Singapore creates test-bed for transport apps

Singapore's Land Transport Authority (LTA) unveiled Wednesday a new initiative that brings together public and private sector agencies to collaborate on new technologies for transportation.

Dubbed the Singapore Urban Transport Solution, the initiative will "position Singapore as a centre of choice for incubation and test-bedding of next generation urban transport applications and services", LTA Chief Executive Yam Ah Mee said at the launch.

As part of the vision, commuters will be able to avoid congested routes, find out what time a bus arrives, and even check if the bus they are planning to take is crowded.

The initiative, designed with the Land Transport Masterplan in mind, has identified four areas of focus: transport optimization; transport telematics; integrated user experience and environment and energy. Launched in March, the Masterplan is a blueprint for Singapore's transport network in the next 10 to 15 years.

To spur the development of new transport capabilities and services to commuters, the LTA will work with six key partners. To formalize the partnership, the LTA signed a memorandum of collaboration (MOC) with its sister agencies, the Economic Development Board (EDB) and Infocomm Development Authority (IDA) of Singapore, as well as 3M, Cisco Systems, IBM and Singapore Technologies Electronics (ST Electronics).

Under the initiative, 3M will focus on energy-saving lighting, displays and noise control technologies. IBM will work in the areas of data analytics, simulation and modeling, and information dissemination, while ST Electronics will delve into wireless communications technologies, and detection and warning systems.

Dominic Scott, Cisco Systems' director for public sector in Asia, told ZDNet Asia one application the company is looking to introduce is its Personal Travel Assistant (PTA).

The technology, currently on trial in Seoul, allows commuters to track bus schedules using a mobile device. Implementing the PTA in Singapore, however, will require customization, said Scott.

According to Rosina Howe-Teo, LTA's chief innovation officer, the MOC entails a three-year engagement under the Singapore Urban Transport Solution. More partners, including academic institutions, will be announced at a later date.

The new technologies, Howe-Teo told ZDNet Asia, could take between three and five years to bring to market. The LTA will consider not only the feasibility of the ideas, but also the affordability of the technologies involved, before commercialization will take place.

"The solutions don't necessarily drive up the cost of public transportation," she said, explaining that older technologies could be implemented should affordability be an issue.

While the three government agencies did not specify the level of investment in the collaboration, the LTA said that the initiative will be supported by the Authority's S$50 million (US$33.8 million) Land Transport Innovation Fund launched earlier this year.

The EDB, which will facilitate interaction between the partners and players outside of Singapore, said it would avail funds from ongoing investment in innovation and R&D for the initiative. The IDA said relevant ideas would be considered for funding under the Intelligent Nation 2015 Masterplan, which aims to enhance the island-state's infocomm structure.

Innovative apps get funding boost

Since the launch of the Land Transport Innovation Fund in March, the Authority has disbursed about S$12 million (US$8.1 million) toward more than 50 applications, Howe-Teo reported.

The new applications include a traffic prediction tool from IBM and a dynamic navigation guide from Quantum Inventions. 3M also customized a patented technology that improved the visibility of road lane marking during flood-like conditions, she added.

LTA meets 'green' target

The transport body has "seen progress" in its endeavor to become more energy efficient, according to Howe-Teo.

In September 2007, the LTA announced a three-year agreement with IBM to reduce energy consumption in its data centers. Howe-Teo told ZDNet Asia, the LTA has since completed a full study of one of its three data centers, and implemented changes, such as turning off servers that were not utilized for batch processing at night.

Making physical modifications to optimize the flow of cool air also meant that one of the four air-conditioning units in that particular facility could be removed.

"The alignments have helped us achieve 15 percent energy efficiency savings, which based on today's tariff rates, would translate to about 20 percent," she noted.

Based on the findings for its data centers, the LTA is now starting to review its seven control centers, added Howe-Teo. In addition, the Authority plans to release by the end of the year, a set of green specifications which will be used to guide procurement decisions.