Frequently Asked Questions (FAQs) on Type Approval Certification

1. What is Type Approval?

Type Approval is a regulatory certification process administered by PTA that ensures terminal equipment conforms to prescribed technical and regulatory standards. Under Section 29 of the Telecom Act 1996, no terminal equipment may be connected directly or indirectly to a public switched network in Pakistan unless it has been type approved by PTA. This certification signifies that the equipment is suitable for connection to public telecommunication networks and approved for commercial import in Pakistan

2. Why is Type Approval required?

Type Approval is mandatory to ensure all terminal equipment used in Pakistan meets national technical and regulatory standards. The process protects consumers, maintains network integrity, prevents interference, and restrict commercial import of substandard equipment that could disrupt telecommunications services

3. Who needs Type Approval from PTA?

Any applicant intends to import terminal equipment for commercial purposes in Pakistan shall require Type Approval certificate from PTA.

4. What is terminal equipment?

Terminal equipment means any apparatus directly or indirectly connected to any network termination point and used for sending, processing or receiving intelligence.

5. Whether PTA issues Type Approval Certificate for Jamming equipment like anti-drone, GPS jamming devices etc.?

 No, PTA does not issue Type Approval Certificate for such equipment as it does not fall under the category of Terminal Equipment. However, Inter-Ministerial Committee (IMC), being constituted under the purview of Ministry of Information Technology (MoIT), to handled such cases may be approached in this regard.

6. What is the difference between Type Approval and Certificate of Compliance (CoC)?

* **Type Approval:** Required for manufacturers and importers to ensure terminal equipment meets PTA standards before being sold in Pakistan.

- **Certificate of Compliance (CoC):** Required for clearance of type approved terminal import from customs after due verification by PTA.

7. What types of equipment require Type Approval?

All terminal equipment shall require Type Approval including but not limited to following:

- Mobile handsets, tablets, and dongles
- Wireless communication devices (VHF, UHF, HF, Two-Way Radios, etc.)
- IP Phones, VoIP gateways, PABX systems
- Satellite terminal equipment
- Maritime equipment
- Module to be installed in a finished device
- Tracking devices with SIM/IMEI-based functionality
- IoT/M2M devices operating within PTA-prescribed frequency bands

8. What is GSMA TAC and how does it relate to PTA Type Approval?

GSMA is a global body that assign unique Type Allocation Codes (TACs) for sim-based devices. PTA is using GSMA database for technical evaluation in accordance with Telecom policy 2015. The TACs are included in the PTA Type Approval certificate and added to the PTA DIRBs so that any commercial importer may import the type approved device. Any new TACs issued by GSMA for an already approved model will be added in DIRBS without the requirement of new type approval.

9. What technical standards does PTA use for evaluating RF, EMC, and SAR compliance?

PTA generally requires compliance with standards set forth by international standard bodies such as:

- RF (Radio Frequency): ETSI EN 301 489, 3GPP TS 51.010, or equivalent/revised.
- EMC (Electromagnetic Compatibility): IEC 61000 series, CISPR 22/32, or equivalent/revised.
- SAR (Specific Absorption Rate): IEC/IEEE 62209-1, IEC 62209-2, EN 50360 or equivalent/revised.

10. Are test reports from foreign lab accepted by PTA?

Yes, provided the lab is accredited by international standards body and **national accreditation** of that country.

11. What frequency bands are permitted for terminal equipment in Pakistan?

Devices must operate strictly within the permitted frequency ranges by PTA/FAB on non-interference basis. Pakistan Table of Frequency Allocations may be used to verify the allowed frequency. A brief detail of allowed frequency is attached at **Annex-A** for ease of general public. Use of restricted or unlicensed bands (e.g., certain HF/UHF etc.) is prohibited unless importer has valid license/authorization issued by PTA/relevant authorities.

> **Type Approval Procedure**

12. How can I apply for Type Approval?

All Type Approval applications must include the following supporting information, submitted in soft format/ any method prescribed by the Authority from time to time.

- Completed Application Form and Applicant's Undertaking to comply with PTA regulations.
- Applicant credentials: CNIC for individuals; SECP/City Government registration and NTN for local companies; for foreign entities, company registration, board authorization, and shareholder details from the country of origin.
- Declaration of Conformity (DoC) from the manufacturer covering applied standards such as RF, Safety, SAR, EMC/EMI etc.
- Detailed test reports for these standards may be requested by PTA.
- Technical Data Sheet specifying device specifications like output power and operating frequency.
- For equipment having Wi-Max, HF, UHF, LPWAN, amateur radio, satellite or maritime functionality license/authorization from relevant bodies/PTA shall be required.
- For security sensitive equipment like drone, UWB GPR & wall penetration radar clearance from relevant authorities shall be required
- Processing fee (non-refundable) and Type Approval certificate issuance fee as per PTA fee schedule.
- One complete sample device with all accessories for technical evaluation.
- For IMEI/SIM-based devices, provision of GSMA Type Allocation Code (TAC) details verified against the GSMA database.
- Undertakings from the manufacturer that the device is for mass consumer use only, contains no unauthorized encryption, and ensures user data privacy.
- Any additional information that Authority may required

13. What are the Type Approval requirements for cellular mobile boosters/repeaters?

The Type Approval of cellular mobile boosters/repeaters requires compliance with regulatory requirements and technical standards. In addition to meeting the prescribed technical specifications and regulatory requirement, applicants must obtain a No Objection Certificate (NOC) from the Frequency Allocation Board (FAB) and ensure compliance in accordance with "Mobile Phone Repeaters Technical Standards and Operations Regulations".

14. What are the requirements and procedures for submitting modifications or updates to already PTA type approved terminal equipment?

Any modifications to certified terminal equipment must be assessed by the Type Approval holder for compliance with prescribed standards. The holder must submit an application to PTA including full details of the changes with supporting diagrams, a test sample for verification, and pay a processing fee if the request is made more than 90 days after the original approval. PTA updates the Type Approval certificate through an Addendum and reflects changes in the Type Approval Register upon request.

15. How does PTA handle Type Approval for modules used within finished products under the terminal equipment category?

PTA grants Type Approval for each specific module that falls under the terminal equipment category to be used inside a finished product. Each module must have its own Type Approval and must be used only within the declared finished product specified in the Type Approval application. Each variant of varying finish device may require separate type approval.

16. What is the processing time for Type Approval?

Upon submission of a complete application, PTA reviews the documents and conducts necessary testing. If all requirements are met, Type Approval is granted within 1 week.

17. Whether the sample device will be returned after issuance of Type Approval Certificate?

Sample devices with invoice cost under USD 2000 may not be returnable. However, PTA may consider returning the sample if the applicant submits manufacturer proof indicating a price exceeding USD 2000 within three months of certificate issuance. It is important to note that PTA reserves the right to disassemble sample devices for testing purposes, which may result in the voiding of manufacturer warranties. PTA holds no liability for any such voidance arising from regulatory testing procedures.

18. What is the procedure for obtaining a duplicate Type Approval Certificate from PTA?

To obtain a duplicate Type Approval Certificate, submit a request on company letterhead, provide an undertaking stating the reason, pay the prescribed processing fee, submit a copy of the intimation to PTA about the lost/misplaced certificate, and attach a copy of the original certificate.

19. What are the fees for Type Approval?

Fees vary depending on the type of equipment. The current fee structure is available on PTA website in Type Approval Technical Standards Regulations,2022.

20. What should I do if my device operates in restricted frequency bands?

Devices operating in frequency bands like HF, UHF, satellite, LPWAN, ammeter radio, GPR radar etc. bands must comply with PTA frequency allocation policies and may require additional approvals or licenses.

21. Which terminal Equipment are exempted from Type Approval requirements?

The following items are exempt from Type Approval requirements:

- Networking Equipment (Switches, Firewalls, Servers, Storage Devices)
- Laptops and Desktops (Non-SIM-based only)
- GPS-only devices

General Queries Type Approval

22. Does each model or variant of terminal equipment require a separate Type Approval?

Yes, each model or variant of terminal equipment requires a separate Type Approval from the Pakistan Telecommunication Authority (PTA).

23. If a device has already been type approved by PTA, but the manufacturer or OEM company ownership changes, is a fresh Type Approval required?

If the device is already type approved, any change in the ownership of the manufacturer or OEM company necessitates obtaining a fresh Type Approval certificate from PTA.

24. Do I need a separate Type Approval if GSMA issues a new TAC for my already PTA type approved model?

No, a separate Type Approval is not required. PTA does not mandate fresh approval for new TACs issued by GSMA for an already approved model. All new TACs notified by GSMA for that model are automatically added to PTA's DIRBS database by PTA.

25. When is a fresh Type Approval required for hardware or software changes, and how are different models or variants handled?

A fresh Type Approval is required if hardware changes are made that modify the equipment, such as changes to the PCBA, motherboard, or memory variants (RAM, ROM) etc. Software-only upgrades do not require new approval if the hardware remains unchanged. Additionally, each distinct model or variant must obtain a separate Type Approval certificate.

26. Under what circumstances can PTA withdraw or revoke a Type Approval Certificate?

PTA may revoke a Type Approval Certificate if:

- The certificate holder violates any PTA regulations;
- The terminal equipment connected to the public network differs from the originally approved sample or test reports;
- The product is found to have manufacturing defects, poses health or safety hazards, or does not conform to the approved standards.

27. How is the identity of PTA type approved terminal equipment verified on the device?

Each PTA type approved terminal equipment must carry a verifiable sign either a paper label or electronic marking embedded in the software that includes at minimum the _unique PTA Type Approval number and a mark stating "Approved by PTA"._ Manufacturers, importers, distributors, dealers, and retailers must ensure this sign is present on all devices offered commercially.

28. How do I check if a device is type-approved?

PTA maintains a list of Type Approved devices on its official website. Additionally, each approved device is assigned a unique PTA Type Approval number, which must be displayed on the packaging or embedded electronically within the device.

29. Whether Type Approval is also required for already type approved equipment?

No.

30. Where can I find more information or assistance?

For detailed guidelines, visit the PTA website (www.pta.gov.pk) or contact PTA's Type Approval division via email at typeapproval@pta.gov.pk.

Sr #	Category	Equipment	Allowed Frequency Range	PTA License Requirement (Yes/No)	OGA Authorization /NOC Required (Yes/No)
1	Wireless Equipment	Wireless Radio Transceiver (HF)	HF (High Frequency: 3-30 MHz)	Yes	No
			3.5-3.8 MHz - Reserved for Amateur Radio Communication (40m band).		
			7.0-7.3 MHz - Reserved for Amateur Radio Communication (40m band).		
			14.0-14.35 MHz - Reserved for Amateur Radio Communication (20m band).		
			24.89-24.99 MHz - Reserved for Amateur Radio Communication (12m band).		
		Wireless Radio Transceiver (UHF)	UHF (Ultra High Frequency: 300-3000 MHz)	Yes	No
			300-399.9 MHz - Military and Aeronautical Systems.		
			400-470 MHz - Reserved for Land Mobile Communication and Government Use.		
			430-440 MHz - Reserved for Amateur UHF Communication (70cm band).		
		Wireless Radio Transceiver (VHF)	VHF (Very High Frequency: 30-300 MHz)	No	No
			50-54 MHz - Reserved for Amateur Radio Communication (6m band).		
			118-136 MHz - Reserved for Aeronautical Band (Aircraft Communication).		
			136-174 MHz - Reserved for Land Mobile Communication System.		
			144-146 MHz - Reserved for Amateur VHF Communication (2m band).		
			156-162 MHz - Reserved for Maritime Communication (VHF Maritime Band).		

		Only ISM Supported Device without any other connectivity mediums, SRD, RFIDS, Access point etc.	9KHZ- 150 KHZ	No	No
			5MHZ - 30 MHz		
			40.66-40.700 MHz		
			180-200 MHz		
			401-435 MHz		
			2.402 GHz-2.480 GHz		
			WiFI: 5.150 GHz- 5.350 GHz, 5.470 GHz- 5.725 GHz, 5.725- 5.875 GHz		
			WiFI 6E: 5.925 GHZ- 6.425 GHZ		
			865-868 MHz		
			920-925 MHz (LPWAN/IOT)		
		Routers	Within allowed frequency by PTA/FAB	No	No
		Repeaters	Receive only mode for IMT frequency allowed by PTA/FAB	No	Yes (FAB)
2	Wireline Equipment	IP Phone, Gateway & VOIP	2.4GHZ, 5GHZ	No	No
3	Satellite equipment	GNSS etc.	4-8 GHz	No	No
			12-15 GHz		
			1610-1626.5MHz		
			1626.5-1660.5MHz		
			1525-1559MHz		
			2483.5-2500MHz		
4	Satellite equipment	Satellite Phone	4-8 GHz	Yes	No
			12-15 GHz		
			1610-1626.5MHz		
			1626.5-1660.5MHz		
			1525-1559MHz		
			2483.5-2500MHz		
5	Tracking/ security devices & Radar System	Vehicle Security Device, Vehicle Tracking Devices etc.	24.05–24.25 GHz	No	Yes (for GPR & wall penetration Radar)
			10.5-10.55 GHz		
			24.00-24.25GHz		
			57.00- 66.00 GHz		
			76.00 - 81.00 GHz		
6	Mobile Phone Equipment	Mobile handset & other sim	UL: 824-834MHz & DL: 869-879MHz	No	No
			UL: 880-915 MHZ & DL: 925-960 MHz,		

		supported Device	UL:1710-1785 & DL: 1805-1880MHz,		
			UL: 1920 – 1960 & DL: 2110 – 2150MHz		
			UL: 723 - 738/ DL: 778 - 793 MHz		
			UL: 1920 - 1980 & DL: 2110-2170		
7	Maritime Equipment	Maritime Equipment	156 MHz to 174 MHz	Yes	Yes (From MSA)
			2MHZ		
			3 MHz to 30 MHz		
8	Miscellane ous	Microwave	2GHZ - 90 GHz	No	No
		NFC	13.533-13.567MHz	No	No
		GMPCS including GPON, XPON	1 GHZ to 40 GHZ	Yes	No
		IOT via LPWAN	865-868 MHZ	No	No
			920-925 MHZ		
			433-434.7 MHZ		
		Laser	10–100 THz	No	NO