

**Government of Pakistan**  
**Ministry of Information Technology & Telecommunication**  
**(IT & Telecom Division)**

\*\*\*\*\*

No.9-11/2014-DW

Islamabad, 16<sup>th</sup> October, 2017

Subject: - **POLICY DIRECTIVE FOR TEST AND DEVELOPMENT OF FUTURE TECHNOLOGIES PARTICULARLY FOR FIFTH GENERATION (5G) WIRELESS NETWORKS IN PAKISTAN**

The Next Generation Mobile Services (3G/4G) are continuously gaining momentum in Pakistan since their launch in mid 2014. This was made possible through consistent policy initiatives adopted over the past four years by GoP (MoITT) ensuring availability of requisite frequency spectrum supply to the mobile broadband market. As a result of the auctions conducted by the Authority under the directives of MoITT, issuance of respective licenses and launch of 3G/4G mobile broadband services the demand for data services is growing along with the subscriber base which has crossed 44 million in just three years.

2. To stay at the forefront of the technology and to enable state of the art service to Pakistani consumers, Telecom Policy 2015 provides measures not only for early commercial adoption of technology but also to provide conducive test and development environment for upcoming and future technologies. It is, therefore, imperative that we remain proactive in ensuring market readiness for the next wave of mobile communications i.e. 5G. 5G is expected to enable new ground breaking data rates and limits and will considerably enhance the experience of services / applications that are available today.

3. It is pertinent to mention that research and development on 5G radio interface standards has been in full swing over the past half decade at multilateral standardization fora. ITU-R has recently published the key requirements related to the minimum technical performance of IMT-2020 (or 5G) candidate radio interface technologies. Similarly another key standard development organization e.g. 3GPP in close collaboration with industry and academia is developing the specification for 5G which is scheduled to be released to ITU-R by the 2019 deadline. Based on still evolving standards, a number of trials and tests are well underway around the globe on pre-standard 5G. South Korea is expected to have a pre-standard 5G system up and running for the 2018 Winter Olympics. Last month, China completed its plans to conduct 5G field test in Beijing.

4. In view of the foregoing and to enable Pakistan to keep up with the growth and embrace new technologies, it is imperative to formalize through policy the regulatory environment for test deployment and benchmarking of 5G technologies. Thus, the Federal Government, using powers conferred by the Section 8(2) of the Pakistan Telecommunication (Re-organization) Act 1996 (Amended 2006), is pleased to issue the following directives for compliance of the Pakistan Telecommunication Authority:

- i. In line with Section 8.14 of the Telecom Policy 2015, PTA will issue a framework for Temporary Test and Development Licenses/Authorizations as appropriate for all future technologies particularly 5G Mobile technologies.
- ii. PTA will identify/set aside appropriate bandwidth in the frequency spectrum blocks currently under consideration for 5G standardization purposes wherever available in Pakistan. These could, inter alia, include the requisite spectrum blocks/channels in 2.6 GHz, 3.6 GHz and other relevant bands amenable to millimeter wave (mmW) propagation. Testing entities will be allowed access to such frequency blocks for testing purposes only.
- iii. The framework for test and development licenses shall include criteria for the provision of the test licenses, conditions, duration, and other terms and conditions of reissuing the test licenses on expiry.
- iv. PTA will consult stakeholders on the framework and then finalize the test and development framework within three months to enable eligible organizations to acquire such licenses.
- v. In defining the requirements for an organization to be eligible, PTA will consider the following types of organizations: telecommunications operators, equipment manufacturers, and research & development organizations, in order to encourage the highest level of technology and application innovation in Pakistan.
- vi. The industry and other eligible organizations will be able to test and develop new services by the assignment of spectrum with specific conditions of use for research, development, testing and demonstration activities, and that such licenses/authorizations will be made available within three months of application.

- vii. PTA will forward the applications to FAB (Frequency Allocation Board) for allocation of suitable frequency band for any such request as per procedure in vogue.
  - viii. To oversee implementation under the test licensing /authorizations framework, PTA will form a multilateral working group comprising members of MoITT, PTA, FAB and Industry. The working group will engage other stakeholders regarding harmonious testing and trials of technologies including 5G and will also recommend further suitable frequency bands if required in view of future technology/standards development as well as other technical and logistical requirements for the trials.
  - ix. Developments ensuing from such technology test and trials will be regularly published in the annual report of the Authority.
5. The Federal Government has approved the issuance of this Policy Directive.



(Saad Zaman Asif)  
Director (Telecom Wireless)

The Chairman,  
Pakistan Telecommunications Authority,  
Islamabad.

Copy to:

1. Secretary to the Prime Minister, Prime Minister's Office, Islamabad.
2. The Secretary, Cabinet Division, Islamabad.
3. The Secretary, Finance Division, Islamabad.
4. The Secretary, IT & Telecom Division, Islamabad.