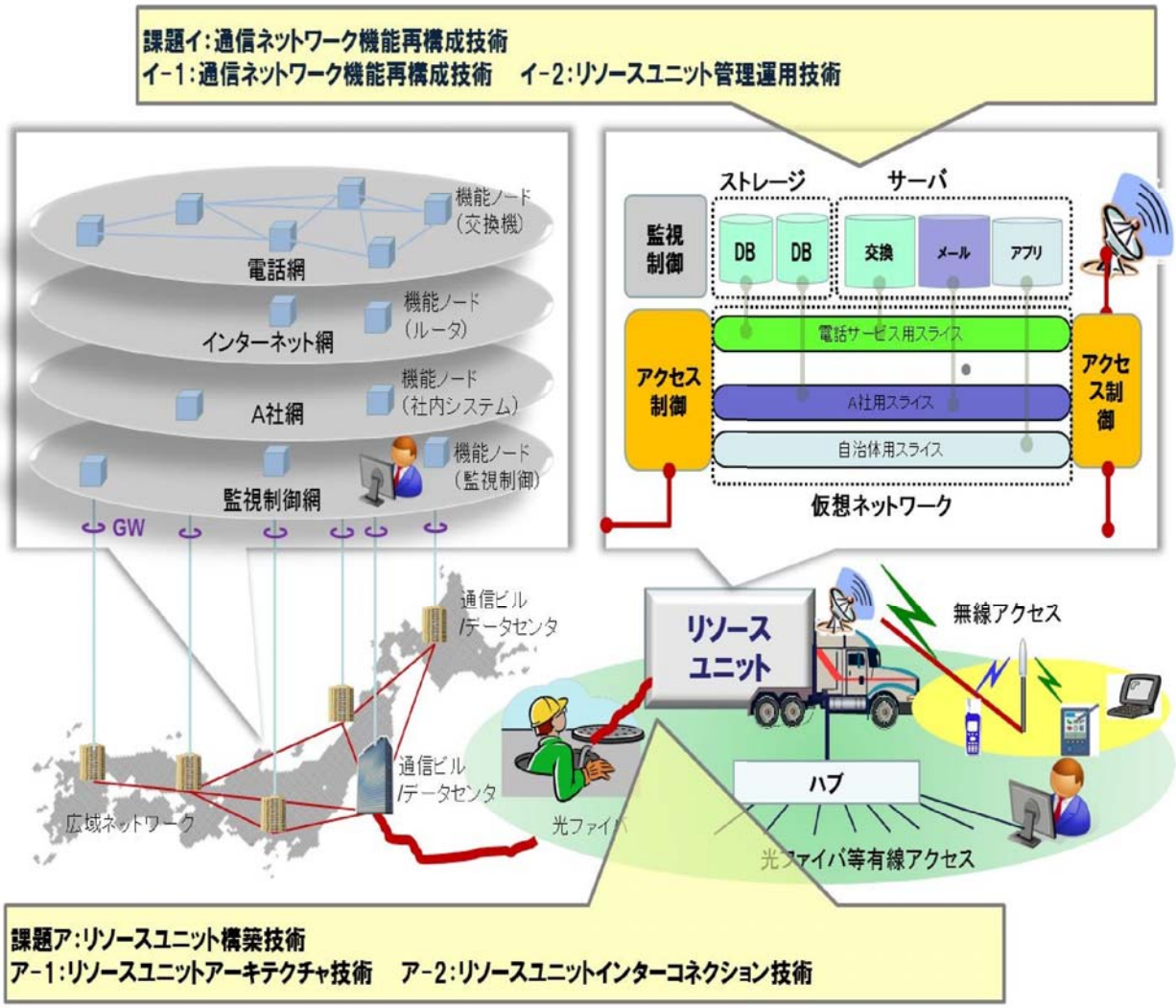

◆Outline

The Great East Japan Earthquake and Tsunami triggered the explosive generation of communication demand. At the same time, telecommunication network suffered serious damages due to the event. This situation caused a significant short- age of resources for information and communication services such as switching systems, servers and storages. Telecom carriers installed portable digital switching systems to the damaged area for urgent and temporal recovery of telecommunications functions. However, it took ap-proximately ten days before starting operation and offered services were limited to basic ones like PSTN (public switched telephone network). In order to meet the wide variety of communication demands which are expected to rise under the devastating disaster situations in the future, it is indispensable to establish technologies which enable us

to promptly add communication re- sources compatible with current and next generation networks for recovery and enhancement of information and communication functions. The objective of this R&D is to establish the following technologies: the architecture of resource unit which accommodates resources for communication, information processing and storage and the technologies to scale the functions flexibly and simply, and the interconnection technology to connect resource units to survived communication networks. The reconfiguration technologies shall also be developed for prompt recovery of functions. A technical test environment, which in part uses the test bed developed by the National Institute of Information and Communications Technology (NICT), shall be built in the Tohoku region to demonstrate and evaluate the effectiveness of the developed technologies. The R&D shall be pushed forward with necessary-base collaboration with other research projects. The investigation of domestic and foreign trends associated with the relevant technologies and cooperation with related organizations as necessary basis shall be considered to look ahead to practical use and international stand-ardization.