



Brussels & 5G

The region of Brussels in Belgium introduced arbitrarily low EMF exposure limits more than a decade ago, which caused problems for 4G deployment and now threatens 5G with the delay of a planned pilot deployment. It should be noted that the EMF limits were introduced for political purposes and contrary to the advice of the World Health Organization which states:

“Considering the very low exposure levels and research results collected to date, there is no convincing scientific evidence that the weak RF signals from base stations and wireless networks cause adverse health effects.”¹

In Brussels, the Government has reduced the limits at least three times despite being unable to provide a scientific rationale for any of the changes. In fact, they have had to adjust the limits when it became obvious that they could not deploy 4G networks successfully and now face a similar situation with 5G. The limits are clearly at a point where they prevent the deployment of networks using the latest technologies and will deprive the people of Brussels with the enormous personal, economic and societal benefits that 5G offers.

5G is being designed to meet the very large growth in data and connectivity of today’s modern society, the internet of things with billions of connected devices and tomorrow’s innovations. In addition to delivering faster connections and greater capacity, a very important advantage of 5G is the fast response time referred to as latency, which for 5G will be around 1 millisecond or virtually instantaneous. This enables the widespread connection of devices for our smart cities and homes, autonomous and safer vehicles, enhanced health care and education.

However, as we see with the delay of the 5G trial in Brussels, these excessively low exposure limits impede the deployment of new networks at the expense of users and the economy because they:

- make compliance distances unnecessarily large,
- reduce the possibilities of co-location and site-sharing, and
- reduce the output power of existing antennas which affects network coverage and results in the need for more antennas

The MWF believes that the best strategy to reconcile public health protection and the need of working mobile communication services is for science-based exposure limits to be implemented, as recommended by respected health authorities such as the World Health Organization (WHO) and which have been incorporated into the relevant European Council Recommendation.²

For further information: [Implications for Mobile Communications Infrastructure of Arbitrary Radio Frequency Exposure Limits](#) and our brochure: [5G and EMF Explained](#)

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¹ <https://www.who.int/peh-emf/publications/facts/fs304/en/>

² Council Recommendation 1999/519/EC on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz)