StarHub, NUS to pilot 5G virtual-reality and AI solutions

By Vivienne Tay
vtay@sph.com.sg
Singapore

TELCO StarHub and the National University of Singapore (NUS) on Friday said they have teamed up to pilot virtual reality (VR) and artificial intelligence (AI) solutions in a net-zero energy building.

The two partners will use 5G technologies to design and test advanced VR and AI solutions.

They will also develop use cases to demonstrate the application of 5G capabilities in practical solutions that will enhance learning, advance research and address industry needs and challenges, StarHub and NUS said in a joint statement.

The research activities will be conducted at an upcoming 5G laboratory hosted at SDE4, Singapore's first net-zero energy building, at the university's School of Design and Environment. A net-zero energy building produces enough energy to run itself.

The 5G lab is under construction and will be operational early next year, NUS and StarHub said.

The SDE4 facility facilitates the test-bedding and development of green building technologies.

StarHub's 5G network, broadcasting on 3.5GHz trial spectrum, will power the 5G proof-of-concepts at the SDE4.

5G offers ultra-reliable and low-latency communications as well as significant improvements in bandwidth performance. These two qualities are required for VR and AI solutions to interact seamlessly without lag or signal dropouts, according to the statement.

StarHub and NUS' School of Design and Environment have started preliminary work on two key 5G projects.

The first project focuses on using 5G augmented reality (AR) and VR to conduct immersive and interactive classes. NUS is exploring this for classes on measurement, construction technology and facilities management, so that students can be immersed in a virtual building environment.

The other project is for a prototype of a real-time, drone-based facade inspection system that will record digital images or video using a drone-based camera. The recordings will then be transmitted over 5G to a remote AI-driven defect detection system for analysis. This capability will transform traditional manual inspections.

As at 4.40pm on Friday, StarHub shares were trading at S$1.43, down one Singapore cent or 0.7 per cent.