

## ABSTRACT

---

*In the development of communication knowledge, especially with the regard to GSM generation also known as the 2G become one of the technology that grow fast and quite good on its development. Started from society life, this technology gave a major impact especially to big cities. However, in some area in Indonesia apparently has a limited transmitter with a weak signal. However, the 2G technology already have GPRS service for their user that allow them to enjoy the internet.*

*The 2G technology is like the predecessor to 3G technology, but the author only going to talk about data services of GPRS on GSM technology. Which will bring in a way to provide solutions to the region that has a signal problem by several operators to build/implementating Open Base Station (OpenBTS-v.5).*

*Open Base Transceiver Station (OpenBTS-v.5) is a BTS technology development that provide services to mobile 2G/GSM. This technology have function as a communiation connector and become an alternative technology that has an easy way on its set up to cover some region that maybe suffer the signal problem from some cellular company. In this case,the provided service is a data connection. Although there are some minor fail on this technology.*

*Then conclusions from testing this system is that the frequency has no problem, but the lack of support from SIM card that makes number must be in listed formally and lack of stability signals to data services.*

*Keywords: Telecommunications, BTS, OpenBTS-V.5, mobile cell, frequency*