

High electricity costs for 5G base stations





Overview

5G New Radio (NR) is designed to enable denser network deployments and simultaneously deliver increased energy efficiency, thus reducing both operational costs and environmental impacts. Be.

Does 5G New Radio save energy?

Emerging use cases and devices demand higher capacity from today's mobile networks, leading to increasingly dense network deployments. In this post, we explore the energy saving features of 5G New Radio and how this enables operators to build denser networks, meet performance demands and maintain low 5G energy consumption.

What is 5G New Radio?

5G New Radio (NR) is designed to enable denser network deployments and simultaneously deliver increased energy efficiency, thus reducing both operational costs and environmental impacts. Before we explore the new technical features, let's look more closely at how the existing 4G LTE radio networks function.

Why is 5G so expensive?

Such energy consumption cannot be tolerated because it will cause corresponding environmental and economic problems. The construction of a new generation of wireless cellular networks is also costly, that often exceed billions of pounds. The technical complexity of 5G makes its implementation cost even higher.

How will 5G impact MNOs?

Nevertheless, the overall energy usage by 5G base stations needs to be reduced as it will account for approximately 2%–3% of total UK's energy consumption in 2030. Energy costs account for 19% - 23% of RAN OpEx, which will seriously affect MNOs' mainstream profits.



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