## ABSTRACT

Mobile messaging has been growing and enriched with new feature. Service based SMS growing so fast, it's because any demand from consumer of operator and innovative way of operator to more competitive to get more revenue at all once to satisfied custumer. All operator have been expanding SMS service not only or mobile to mobile communication but also for other Value-added Service, example : online information, quiz, entertainment info, am d so forth. With increasing of needs mobile of communication and rapidly technology TCP/IP triggered interconnection between difference of two technology for resulting easier information with that technology.

SMS gateway is computer system that have function as gateway between SMSC TCP/IP based. SMPP (Short Message Peer to Peer Protocol) is protocol that implemented as SMSC connectivity protocol. SMPP and HTTP can connected with gateway to communicating. SMS Gateway build to communication efficiently system, until with SMS people get information service actually.

This thesis is try to design and implementation a SMS gateway using SMPP. This gatway will connecting SMSC with TCP/IP based for example *Content Provider (CP)*. Performation and delay will show with counting delay and throughput that can be output by system. Case study for implementation using Information Services Horoscope and Kurs. System will created using J2SDK1.3 dan MySQLv3.23.32 as database and API from Open Logica SMPPv3.4.

Key word : SMS Gateway, SMPP, SMSC, Content Provider (CP).