

5G and Internet of Things – exposure scenarios

Mike Wood
International Electrotechnical Commission (IEC)

5G is set to revolutionize wireless communications and play a major role in our future connected society and facilitate the road towards a more advanced Internet of Things (IoT). The technology promises not only to increase downloading and uploading speeds over mobile networks, but also to add significant capacity and reduce latency (the time taken by networks to respond).

5G will provide the speed, low latency and connectivity to enable a new generation of applications, services and business opportunities that have not been seen before including advanced remote health care, smarter and safer motorways, factories, agriculture and farms.

This presentation will explore how 5G works, the differences between 5G and other mobile technologies, what 5G means for EMF exposure from base stations and devices including recent exposure testing from live 5G networks and IoT in smart homes.

The International Electrotechnical Commission (IEC) Technical Committee 106 has responsibility to prepare international standards on measurement and calculation methods to assess human exposure to electric, magnetic and electromagnetic fields.

This presentation will also provide an overview of the technical standards and reports prepared by the IEC for the assessment of 5G exposure, and the future standards currently being developed for mmWave assessments.