Narrowband technologies LPWAN (LoRaWAN, SigFox, etc.) to be used for deploying M2M and IoT-based networks

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Up to 90% of Internet devices of things will be used in a stationary state, with a significant part of IoT / M2M applications generating traffic below 10-100 bit per day. This explains the high interest of the market in the use of new narrowband technologies in IoT devices, which have low radiation power and an extended coverage with a radius of up to several kilometers. This category of access networks was joined in a separate segment and defined as a Low-Power Wide-Area Network (LPWAN). The ability to use unlicensed parts of the spectrum in the low frequency bands 443, 866, 921 MHz and 2.4 GHz(ISM-bands) allows such technologies to create a high competition for traditional access technologies based on the use of licensed spectrum in mobile communication networks of 2G-5G generations. Advantages and disadvantages of such technologies, and their market potential are discussed in the presentation.