

HKIE Electronics Division Activity Report**WLAN : 802.11 site survey case study**

On 11 June 2007, the EN Division, IT Division and AMC jointly organized a seminar called “WLAN : 802.11 site survey case study”. The guest speaker Dr. Philip Tsang, Associate Professor of Open University gave an overview on the surveying of wireless broadband security and connectivity.

The speaker opened the talk by providing an overview on the Wi-fi technology. The 802.11 standard is introduced in 1990 so as to define the cable-free local area network with either fixed or mobile location. Standard are evolved for sending packetsized data traffic over radio waves in the unlicensed 2.4 GHz band (802.11 b,g).

Dr Tsang went on to elaborate on the war driving vs WLAN Surveys. He explained that the term ‘war driving’ has ‘negative’ meaning in that it means ‘using a laptop to pick up unsecured wireless networks for anonymous and free high-speed Internet access’. As opposed to war driving, WLAN surveyys are to collect data about the growth, distribution, and proliferation of WLANs, determine the ratio of secure/unsecure WLANs, obtain information about WLAN provider, estimate connectivity between WLANs. The WLAN survey data will be used to support research into Wifi usage, map Wifi access point. A tool called Netstumbler is used during the survey. Based on the 2007 OUHK 802.11 survey held on June, there are as many as 11,00 Access Points (AP) while in 2006 survey, there were 4698 APs.