

**Annexure A, B, C, D, E, F and G - Supply and Installation of complete Hybrid - PABX System/solution (T#29 20-21)**

<b>Attachment Details are as under</b>		
<b>1</b>	<b>Core Scope of Work</b>	<b>Annex “A”</b>
<b>2</b>	<b>Technical Requirements</b>	<b>Annex “B”</b>
<b>3</b>	<b>Specifications for Phones</b>	<b>Annex “C”</b>
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### Core Scope of Work

- SECP intends to procure, install and commissioning of a complete Hybrid - PABX System/solution on TURN KEY basis with all required hardware / software, connectors, licenses etc. at following scope and locations:
  1. Head Office and
  2. Lahore Office.
  3. Karachi Office
- Migration of users from current infrastructure to new infrastructure.
- End to End installation, configuration and testing of solution.
- Built-in IP support required for analogue hardware.
- Maintaining/administrating entire hybrid solution as per following requirement for one year,

S#	Location	Required Capacity	IP Users (Where Applicable)	SIP Trunks Lines for Exchange	SIP Trunk Lines for DID	Integration /Connectivity
1	Head Office Islamabad	500	25	64	104	CRO Lahore, CRO Karachi over SECP WAN
2	CRO Lahore	100	2	16	16	CRO Karachi, HO Islamabad over SECP WAN
3	CRO Karachi	200	2	32	50	CRO Lahore, HO Islamabad over SECP WAN
4	CRO Islamabad	-	2	-	-	Head Office Exchange over SECP WAN
5	CRO Peshawar	-	2	-	-	Head Office Exchange over SECP WAN
6	CRO Multan	-	2	-	-	CRO Lahore Exchange over SECP WAN
7	CRO Faisalabad	-	2	-	-	CRO Lahore Exchange over SECP WAN
8	CRO Sukkur	-	1	-	-	CRO Karachi Exchange over SECP WAN
9	CRO Quetta	-	2	-	-	CRO Karachi Exchange over SECP WAN
10	Voice Mailbox Licenses		56			

### Core Scope of work Compliance Requirements:

The objective is to procure, install and maintenance of hardware and software, HYBRID PABX EXCHANGE with desktop telephone sets on turnkey basis, to fulfil following requirements;

- To improve the production environment and to meet new and existing demands of PABX extensions.
- To improve the working environment, performance, scalability, flexibility and functionality
- The system must support SIP Trunks and PRI trunks

- The Hybrid PABX must have a uniform dialling plan so that intra site calling can happen via direct extension numbers
- Default built-in audio conferencing at least 08 parties internal/external depending on the availability of the trunks.
- Active Directory integration, for a complete phone directory solution.
- Telephone sets qty may vary as per the SECP requirement.
- Solution must support sharing of licenses for IP users over network.

**Future additional capabilities to be supported PABX required by SECP:**

- Desktop soft client for receiving and making outside calls.
- System should be capable of call recording with/without additional hardware.
- Mobile soft client for receiving and making outside calls.
- The Hybrid PABX should support integration with video conferencing solutions i.e. Polycomm, Cisco based Video Conferencing solutions.
- LDAP Directory Synchronization (Active Directory).
- The exchange should be inter-connected/inter-linked with CROs at different locations, and any phone calls received at head office that pertain to CRO can be easily transferred directly to relevant CRO. The exchange may alternatively allow automated call routing option through which calls can be automatically be directed to appropriate/relevant department or CRO by detecting caller information such as corresponding number keys on a caller's phone
- The exchange should also be backed by call management to provide a real-time view of all call activity and to produce useful reports. These reports can provide analysis of call activity, which can be used to compare the performance between individuals and different departments. This can enable us to target specific areas for improvement, in order to increase efficiency and productivity. The log of phone calls received can be in respect of date, time, call waiting time, duration, call declined or attended.
- Auto Attendant

**Note:**

- SIP trunks at Head Office (HO) Islamabad, Lahore and Karachi office will be provided by SECP.
- Complete System Administration Free of Cost training for 6 persons (2 each Location).
- Vendor must give a one-year support for licenses and hardware.
- The system shall be upgradable to any new software versions or releases issued during the warranty period without any extra cost.
- The Hybrid PBX and all components shall be new, non-blocking based, solid-state with up-to-date and latest technologies of hardware and software and approved by PTA.
- Vendor should provide necessary licenses and IP/cards where required. Hardware size should be suitable and accordance to the PABX room at both locations.
- Vendor will manage the PABX solution for one year.
- Support fee must be included.

### Technical Requirement

Bids shall comply to following MUST requirements. **Failure to comply any MUST requirement, shall lead to rejection of the bid without evaluating technically further. Bidder shall submit all the possible supporting documents/references which confirms the compliance to the published technical requirements.**

Technical Requirements and Evaluation Criteria of Hybrid Telephony			Mention Page # of the submitted Technical bid
Sn.	MUST Requirements	Compliance	
1.	SIP Trunk Support	Must	
2.	01 Year Warranty along with complete support required	Must	
3.	Free of cost official training for at least 06 resources (2 at each location)	Must	
4.	Complete Installation of the PABX solution and Configuration by the Vendor on three locations	Must	
5.	Bidder must have regular place of business in Lahore, Karachi and Islamabad and must provide proof of their existence.	Must	
6.	Bidder should be registered with SECP and must have at least five years of experience in the particular business of PABXs.	Must	
7.	The quoted equipment should be PTA Approved (Certificate to be attached). Vendor must provide import/custom documents of the imported equipment.	Must	
8.	The system must support SIP Trunks	Must	
9.	The Hybrid PABX must have a uniform dialing plan so that intra site calling can happen via direct extension numbers	Must	
10.	Vendor must provide all necessary/required licenses and hardware and must provide one-year principal support for licenses and hardware.	Must	
11.	The system shall be upgradable to any new software versions or releases issued/released during the warranty period without any extra cost.	Must	
12.	The Hybrid IP PABX shall be new, non-blocking based, solid state, up to date technologies of hardware and software.	Must	
13.	Desktop soft client for receiving and making outside calls should be available for their high-end users.	Must	
14.	System should be capable of call recording with/without additional hardware.	Must	
15.	Mobile soft client for receiving and making outside calls should be available for their high-end users	Must	
16.	The new PABX must be supported with or without the video conferencing solution with additional hardware.	Must	
17.	Integration is expected with all features of the solution, including but not limited to presence, audio, video calls	Must	
18.	LDAP Directory Synchronization (Active Directory 2019 and later)	Must	
19.	Migration of users from current infrastructure to new infrastructure	Must	
20.	End to End installation, configuration and testing of solution	Must	
21.	Telephone system should be hybrid PABX exchange (IP based with built-in support for analog hardware)	Must	
22.	User supported up to minimum 500, 200, 100 including minimum 367, 110, 70 analog lines for Head Office, Karachi and Lahore respectively	Must	

23.	Direct inward dial (DID) support	<b>Must</b>	
24.	Direct outward dial (DOD) support	<b>Must</b>	
25.	Fax Connectivity	<b>Must</b>	
26.	Built-in Music on Hold	<b>Must</b>	
27.	One Number Service	<b>Must</b>	
28.	Multiple Lines provisioning	<b>Must</b>	
29.	Call Detail Recording (Time /Duration, Source, Destination)	<b>Must</b>	
30.	Phone Code facility for International Calls and Faxes	<b>Must</b>	
31.	UC & Mobility (May be on selected phones)	<b>Must</b>	
32.	Presence (through soft client)	<b>Must</b>	
33.	Document Sharing (through soft client)	<b>Must</b>	
34.	File Transfer (through soft client)	<b>Must</b>	
35.	Coder-Decoder (codec) support (G711, G723, G729, G729a, G729ab or compatible)	<b>Must</b>	
36.	Hunt groups broadcast, circular and linear	<b>Must</b>	
37.	Directory search via name and IP numbers (Extension)	<b>Must</b>	
38.	Call Forwarding (Off net & On-Net)	<b>Must</b>	
39.	Call Transfer (Off net & On-Net)	<b>Must</b>	
40.	Call Park	<b>Must</b>	
41.	Shared line support	<b>Must</b>	
42.	Hotline	<b>Must</b>	
43.	Executive / Secretary setup	<b>Must</b>	
44.	Barge and Privacy	<b>Must</b>	
45.	Distinctive phone rings	<b>Must</b>	
46.	Do Not Disturb	<b>Must</b>	
47.	Extension Mobility	<b>Must</b>	
48.	Smart Phones agents (iPhone, Android)	<b>Must</b>	
49.	External Call Transfer Restrictions	<b>Must</b>	
50.	Immediate Divert	<b>Must</b>	
51.	Vendor must provide costing of IP licenses/cards where required to operate the complete solution.	<b>Must</b>	
52.	Systems quoted for each location (Islamabad, Karachi and Lahore) should be capable to operate independently in case of IP Link failure to serve the respective city office. They should also be capable for incoming & outgoing Trunk calls during this time.	<b>Must</b>	
53.	The End of Life, End of Support life cycle of the proposed solution should be more than 05 years.	<b>Must</b>	
54.	All required allied components required for operationalization, integration, connectivity whatsoever quoted in financial cost	<b>Must</b>	
55.	Auto attendant (Min. 16 Lines) for HO only	<b>Must</b>	
56.	Auto attendant (Min. 08 Lines) for Lahore and Karachi offices	<b>Must</b>	
57.	Systems should be capable of sharing limits (Users and trunks)	<b>Must</b>	
58.	Sharing of Licenses over Network	<b>Must</b>	
59.	Voice Mailbox Support and required licenses and integration with email system	<b>Must</b>	

<b><u>Specifications for Phones</u></b>
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**Specifications for IP Phones****1. Specifications for IP Phones****Qty = 25**

IP Phone with both power adapter and POE

HD Voice

PC connectivity

Built-in LAN Switch

Minimum 4 programmable keys

Minimum 2 Lines display

40 free programmable keys (call waiting, one touch, external lines and for system features i.e. conference, hold, park etc.

**2. Specifications for TDM Phones for operators****Qty = 03**

TDM Phone

Minimum 4 programmable keys

Minimum 2 Lines display

40 free programmable keys (call waiting, one touch, external lines and for system features i.e. conference, hold, park etc.

**3. Voice Mailbox (integration with email system)****Qty = 56****4. Cabling requirement for Karachi, Lahore and Head office shall be as per actual, Vendor may visit site before quoting the cabling charges etc. per sqft. charges must be quoted separately**

<b>Phone Evaluation Criteria</b>		
<b>Description</b>	<b>Compliance</b>	<b>Mention Page # of the submitted Technical bid</b>
<b>Specifications for IP Phones</b> IP Phone with both power adapter and POE HD Voice PC connectivity Built-in LAN Switch Minimum 4 programmable keys Minimum 2 Lines display 40 free programmable keys (call waiting, one touch, external lines and for system features i.e. conference, hold, park etc.	<b>Must</b>	
<b>Specifications for TDM Phones for operators</b>  TDM Phone Minimum 4 programmable keys Minimum 2 Lines display 40 free programmable keys (call waiting, one touch, external lines and for system features i.e. conference, hold, park etc.	<b>Must</b>	
Cabling requirement for Karachi, Lahore and Head office as per actual, please quote cost separately	<b>Must</b>	

**Cabling requirement for Karachi, Lahore and Head office shall be as per actual, bidder may visit site before quoting the cabling charges etc. per sqft. charges must be quoted separately**

**Evaluation Criteria:**

- A. Bidder fulfilling all the above-mentioned **MUST requirements** and obtaining 70% marks i.e. 45.5 out of 65, or more in the technical attributes shall be considered Equivalent and further processing i.e. financial bid opening. **Bidder quoting lowest Grand Total in its financial bid, shall be awarded the contract.**

- A. Evaluation Criteria attributes are as follows;

Sr. #	Criteria	Total Marks	Ref. Page No.
1	<b>Experience:</b> Minimum 05 years' experience is <b>must</b> Experience more than 5 years: (02 marks per year, max marks 10)	10	
2	<b>Clientele:</b> No of the firm's clients (4 marks for each of the, National, Multi-National Companies, Government Departments, Autonomous Bodies, Financial Institutions/Banks). Max marks for five plus clients.	20	
3	<b>Geographical Location:</b> If bidder has office in Islamabad: 05 marks If bidder has office in Karachi 05 marks If bidder has office at Lahore: 05 marks	15	
4	<b>Similar Projects:</b> Bidder has supplied and installed similar capacity exchange to other Govt./private sectors, amounting 5 million or above, (4 marks for each project, max marks for five or more projects).	20	



**Format for Submission of Financial Bid**

Please quote the financials in following format. Bidder can add as many rows to breakdown the cost as required.

S.#	Items	Qty/Job	Unit Cost (with all applicable taxes)	Total Cost (with all applicable taxes)
1	Cost of Hybrid Exchange for Head Office with all allied components/licenses required for operationalize the exchange i.e. connector, cables, power supplier, etc.	1		
a)	Cost of Installation and configuration including client side. (For Head Office Islamabad)	1		
b)	Cabling requirements if any	1		
2	Cost of Hybrid Exchange for CRO Lahore with all allied components required for operationalize the exchange i.e. connector, cables, power supplier, etc.	1		
a)	Cost of Installation and configuration including client side. (For CRO Lahore)	1		
b)	Cabling requirements if any	1		
3	Cost of Hybrid Exchange for CRO Karachi with all allied components required for operationalize the exchange i.e. connector, cables, power supplier, etc.	1		
a)	Cost of Installation and configuration including client side. (For CRO Karachi)	1		
b)	Cabling requirements if any	1		
3	Unit Cost of additional License (if any):	1		
4	<b>Cost of Phones:</b>			
a)	IP Phones	25		
b)	TDM for operator	03		
c)	Voice Mailbox (integration with email system)	56		
5	Cost of any other relevant item (If any): cabling etc.	01		
<b>Grand Total (A):</b>				
S.#	Items	Qty/Job	Unit Cost	Total Cost
6	<b>Support Cost:</b> required for calculating TCO			
a)	2nd year estimated support cost/licenses Cost			
b)	3rd year estimated support cost/licenses Cost			
c)	4th year estimated support cost/licenses Cost			
d)	5th year estimated support cost/licenses Cost			
<b>Grand Total (B):</b>				

*\*Support for 1<sup>st</sup> year shall be considered part of the quoted hardware.*

- The Commission reserves the right to purchase the required equipment either with or without the support of 2<sup>nd</sup> year and onward.
- Commission reserves the right to exclude /include any of the above-mentioned requirement.

**Great Grand Total = Grand Total (A) + Grand Total (B).**

**Bid Security should be submitted against Great Grand Total.**

**Payment Terms**

Payment Terms shall be as follows; however, it may vary at time of signing of agreement,

- i. No Advance Payment shall be made.
- ii. 50% Payment shall be made after complete delivery at our premises
- iii. 40% Payment shall be made after complete installation, testing and commissioning.
- iv. 10% of total amount will be withheld for six months period as retention money.