GOODS CONTAINERS

Causes of interference from base stations to communication equipment

Overview

What is cross-link interference?

One of them is so-called cross-link interference, which occurs when one base station is transmitting, while another is receiving in the same frequency band. Base stations usually transmit at higher power and have better propagation conditions between them, i.e., lower path loss compared to the link between base station and user equipment.

What is interference & why is it a problem?

The term “interference” is commonly used to describe the addition of unintended signals to a desirable signal. It can be caused for example by the reuse of the time–frequency resources of different base stations or user devices, or due to the unintentional leakage of a transmit signal.

Why do TDD networks have cross-link interference?

It’s here that TDD networks experience so-called cross-link interference, where the base stations interfere with each other as they transmit and receive in the same frequency band. End users constantly require improved coverage, capacity and throughput.

How does cross-link interference affect user throughput?

This interference from another base station that is transmitting is significantly larger than the received uplink from a user to another base station, resulting in a decrease in user throughput. One way to avoid cross-link interference is to ensure that all base stations are either transmitting simultaneously or receiving simultaneously.

Causes of interference from base stations to communication equipn

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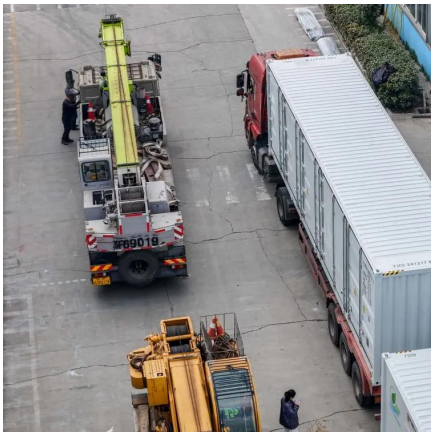
Mutual interference that could exist has been limited to acceptable levels by good frequency planning. Why do TDD networks have cross-link interference?It's here that TDD networks ...



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