Singapore consortium to test smart mobility tech

Led by Nanyang Technological University and NXP Semiconductors, the consortium provides a testbed to develop and trial technologies such as smart traffic systems and environmental sensors.

By [Eileen Yu](#) for [By The Way](#) | January 18, 2017 -- 09:58 GMT (17:58 GMT+08:00) | Topic: [Mobility](#)

A new Singapore consortium has been set up to develop and test smart mobility technologies, including smart traffic systems, automated video analysis, and environmental sensors.

Led by the Nanyang Technological University (NTU) and NXP Semiconductors, the new "smart mobility consortium" would tap wireless communication standard for vehicular use, [vehicle-to-everything (http://www.zdnet.com/article/at-t-works-on-connecting-cars-to-everything/)](http://www.zdnet.com/article/at-t-works-on-connecting-cars-to-everything/) (V2X). The global standard had been adopted by countries such as Singapore and the US for use in transportation systems as well as [autonomous vehicle networks (http://www.zdnet.com/article/singapore-to-pilot-self-driving-buses-but-crash-puts-focus-on-safety/)](http://www.zdnet.com/article/singapore-to-pilot-self-driving-buses-but-crash-puts-focus-on-safety/).

NTU's campus would serve as testbed for technologies developed by the group, which currently also encompassed 12 other industry partners including Mitsui & Co.'s subsidiary Car Club, Red Hat, Panasonic, Smart Parking, ST Kinetics, ST Engineering, and Shenzhen Genvict Technology. These market players offered expertise relevant to the V2X ecosystem such as wireless communication design, data analytics, and network security, said the consortium.

It added that the test network was supported by NXP, which communications systems were designed to link cars, traffic lights, and other infrastructure. The NTU-NXP Smart Mobility Test Bed was first launched in April 2015 as part of a four-year S$22 million partnership to drive the development of V2X technology.

Further built out in December 2016 to support the 200-hectare campus, the NTU testbed currently comprised 50 vehicles equipped with smart on-board unit as well as 35 roadside units with video cameras mounted on street lamps located throughout the university. This would facilitate organisations, research institutions, and government agencies in deploying and testing V2X wireless applications.

The campus-wide test network also is supported by a data centre, managing live video and V2X data collection, as well as a command centre that monitors NTU's traffic real-time and broadcasts safety information. It runs on IEEE802.11p and 1609 standard, which the consortium described as a Wi-Fi-like standard for vehicular communications.

Yoon Soon Fatt, chair of NTU's School of Electrical and Electronics Engineering, said the university's researchers had focused on ideas that were "in line with Singapore's smart nation (http://www.zdnet.com/article/singapore-unveils-plan-in-push-to-become-smart-nation/)" ambition. These now could be supported by the new consortium, he said.

NXP's senior vice president of global technology innovation, Wang Hai, added: "The launch of the NTU-NXP consortium is an important step in realising Singapore's vision of a sustainable transport system that includes driverless vehicles.

"The consortium brings together industry players in V2X adoption to drive innovation within Singapore's rich network of industry, academia and government support," Wang said. "V2X adoption requires collaboration and we look forward to building the consortium."

Technologies being developed and tested included automated video analysis and environmental sensors, the consortium said. NTU and NXP said they would be rolling out initiatives to trial mobility applications with the aim to improve safety of all vehicles, including driverless cars and personal mobility devices.