

MICROWAVE TRANSMISSION ANALYSIS FOR VETERAN BTS INSTALLATION to 09.NETsite RAJEG

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ABSTRAK

Communication technology has become a major human need in today's modern era. The communication technology used wirelessly is capable of handling long distances, quickly and flexibly. These needs can be met with the existence of mobile/cellular communication technology. One of the communication processes that occur in mobile communication technology is supported by antennas installed on BTS (Base Transceiver Station) towers, namely sectoral antennas and microwaves. The sectoral antenna transmits and receives radio frequency waves from and to communication devices such as smartphone users, while the microwave antenna works to transmit and receive radio frequency waves from and to other microwave antennas or from BTS to BSC and between BTS so that between sites can communicate. The microwave antenna installation process is not only limited to installing microwave antennas and ODU (Outdoor Units) on BTS towers and doing pointing, but there is also a process that is also important, namely commissioning. Commissioning is the process of inputting parameter values into the IDU (Indoor unit). A commissioning process is needed according to the plan on the link budget so that the microwave antenna installation process can run well and get the optimal receiving signal quality according to the plan on the link budget. In this practical work, commissioning was successfully carried out to connect the Girirejo-Tegalrejo site with RSL (Receive Signal Level) output, not much different from the link budget. The device can work well and can connect with other sites that are in one hop after the commissioning process is carried out.

Keywords: *Base station, Microwave antenna, Commissioning*