

Explore new opportunity of 6G for sensing, communication and how to become more GREEN

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Abstract

Higher demand of bandwidth to satisfy the requirements of sub-ms latency, aggregated data rate required by the vertical industries. New frequency bands with high bandwidth will be assigned to 6G. What else can be done with the huge amount of radio spectrum? Don't waste bandwidth just for data exchange. The presentation gives some examples of what 6G could additionally get from radio signals by sensing technologies. Communication needs are much different in many of the vertical domains. Most traffic stays local and requires new architecture that matches better with the demands in the vertical domain. Traditional network optimization targets spectral efficiency, deterministic latency or extreme data rate. Besides, all of those 6G has to address sustainability in order to become the first GREEN radio generation.

Bio



Eichinger Josef joined Huawei Technologies in 2013 to strengthen the 5G Research team in Munich. He started his professional carrier as a technical expert in the field of industry energy and electronic systems. After the study, he joined Siemens AG in 1994 and was working in the development of high frequency radar systems, optical networks and as a researcher on radio technologies as HSPA and LTE. He changed to Nokia Siemens Networks 2007 as LTE Product Manager and was head of LTE-Advanced FastTrack Programs. Currently, he is leading research on 5G enabled industrial communication in Huawei Munich Research Center. The focus is 5G for industry 4.0 and vehicle-to-vehicle communication. Complementary to the research and standardization work, he is also responsible for the prove of the new concept by trials and live experiments. Since April 2018 he is also a member of the 5G-ACIA steering board and leading the Huawei delegation in 5G-ACIA.