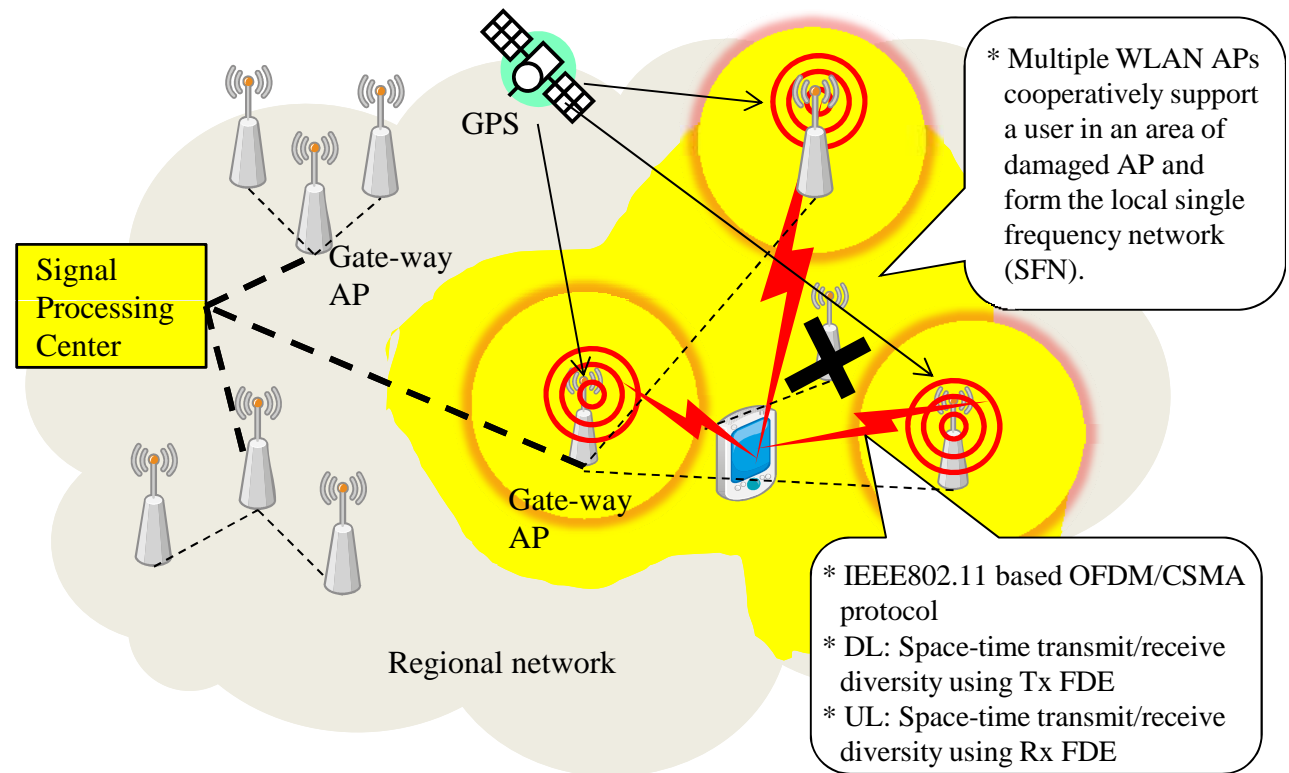


連携ダイバーシティ技術の研究開発

Development of Cooperative Access Point Diversity

Orthogonal frequency division multiplexing (OFDM) based IEEE802.11 WLAN is spread widely. In the disaster situation, communication failure occurs in some areas where access points (APs) are seriously damaged and/or power lines/backhaul cables are cutoff. OFDM enables the single-frequency network (SFN) and thus, a group of surviving APs can cooperate to cover damaged AP's area. A group of surviving APs performs space-time coded cooperative diversity using the SFN nature to continuously support users in the area of damaged AP. The SFN area size can be flexibly controlled by changing the number of cooperating APs according to the damaged area size.



Conceptual structure of cooperative AP diversity.