Cellular Controlled Short-Range Communication for Cooperative P2P Networking

This article advocates a novel communication architecture and associated collaborative framework for future wireless communication systems. In contrast to the dominating cellular architecture and the upcoming peer-to-peer architecture, the new approach envisions a cellular controlled short-range communication network among cooperating mobile and wireless devices. The role of the mobile device will change, from being an agnostic entity in respect to the surrounding world to a cognitive device. This cognitive device is capable of being aware of the neighboring devices as well as on the possibility to establish cooperation with them. The novel architecture together with several possible cooperative strategies will bring clear benefits for the network and service providers, mobile device manufacturers and also end users.

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