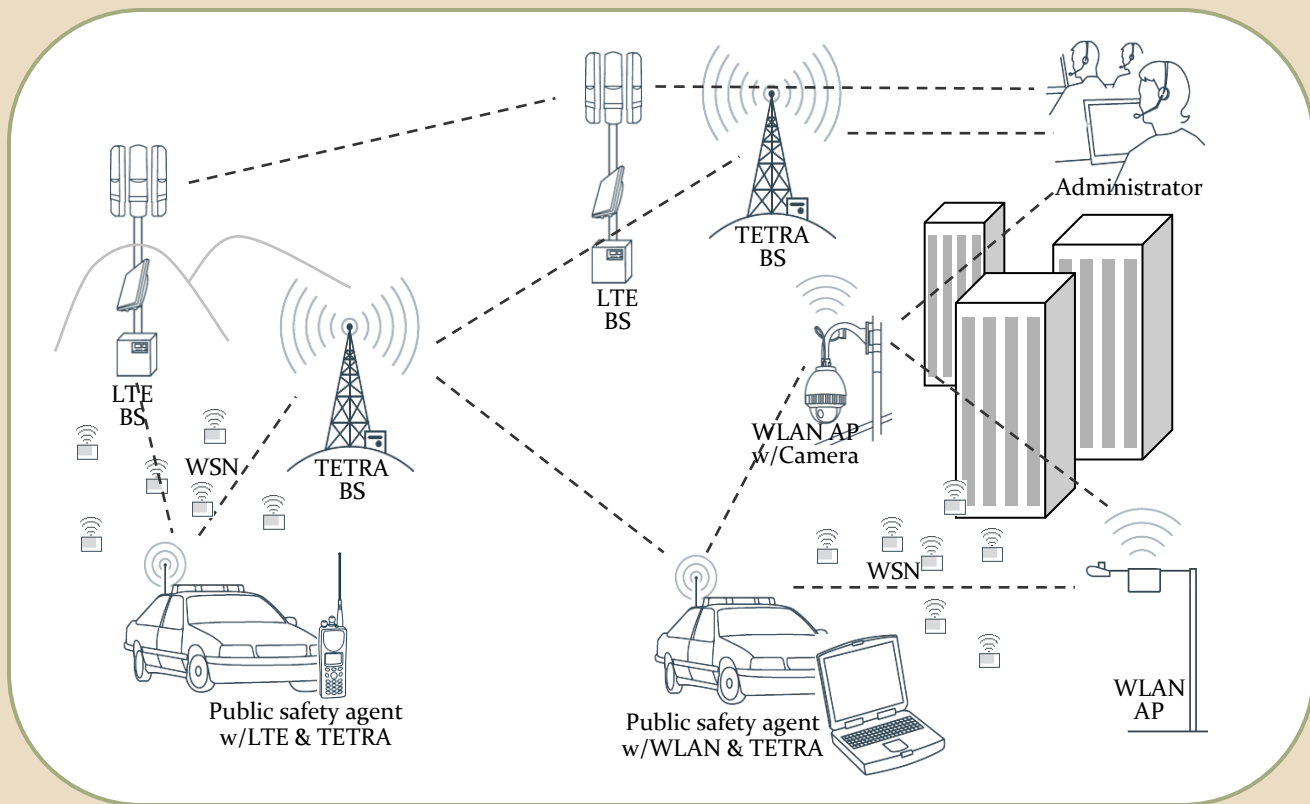


# Research on total solution for Heterogeneous-based Next Generation Public Safety Networks

Performances of Public Safety Networks have been improved in recent years due to the unexpected disasters such as Hurricane, Terrorism, Earthquake and so on which cause huge material damages and casualties. The networks have been evolved from narrowband analog system to narrowband digital systems, and enabled to deal with small messages as well as voice. Recently, the system has been moving forwards to IP-capable networks. Furthermore, as the internet and communication technologies are advanced, the strategy is changed to integrate the conventional TRS system with other commercial networks such as WiFi, WiMax, WSN and so on. Compared with such active research trends on the public safety networks cross over the world, Korean public safety networks are still immature, and rely on the technologies of other countries. Therefore, in this project, we are investigating and researching on ways to improve the network performance and to develop the independent Korean public safety network. The project will be conducted with the following objectives on each three-year.

- 1st year: research on heterogeneous-based Public Safety Network Architecture
- 2nd year: research on inter-operabilities over heterogeneous-based Public Safety Network.
- 3rd year: research on Fault-tolerant technologies over heterogeneous-based Public Safety Network

The results from the three year researches will provide total public safety network solution that is fit to disaster and public safety cases in Korea. Results from this project are also able to make technical independence from countries having advanced technologies for Public Safety Networks. Moreover, the results stimulate industries in Korea to participate in the various public safety network-related markets including network infrastructure industries: Push-to-Talk radio industries, mission critical network industries and so on. In addition, to the public safety network industries, the enhanced group-call technologies obtained from this project will contribute to wireless IPTV technologies, and the inter-operability techniques contributes to the performance enhancement of the next generation cellular networks such as NGN and IMS.



Sponsor: Korea Science and Engineering Foundation (KOSEF), South Korea

Amount : 296,412,000 KW (\$230,000)

Period : 2009 / 9 / 1 - 2012 / 8 / 31

People : Konkuk Univ. - Younggoo Kwon (prof.), Junseok Kim, Xia Sun, Jaeyoung Cha  
Hongik Univ.- Byungseo Kim (prof.), Saewon Han, Jeehoon Park