

5G Synchronization Problems with GNSS Interference

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Structure of fifth generation mobile networks allows fast data transmission speed, high device density and low latency between hosts in the network. To provide these qualities, it is very important to uphold the necessary synchronization of the network components. With the help of our experiments we examined the effects of the disturbed synchronization processes to the operation of a 5G network. Time synchronization is an elemental process of the network, usually GPS and Glonass - or other GNSS (Global Navigation Satellite System) receivers are used for this purpose. We checked the stability and proper operation of these devices in a radio jammed environment. We did our experiments in the Ministry of Innovation and Technology, National Research, Development and Innovation Office within the framework of the Infocommunications and Information Technologies National Laboratory.

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