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Maksym Boluchevskiy¹, Nataliia Zhukova²

¹student of group CST-131 NU “Zaporizhzhia Polytechnic”

²PhD (Philology), associate professor NU “Zaporizhzhia Polytechnic”

5G COMMUNICATION STANDARD: CHALLENGES AND BENEFITS

5G is the fifth generation of cellular network technology. Its average data speed is five times faster than with 4G, and it could be faster. It also has much lower latency as well and better bandwidth.

5G is a unified, more capable air interface. It is driving global growth, whose impact is much greater than that of previous network generations. 5G is used across three main types of connected services, including enhanced mobile broadband, mission-critical communications, and the massive IoT. 5G also provides great opportunities for business improvement, innovative ideas, and customer service.

5G has been deployed in 60+ countries and counting. In Ukraine, successful tests of an electric car – a solution for remote vehicle control via the 5G network – were conducted at the Corum Svitlo Shakhtaria (DTEK Energo) machine-building plant in Kharkiv.

5G has its challenges such as less coverage, IoT security risks, increased costs, and satellite interference.

Though 5G has a lot more advantages than its previous versions, the process of 5G deployment is not such a simple and easy task. Availability and cost of high frequency bands is another problem. The increase in demand for 5G increases the complexity of fiber testing. There is still a limited number of 5G phones vs non-5G phones in the market due to technical problems. 5G deployment is a real huge investment. The spread of 5G networks requires control of the radiation they emit.

Low-band 5G coverage will likely be widely available within a couple of years, but high-speed 5G connections will take more time to roll out. And if you want to be able to use the 5G network you will need to get a new smartphone that supports it.