Focused on the future

5G open for business

Previous generations of mobile networks addressed consumers' needs for voice and SMS in 2G, web browsing in 3G, and higher-speed data and video streaming in 4G. Transition to the fifth generation of mobile networks (5G) will bring many benefits not only to consumers but also to multiple industries. It is estimated that the number of 5G users will reach one billion by 2023, while global mobile data traffic is expected to grow eight times. This requires a more efficient technology, higher data rates and better spectrum utilization.

Therefore, the live 5G demonstration which premiered in Croatia in Ericsson Nikola Tesla, only a month after the Mobile World Congress in Barcelona, is of special importance. It is a state-of-the-art technology working in microwave area, whose wider use in Europe is expected only after 2020, in the second wave of 5G deployments which will, according to experts' forecasts, fundamentally change many industry processes, end users' communication possibilities and the society at large.

The configuration consisting of a radio station and two terminals clearly shows the increase of the capacity of the system equipped with multi-user technology with multiple receive and transmit antennas (MIMO) and a stable data transfer rate of over 20 Gbps was demonstrated simultaneously with video transfer of ultra-high definition (4K). In practice, this implies that to a larger number of users, even in rural areas or, for example, on islands, will be simultaneously provided with mobile communication capacities, which are nowadays available only through optical infrastructure in urban areas.
An essential feature of 5G technology is also low latency in the network, which enables new applications of wireless technology. This is especially important in the Internet of skills domain in cases of remote utilization as well as for the location of real-time applications in the cloud.

Since Ericsson is one of the global pioneers in 5G technology and standardization, the shown demo system is performed on hardware with the use of components that are already available on the global market, with appropriate software enhancements, which should enable easier and faster putting of 5G networks to commercial use.