yes, Number of Software / Licenses shall be Commensurate / Equal to the Number of Offered under ""EXTENSION AND TRUNK / JUNCTION"")"	YES



S.N	Parameter	Specification
20	"Radio Interface (If Yes, Number of Software /Licenses shall be Commensurate/Equal to the Number of Radio Interface Offered under ""EXTENSION AND TRUNK / JUNCTION"")"	YES
21	"GSM (If Yes, Number of Software /Licenses shall be Commensurate / Equal to the Number of GSM Offered under ""EXTENSION AND TRUNK / JUNCTION"")"	YES
22	Number of Conference Participants Supported	8 or more (As per user requirement)
23	Number of IP-TDM Concurrent Calls(2 users per call) Supported	4 or more (As per user requirement)
24	Loop resistance interface	1200 ohm or better
25	Call Buffer Memory System	YES
26	If Call Buffer Memory Available, Number of Records	100 or more (As per user requirement)
27	Standby Redundant CPU/Redundant server	YES
28	If YES, Number of Standby CPU Card/ redundant server	1
29	Standby Redundant PSU (Power Supply Unit) (As per user requirement)	YES
30	If YES, Number of Hot Standby Redundant PSU Cards	1
31	Inbuilt Voice Mail for EPABX System	YES
32	If Voice Mail Available, Number of Voice Mail Channels	2 or more (As per user requirement)
33	Available for Voice Mail, Facility for Recording	24x7
34	Auto Attendant Facility (optional)	YES
35	If Available, Number of Auto Attendant Channels	2 or more (As per user requirement)

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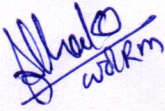
S.N	Parameter	Specification
36	System Features	Automatic Route Selection facility, DID facility(Direct inward dialing),DOD facility(Direct outward dialing), DISA facility(Direct inward station access), DOSA facility(Direct outwards station access), Multi Level Voice DISA facility, Privacy of Call, Facility for connecting recorded voice answering, Programmable class of service for(STD/ISD/LOCAL) dialing as per need, Caller ID information for both internal and external callers (over Analogue, ISDN PRI), unique authorization codes for every users, Automatic call back, Call waiting, Music-on-hold facility, Call budgeting, Least cost routing, Mix-mode dialing, Provision for remote logins, Interactive Voice Response System (IVRS), Extension to Extension dialing
37	Extension Features	Call forwarding, Consultation Hold, Brokers Call, Automatic call transfer, Conference call, Call pickup, Call re routing, Dynamic STD Lock, Paging on key phone, Background music, Password control, Virtual Telephony, Call parking, Auto answer/Auto off, Emergency call facility, Missed/Dialed/Received Call Lists, Last Caller Call back, Password display suppression, Personal Identification Number, Hotline, Calling line identification(CLI), Remote Maintenance, Other Extension features
38	Attendant Console Features	Answering an incoming call, Call queuing, Call waiting display, Automatic Call Distribution, Call Hold, Trunk offering, Night service, Head phone connectivity, Other Attendants console Features
39	Supply Voltage	48 V /110V-230 V AC UPS supply (As per user requirement)

Ranjit
Aashish
Suresh
Shakti
MP

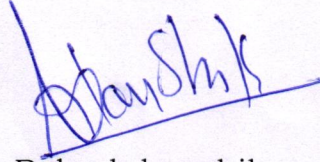
S.N	Parameter	Specification
40	Inbuilt Battery Charging arrangement for providing battery backup/FCBC/UPS (As per user requirement)	Yes
41	FCBC	Yes /No (As per user requirement)
42	If YES, minimum current Rating of FCBC at charging voltage of 48V	12.5 A or more (As per user requirement)
43	Protection against over current and accidental reversal of polarity on the input side and against over current, over voltage on the output side	Yes
44	Minimum Operating Temperature (Degree C)	0°C
45	Maximum Operating Temperature (Degree C)	40°C or more
46	Operating Humidity (RH) (%)	80 or more
47	Conformity to dry heat for 16 hours at maximum specified temperature degree C in accordance with IS:9000/part-3 /section-5/1977 latest	Yes
48	conformity to Cold Test for 4 hours at minimum specified temperature degree C in accordance with IS:9000/part-2 /section-4/1977 latest	Yes
49	conformity to Damp Heat (Cyclic)Test for 2 Cycles of 24 h each at a temperature of 40 degree C & 95% RH in accordance with IS:9000/part-5/section-1/ 1991 latest	Yes
50	Installation and Commissioning	Yes
51	The scope of supply include one set of operation and maintenance manual for each equipment	YES

Peri *Abhishek* *Sund* *Sharma* *Mr*

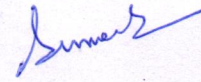
S.N	Parameter	Specification
52	Training provided to buyers	YES
53	If YES, Details of training	Onsite training for 3 days
54	Warranty	1 Year or More (As per user requirement)



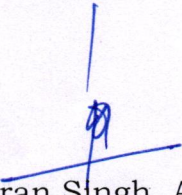
WO/RM. R.S.Dhaka
Assam Rifles



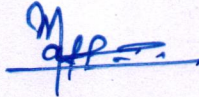
Insp/RM. Rakesh kaushik
BSF



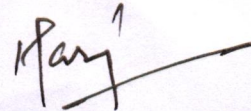
AC-III. Suman Dey
NSG



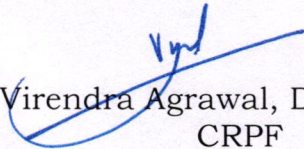
Karan Singh, AC
ITBP



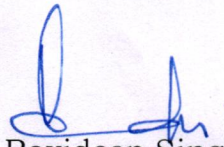
P. R. Jha, DC(Comn)
CRPF



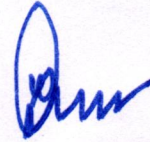
Harjinder Singh, DIG(Eqpt)
CRPF



Virendra Agrawal, DIG(Comn)
CRPF

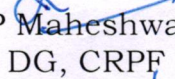


Ravideep Singh Sahi,
IG(Comn &IT) CRPF



Zulfiquar Hassan, IPS,ADG(HQ)
CRPF

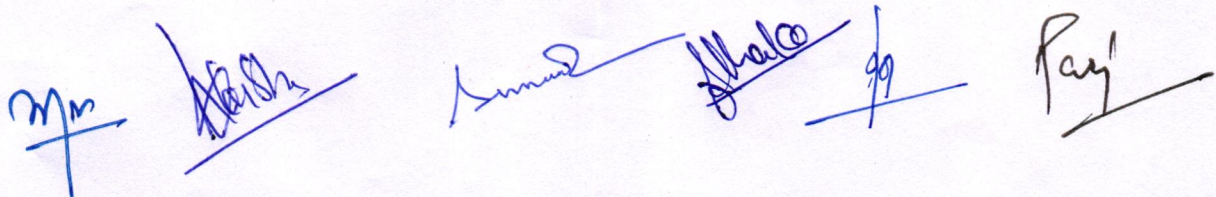
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Approved/Not Approved



Dr. A P Maheshwari, IPS
DG, CRPF

Trial Directives of "EPABX System (16-512 lines)"

S.N	Parameter	Specification	Trial Directives
1	EPABX system Implementation Technology/ Architecture	Hybrid (Microprocessor based also supporting SIP extension)	Firm will produce OEM certificate
2	Number of Analogue Extensions / FXS Ports	16 to 512 (As per user requirement)	BOO will check practically
3	Expandable Up to (TDM / FXS Ports)	64 to 1024 (As per user requirement)	BOO will check practically
4	Number of Digital Extension Port	4 to 256 (As per user requirement)	BOO will check practically
5	Number of Analogue Junction/FXO ports	4 to 24 (As per user requirement)	BOO will check practically
6	Number of SIP Trunks	4 to 32 (As per user requirement)	BOO will check practically
7	Number of SIP Extensions	4 to 32 (As per user requirement)	BOO will check practically
8	MDF(Number of pair)	64 to 1024 (As per user requirement)	BOO will check practically
9	Integrated Protection Module(IPM)	YES	BOO will check practically
10	If YES, number of Integrated Protection Module (IPMs)	64 to 1024 (As per user requirement)	BOO will check practically
11	Type of Cards Supported	PRI, E1, Radio Interface, GSM, IP	BOO will check practically
12	Number of Ports per Card Supported	2 to 32 (As per user requirement)	BOO will check practically
13	Type of Gateways Supported	Universal Gateway, SIP, FXO, FXS, PRI, Radio, GSM, E1, NA	BOO will check practically
14	Number of Ports per Gateway Supported	2 to 32 (As per user requirement)	BOO will check practically
15	Type of Operator Console (optional)	Key phone based	BOO will check practically
16	Number of Operator Console	1 to 4 (As per user requirement)	BOO will check practically
17	Swap Component(optional)	Power supply unit	BOO will check practically



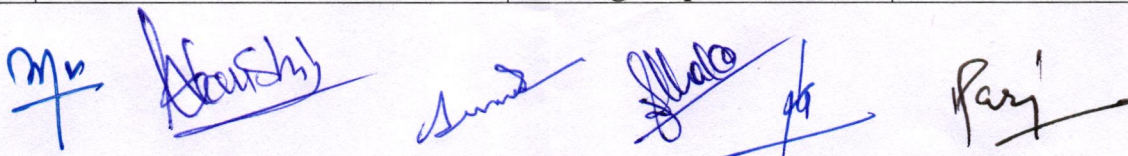
S.N	Parameter	Specification	Trial Directives
18	SIP extension (If Yes, Number of Software / Licenses shall be Commensurate /Equal to the Number of SIP Extension Offered under ""EXTENSION AND TRUNK / JUNCTION"")"	YES	BOO will check practically
19	"SIP trunk (If Yes, Number of Software / Licenses shall be Commensurate / Equal to the Number of Offered under ""EXTENSION AND TRUNK / JUNCTION"")"	YES	BOO will check practically
20	"Radio Interface (If Yes, Number of Software / Licenses shall be Commensurate / Equal to the Number of Radio Interface Offered under ""EXTENSION AND TRUNK / JUNCTION"")"	YES	BOO will check practically
21	"GSM (If Yes, Number of Software / Licenses shall be Commensurate / Equal to the Number of GSM Offered under ""EXTENSION AND TRUNK / JUNCTION"")"	YES	BOO will check practically
22	Number of Conference Participants Supported	8 or more (as per user requirement)	BOO will check practically
23	Number of IP-TDM Concurrent Calls(2 users per call) Supported	4 or more (As per user requirement)	BOO will check practically
24	Loop resistance interface	1200 ohm or better	Board will check practically
25	Call Buffer Memory System	YES	BOO will check practically
26	If Call Buffer Memory Available, Number of Records	100 or more (As per user requirement)	BOO will check practically
27	Standby Redundant CPU/Redundant server	YES	BOO will check practically
28	If YES, Number of Standby CPU Card/ redundant server	1	BOO will check practically

M. Anshil

Suresh

Parg

S.N	Parameter	Specification	Trial Directives
29	Standby Redundant PSU (Power Supply Unit) (As per user requirement)	YES	BOO will check practically
30	If YES, Number of Hot Standby Redundant PSU Cards	1	BOO will check practically
31	Inbuilt Voice Mail for EPABX System	YES	BOO will check practically
32	If Voice Mail Available, Number of Voice Mail Channels	2 or more (As per user requirement)	Firm will produce OEM certificate
33	Available for Voice Mail, Facility for Recording	24x7	BOO will check practically
34	Auto Attendant Facility (optional)	YES	BOO will check practically and Firm will also produce OEM certificate
35	If Available, Number of Auto Attendant Channels	2 or more (As per user requirement)	BOO will check practically
36	System Features	Automatic Route Selection facility, DID facility(Direct inward dialing), DOD facility(Direct outward dialing), DISA facility(Direct inward station access), DOSA facility(Direct outwards station access), Multi Level Voice DISA facility, Privacy of Call, Facility for connecting recorded voice answering, Programmable class of service for(STD/ISD/LOCAL) dialing as per need,	BOO will check practically and firm will also produce OEM certificate



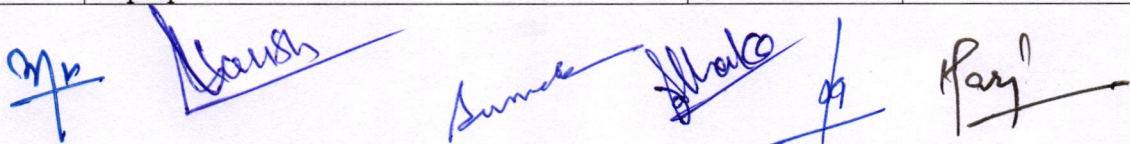
S. N	Parameter	Specification	Trial Directives
		Caller ID information for both internal and external callers (over Analogue, ISDN PRI), unique authorization codes for every users, Automatic call back, Call waiting, Music-on-hold facility, Call budgeting, Least cost routing, Mix-mode dialing, Provision for remote logins, Interactive Voice Response System (IVRS), Extension to Extension dialing,	
37	Extension Features	Call forwarding, Consultation Hold, Brokers Call, Automatic call transfer, Conference call, Call pickup, Call re routing, Dynamic STD Lock, Paging on key phone, Background music, Password control, Virtual Telephony, Call parking, Auto answer/Auto off, Emergency call facility, Missed/Dialed/Received Call Lists, Last Caller Call back, Password display suppression, Personal Identification Number, Hotline, Calling line identification(CLI), Remote Maintenance, Other Extension features	BOO will check practically and firm will also produce OEM certificate
38	Attendant Console Features	Answering an incoming call, Call queuing, Call waiting display, Automatic Call Distribution, Call Hold, Trunk offering, Night service, Head phone connectivity, Other Attendants console Features	BOO will check practically and firm will also produce OEM certificate
39	Supply Voltage	48 V / 110V-230 V AC UPS supply (As per user requirement)	BOO will check practically

M/s. Akash

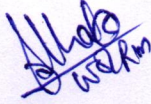
Suresh Shukla

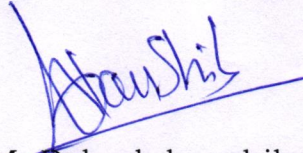
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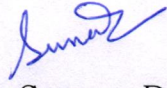
S.N	Parameter	Specificatio n	Trial Directives
40	Inbuilt Battery Charging arrangement for providing battery backup/FCBC/UPS (As per user requirement)	Yes	BOO will check practically
41	FCBC	Yes /No (As per user requirement)	BOO will check practically
42	If YES, minimum current Rating of FCBC at charging voltage of 48V	12.5 A or more (As per user requirement)	BOO will check practically
43	Protection against over current and accidental reversal of polarity on the input side and against over current, over voltage on the output side	Yes	BOO will check practically and firm will also produce OEM certificate
44	Minimum Operating Temperature (Degree C)	0°C	Firm will submit certificate of Govt. Lab. or NABL/ILAC accredited laboratory
45	Maximum Operating Temperature (Degree C)	40°C or more	
46	Operating Humidity (RH) (%))	80 or more	
47	Conformity to dry heat for 16 hours at maximum specified temperature degree C in accordance with IS:9000/part-3 /section-5/1977 latest	Yes	
48	conformity to Cold Test for 4 hours at minimum specified temperature degree C in accordance with IS:9000/part-2 /section-4/1977 latest	Yes	
49	conformity to Damp Heat (Cyclic)Test for 2 Cycles of 24 h each at a temperature of 40 degree C & 95% RH in accordance with IS:9000/part-5/section-1/ 1991 latest	Yes	
50	Installation and Commissioning	Yes	Firm will produce OEM certificate
51	The scope of supply include one set of operation and maintenance manual for each equipment	YES	Board will check practically




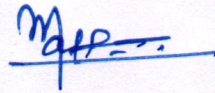
S.N	Parameter	Specification	Trial Directives
52	Training provided to buyers	YES	Firm will produce OEM certificate
53	If YES, Details of training	Onsite training for 3 days	Firm will produce OEM certificate
54	Warranty	1 Year or More (As per user requirement)	Firm will produce OEM certificate

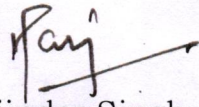

WO/RM. R.S.Dhaka
Assam Rifles

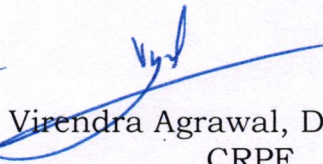

Insp/RM. Rakesh kaushik
BSF

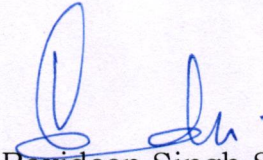

AC-III. Suman Dey
NSG

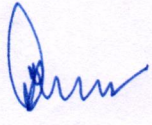

Karan Singh, AC
ITBP



P. R. Jha, DC(Comn)
CRPF

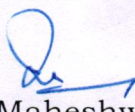

Harjinder Singh, DIG(Eqpt)
CRPF


Virendra Agrawal, DIG(Comn)
CRPF


Ravideep Singh Sahi, Zulfiquar Hasan , IPS,ADG(HQ)
IG(Comn &IT) CRPF


Zulfiquar Hasan , IPS,ADG(HQ)
CRPF


Approved/Not Approved


Dr. A P Maheshwari, IPS
DG, CRPF