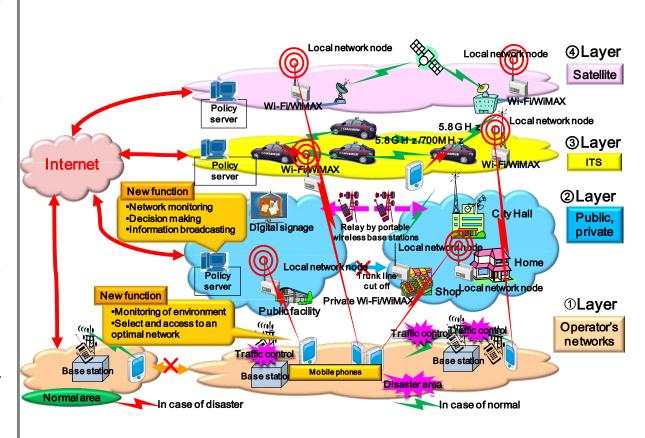
災害に強いネットワークを実現するための技術の研究開発 R&D Project of Multilayered Communications Network

The objective of the R&D project is establish alternative communication route and to develop its related technologies. In case of a disaster, the commercial operator's cellular network may fall into severe traffic congestion or is damaged. When this happens, a mobile phone will automatically connect to a surviving local network. Local networks will be private Wi-Fi, WiMAX, dedicated networks such as cable, satellite, and ITS (Intelligent Transportation Systems) networks. To enable such an autonomous network selection, a "Policy server" will be installed in each network. The policy server monitors its own network and decides whether or not the network can be open to third users based on its own network policy. Accordingly, a new function needs to be installed on mobile phones to select and access to one of the local networks. The decision is made by monitoring its surrounding radio environment and information broadcasted from the policy server of each network.



Conceptual structure of multilayered communications network.