



**PAKISTAN TELECOMMUNICATION COMPANY LIMITED
HEADQUARTERS, G-8/4, ISLAMABAD**

DATE: 11-11-2021

REQUEST FOR INFORMATION (RFI)

FOR

SUPPLY OF ANDROID TV SET-TOP BOX (STB)



PAKISTAN TELECOMMUNICATION COMPANY LTD.
HEADQUARTERS, G-8/4, ISLAMABAD

REQUEST FOR INFORMATION (RFI)

Dated: 11th November, 2021

SUBJECT: RFI FOR SUPPLY OF ANDROID TV SET-TOP BOX (STB)

1. PTCL intends to invite vendors to share information & recommendations pertaining to RFI in light of their strengths and capabilities for Supply of Android TV Set-Top Box (STB).
2. Due to prevailing situation in the country, online RFI documents submission is allowed by PTCL as per following instructions:
 - a. Vendor shall submit RFI proposal/ solution in word or PDF format through email i.e. bidsubmission@ptcl.net.pk before the deadline **26th November, 2021 (before 1200 hours)**. Bids submitted after due time and on other e-mail address shall not be considered.
3. RFI/solution received after the above deadline shall not be accepted and returned unopened. Bids through Email/Fax/Courier shall not be accepted.
4. PTCL reserves the right to reject RFI/solution and to annul the RFI process at any time, without thereby incurring any liability to the affected bidder or any obligations to inform the affected bidder of the grounds for PTCL action.
5. Bidder must mention their Bidder Registration code on offer. In case Bidder is not registered, then registration must be done before the issuance of Letter of Award/Intent. Bidder Registration form can be downloaded from PTCL website: <https://ptcl.com.pk/Home/PageDetail?ItemId=108&linkId=156>
6. All correspondence on the subject may be addressed to the undersigned and Bids shall be submitted on the address given below.

SM Procurement (Business Support)
Room #18, 4th Floor, Old building, PTCL
Headquarters, G-8/4, Islamabad
Email: Shahzad.Ali@ptcl.net.pk
Muzamil.Farooq@ptcl.net.pk
Tel: +92-51-2283244 & 2283462

Request for Information (RFI) for Supply of Android TV Set-Top Box (STB)

1. PURPOSE:

Pakistan Telecommunication Company Limited (PTCL), the largest ICT service provider in the country is issuing a request for information from qualified vendors for the supply of Android TV STB for PTCLs' valued customers, with the intention of providing a reliable and high-quality TV experience for customers. The purpose of this document is to provide broad-level specifications of the sought ATV STB equipment and gather information regarding possible solutions from prospective vendors. No contract will be awarded based on the responses to this RFI received. PTCL may or may not choose to issue a solicitation to contract for these devices. PTCL may or may not choose to incorporate information gathered through this RFI into possible future requirements.

2. OBJECTIVE:

The intent of the RFI is to gather information; it is not a formal procurement. However, a formal procurement action may result from this information-gathering process. The purpose of this RFI is to:

- 2.1. Obtain information regarding various **Android TV STB** models that may be used for provisioning of TV services to PTCL Customers which shall be interoperable, compatible & integrated with ZTE IPTV platform of PTCL or any other backend platform if PTCL desires to upgrade to. The Android box should be compatible and easy to transform to unicast mode from Multicast. The transition for customer to move to OTT mode should be seamless.
- 2.2. Interested parties shall propose maximum three models of Android TV STBs in document for each model has to be submitted separately. The ATV STB are required which **contain Latest Android version which is capable to deliver the high-quality unified experience on all screen sizes of TV.**
 - Obtain comprehensive specifications/ feature sets of the above-mentioned equipment.
 - Obtain input in the form of recommendations and proposals from qualified respondents with regards to solutions available in the market to achieve the desired objective (delivery of TV service with high-quality experience in a cost-effective manner). Parties should ensure to include pricing against the various proposed solutions.
 - Obtain vendor/firm information regarding successful supply of this product previously to other corporations and organizations.

3. PTCL RESERVED RIGHTS:

- 3.1. PTCL reserves the rights to make any changes to the specifications at any time without any prior notice.
- 3.2. PTCL does not guarantee that the requirements, standards, regulations, and/or conditions stated in this document of specifications are not covered/ protected by copyright or patent of a third party.

3.3. PTCL has the rights to accept or reject the offered proposals without any notice or explanation.

4. PTCL TV PLATFORM INFORMATION:

The existing IPTV network setup of PTCL is ZTE based. There are three IPTV nodes i.e. Islamabad which is the central node and three edge nodes at Lahore and Karachi. The core Head end is at Islamabad and the DR Head ends are located at Karachi. PTCL provides the following services through its IPTV system:

- a) Broadcast Television (BTV)
- b) Video On Demand (VOD)
- c) Near Video On Demand (NVOD)
- d) Time Shift Television (TSTV)

PTCL broadband network equipment is from three vendors i.e. Huawei, Alcatel, Fiberhome and ZTE. The Android TV Boxes are evolving rapidly. Different types of ATV Box technologies are now available.

5. STB SPECIFICATIONS (VENDOR TO PROVIDE):

- 5.1. Android box shall be google certified.
- 5.2. Android Version with Widevine L1 implementation or higher.
- 5.3. Android Support for H.264, H.265, 4k, 8k and higher codecs and resolutions etc.
- 5.4. Support for latest DRM (Widevine, Fairplay, Verimatrix, play ready, Irdeto etc.)
- 5.5. Latest hardware and software version.
- 5.6. Android box should be upgradable to the newer versions of Android.
- 5.7. Top breed robust Processor/CPU with chipset from (Broadcom, Marvel, and Amlogic etc.). Android box with highest CPU processor will be preferred.
- 5.8. Top breed GPU. Android box with highest GPU will be preferred.
- 5.9. RAM with extendable options.
- 5.10. Flash memory.
- 5.11. Android box with voice command option.
- 5.12. Android box shall have the capability to adjust the screen size regardless of the TV set & its size automatically through HDMI or composite cable.
- 5.13. Android box shall support DHCP , Static IP & PPPoE dialling.
- 5.14. Support for latest IPV4 and IPTV6 versions.
- 5.15. Support IGMP latest version.
- 5.16. Support RTSP, RTP, RTCP, HLS, NTP and FTP and relevant prevailing protocols.
- 5.17. Support for international standards (e.g. ISO, NEBS, ITU, ETSI, IETF, IEC, DIN, IEEE, BS, NIMA, JIS, ANSI and TIA/EIA).
- 5.18. All operating system software (with the possible exception of CPE equipment) must be non-proprietary and internationally commercially available.

- 5.19. Android box must use internationally recognised design and coding standards and languages. The standards and languages used must be detailed for each item that contains software in whatever form (stored program, firmware, DSP, flash).
- 5.20. All hardware and software interfaces between elements of the vendor's proposed must be non-proprietary internationally recognised open standards. The interface standards used (including the version/date) must be detailed for each interface.
- 5.21. Proper ventilation mechanism.
- 5.22. Operate on commercial power supply $230V \pm 15\%$ through adapter. Power cable and other accessories shall be suitable for the use in Pakistan.
- 5.23. Android box shall be of appropriate size. Bidder shall mention the LxWxH of offered box

6. INTEROPERABILITY WITH EXISTING IPTV PLATFORM:

- 6.1. Offered ANDROID BOX shall be capable to interoperate with existing IPTV network installed in PTCL.
- 6.2. The ANDROID BOX shall comply to all specifications of PTCL IPTV platform which are necessary to fully integrate with existing IPTV platform
- 6.3. The Party shall share the interface specification document of ANDROID BOX so that's its integration capability shall be checked.

6.4. Interoperability with third-party OTT Application:

- 6.4.1. Party shall ensure that the offered ANDROID BOX shall be capable to embed OTT applications like PTCL OTT App, Netflix, Starz play, Amazon Prime, Disnet+ etc. and any other prevailing application. There shall be no limit on embedding of 3rd Party App in the Android Box.
- 6.4.2. The ANDROID BOX shall be capable to update app versions without disturbing the user experience and overall functionality of the ANDROID BOX. The embedded application normally update itself frequently. Party must state the update mechanism and its details.

6.5. International and Local References of Integration

Party shall provide the following information:

- 6.5.1. International and Local references where the integration has been made with the 3rd party IPTV platform.
- 6.5.2. Timeline consumed for the integrations.
- 6.5.3. Challenges being faced & initiative taken to cop up with the challenges.

6.6. RESPONSES:

- 6.6.1. Interested parties are encouraged to submit an electronic response to this RFI together with: Marketing materials (including information on your firm with a link to your website)
- 6.6.2. Detailed description of the product(s), services and capabilities available

- 6.6.3. Comments regarding pointwise compliance with required functionality are mentioned in section 4 to section 6.
- 6.6.4. Representative cost estimates for solution.
- 6.6.5. Delivery Timeline estimates.
- 6.6.6. Any additional information, details and value you may be able to add to the specifications mentioned in this document.

Please note that this is not a Request for Proposal (RFP), but rather a Request for Information (RFI) giving vendors the opportunity to inform PTCL of the current capabilities they provide as well as available in the general market.

7. ANNEX-A (ANDROID TV STB SPECIFICATIONS FORM):

Section	Parameters	Please fill this Up		
		STB Model-1	STB Model-2	STB Model-3
Price	Unit Price (CPT-USD or DDP-PKR)			
Core System	Brand			
	Model number			
	SoC			
	CPU			
	DMIPS			
	GPU			
	Process			
	DRAM			
	Flash			
	OS			
Features	Remote administration			
	DRM			
	Multi-screen interactive			
	Local Media Playback			
	External Storage			
	Video Decode Standard			
	Video Resolution			
Network	Ethernet Port			
	Wi-Fi			
Remote Management	1. TR-069 (CPE WAN management standard)			
	2. TR-098 (CPE WAN management extended version of TR-069 standard)			
	3. TR-143 (To run Speed test from CPE)			

	4. TR-181 (Device parameter management (IoT))			
	5. TR-369 (managed Wi-Fi services)			
Connectivity	HDMI			
	Composite AV output			
	Ethernet			
	USB			
	Power			
3rd Party Integration	Capability to integrate with 3rd Party App			
References	International References			
OEM Support	Yes/No			
Other	Input Voltage			
	Operation Temperature			
	Product Dimensions			
	Unit Weight			
	Proposed Accessories			