ABSTRACT

Information contents delivered through to Internet is beginning to change from text based to image, sound, even video or multimedia based. This means a high speed data transmission is needed to access those contents. On the other hand, the network connecting customer to Internet, which is PT. Telkom's copper local loop access, can not provide high enough data rate for those services.

PT. Telkom's copper local loop access has a speed limitation for data transmission. The maximum speed is equal to ISDN (128 kbps). With ADSL technology, the existing copper local loop access can be use for data transmission up to 6 Mbps in downstream direction and 1 Mbps in upstream direction. With such high speed data transmission, the ADSL maximum reach is depend on copper local loop access performance. So it's necessary to do some prequalification test and calculations before attempting to provide ADSL service.

Based on the calculations and analysis of 9 sampled RK, ADSL maximum reach on STO Kebayoran local loop is 3,679 km on average. 5 RK's are capable to deliver ADSL, which is RAV, RAX, RAX-2, RAY and RDL. The maximum reach at those RK's are 3,603 km, 3,541 km, 3,937 km, 3,354 km, and 3,8 km. While 4 others RK's are incapable to deliver ADSL because the loop length is longer than ADSL maximum reach at those loop.