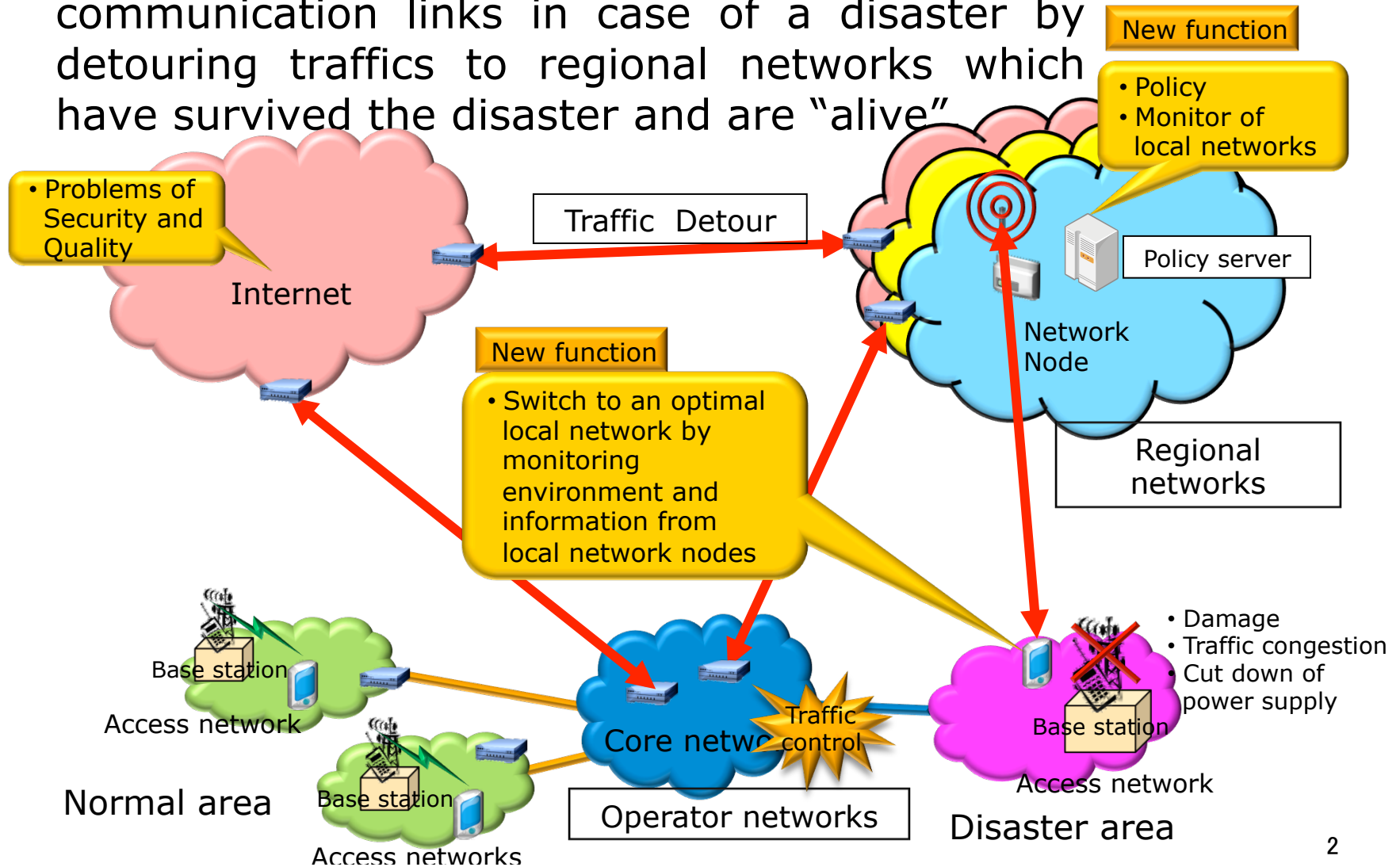


Disaster-resilient Multilayered Communications Network

- We learned from March 11 disaster that relying on a single network is unreliable in a disaster situation
- Multiple networks should cooperate
 - Terrestrial (mobile and fixed) networks
 - Adhoc networks
 - Satellite
 - etc
- Smart phones have been widely spread and can be the best “emergency terminal”
 - Smart phones equipped with 3G, Wi-Fi and WiMAX are becoming popular and popular.
 - Smart phones can be used not only in daily life, but also in case of disaster and emergencies.

Disaster-resilient Multilayered Communications Network

- “Multilayered network” will ensure communication links in case of a disaster by detouring traffics to regional networks which have survived the disaster and are “alive”



Disaster-resilient Multilayered Communications Network

- “Multilayered network” consists of such regional networks as WiMAX, Wi-Fi, ITS and satellite networks.
 - In a normal situation, different networks in the multilayered network operate independently.
 - However, in case of a disaster, each different network will become a part of the multilayered network to detour the traffic in a damaged or over-loaded cellular network.
- Secure communication is important even in a disaster situation.
 - For useful and effective information sharing among a group of people (e.g., a rescue team), the disaster-resilient network should have functions of secure simultaneous calls and secure group calls.
 - Safety-related information should be provided to a designated person such as handicapped and seniors.

Disaster-resilient Multilayered Communications Network

