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Methods of detecting defects in radio electronic devices

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Annotation: *With the increase in the number of electronic devices, their tasks became more complex, and the range of services provided increased. Many radio tools must work together to provide one or more services. Accordingly, interference in the radiation radio receiver interferes with the correct reception of the signal, affects the circuit of the radio receiver, and also violates the signals during transmission of radio waves. The article discusses the causes and causes of problems arising from electromagnetic interference in most communication facilities, industry and industry of the republic.*

Keywords: *electromagnetic conditions, electronic devices, industrial radio interference, high-frequency devices, ferrites, permalods, shielding.*

Introduction.

In recent days in the country, including in Samarkand region, a lot of work is carried out to improve the quality of mobile communications and mobile Internet. Certain work is being carried out to improve coverage of all generations of mobile communications (2G, 3G, 4G), from densely populated urban areas to remote regions, in order to provide quality communication services to the population. As in any industry, this industry has its own problems and challenges, which are difficult to solve.

Main part.

Due to the high demand for mobile communications of the population, especially our entrepreneurs, the production facilities of most entrepreneurs work in the basement or the first floors of multi-storey modern houses, i.e. in rooms with bars on the outside windows, preventing the penetration of mobile signals. That is why the installation of repeaters that amplify cellular signals, imported by most of our entrepreneurs, not having a certificate of compliance (often made in China), creates interference to the antennas of mobile operators, leading to a deterioration of mobile and mobile Internet quality.

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Picture-1. Repeated devices that emit radiation that has an adverse effect on the practice.

Such faulty repeater devices interfere with the connection of other mobile devices by generating negative emissions on all mobile phone channels without amplifying the signal of the required working channel.

“MobiUz” Limited has received several complaints about this. Based on the complaints received, a joint investigation was conducted to determine the operability of the repeater devices. As a result, warnings were issued to owners of repeaters that negatively affected the quality of mobile communications.

Despite the warnings, some of our entrepreneurs say: "I bought and installed this device with my own money, I'm not going to turn it off, if I have to turn it off, bring another device instead".

Picture2

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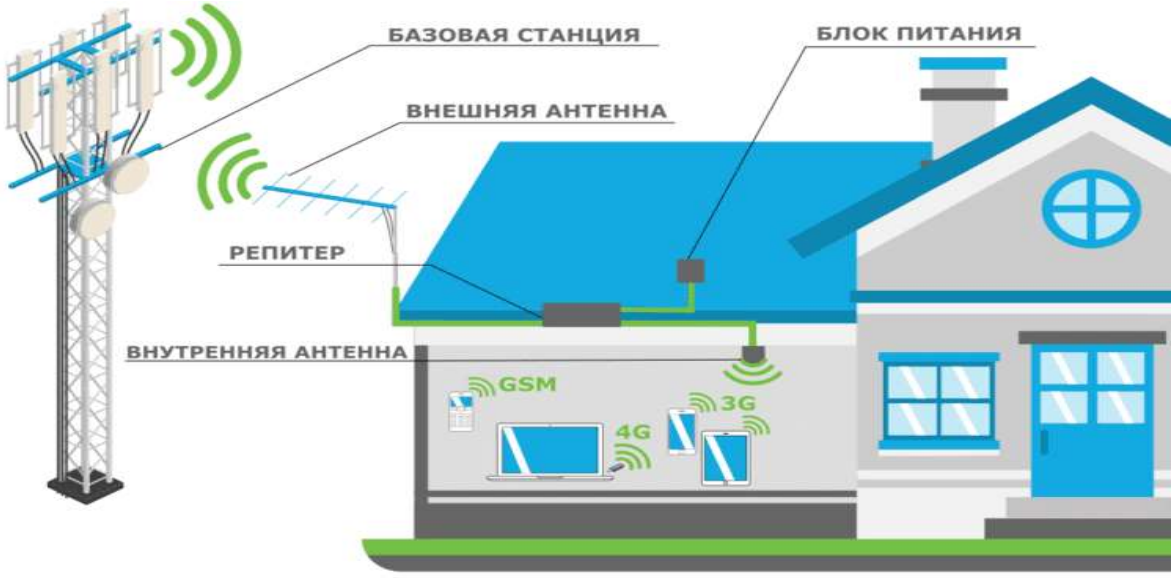
Pictures 2 and 3. Incorrect retransmission system in the antenna installed and used by the entrepreneur.

In order to positively address the issue and improve the quality of mobile communications, mobile Internet, together with the Samarkand regional office of the State Inspectorate for Information and Telecommunication Control, raids were carried out to suppress the work of relay devices that negatively affect the quality of communication.In this connection, we would like to appeal to our people!

Dear citizens, when buying in a certain place such a device as a repeater, please pay attention to its quality, certificate of conformity, permission to use it in the territory of the Republic of Uzbekistan, as well as the quality of the product and full compliance with technical requirements.

Picture-3. Repeater installation procedure.



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Hundreds of citizens are suffering from mobile phone and mobile internet problems due to a mistake made by one individual or entity, as mentioned above.
We inform you that we are ready to provide practical assistance to the Samarkand Region EMC Service in obtaining the necessary advice from staff, if necessary, so that our citizens are not deceived.

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