

EION BYTES

Benefits of Beamforming Technology in the Smart Antennas

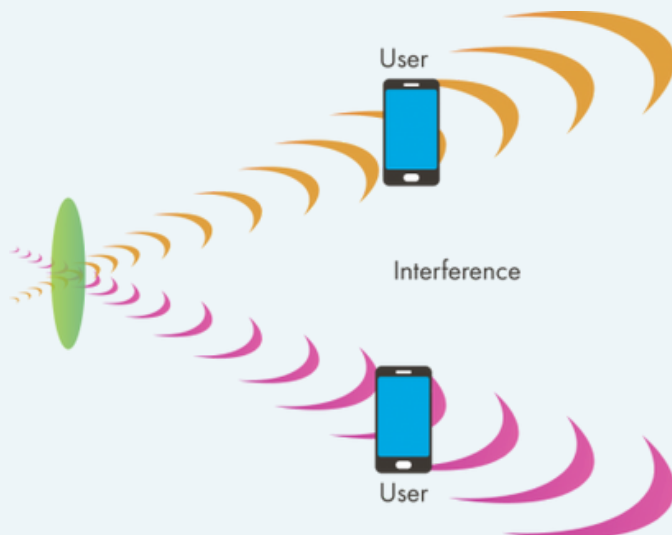
Better Coverage at a Cell's Edge

Beamforming appropriately weights the amplitude and phase of individual antenna signals to create narrowly-focused radiation. This makes it possible to provide better coverage indoors and at the edge of a cell. When end-users face variances in connectivity, even in small areas, satisfaction suffers. Beamforming goes a long way to mitigating this type of poor cell coverage and makes for better experiences overall.



Improves Signal Quality at the Receiver

A beamforming receiver electronically modifies an antenna pattern to focus the antenna in the direction of an arriving signal. Interfering signals in the direction of the incoming signal are suppressed. These modifiable receiver antenna patterns improve signal quality.



Adaptive Beamforming Tracks Users

Beamforming can be adaptive to track a moving terminal continually. The received signals from the mobile terminal may be processed to continuously optimize the antenna pattern to follow the target. This adaptive beamforming enhances spectral efficiency and link quality. When carriers can more efficiently serve customers and produce a better user experience simultaneously, it's a win-win situation.



Beamforming Technologies Allow Cooperation Among Base Stations



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