

ANALISA DAN OPTIMASI QUALITY OF SERVICE (QOS) LAYANAN VOICE DALAM JARINGAN SELULAR CDMA 2000 1X TELKOM FLEXI REGIONAL OPERATION SEMARANG

SUMEWO WAHYU HANDOKO

*Program Studi Teknik Informatika - S1, Fakultas Ilmu
Komputer, Universitas Dian Nuswantoro Semarang*

URL : <http://dinus.ac.id/>

Email : owemus

ABSTRAK

Telkom Flexi merupakan salah satu provider komunikasi berbasis CDMA 2000 1x. Kadang indikator sinyal pada perangkat komunikasi (HP ataupun smartphone) terlihat sinyal penuh tapi saat berkomunikasi kualitasnya buruk. ini menandakan Quality of Service (QoS) layanan Voice dari jaringan selular itu kurang baik. QoS dipengaruhi oleh beberapa faktor seperti : Keadaan Geografis wilayah, Kualitas dan jangkauan (Coverage) dari Radio Frequency (RF), serta kondisi dan konfigurasi BTS. Dan QoS sendiri ditentukan berdasarkan Key Performance Indicator (KPI) seperti nilai CSSR, CDR, SHO yang telah ditetapkan. Agar QoS dari jaringan bisa sesuai KPI maka perlu dilakukan optimasi jaringan selular. Dalam optimasi dilakukan dengan cara Drive Test yang akan menghasilkan data pengukuran dari parameter Rx Power, Tx Power, FFER, Ic/Io dan Active PN. Data hasil Drive Test bisa dibaca berdasarkan warna yang tampil sesuai dengan tabel performa indikator serta log filenya dianalisa untuk mendapatkan kesimpulan masalah serta solusi untuk optimasi QoS layanan.

Kata Kunci : CDMA 2000 1x, QoS Layanan Voice, Key Performace Indicator, Drive Test

**ANALYSIS AND OPTIMIZATION FOR QUALITY OF SERVICE (QoS)
OF VOICE SERVICE IN CDMA 2000 1X MOBILE NETWORKS AT
TELKOM FLEXI SEMARANG**

SUMEWO WAHYU HANDOKO

*Program Studi Teknik Informatika - S1, Fakultas Ilmu
Komputer, Universitas Dian Nuswantoro Semarang*

URL : <http://dinus.ac.id/>

Email : owemus

ABSTRACT

Telkom Flexi is a communications provider based CDMA 2000 1x. Sometimes the signal indicator on the communication device (HP or smartphone) visible full signal but when communicating bad quality. This indicates Quality of Service (QoS) of Voice of the cellular network is not good. QoS is affected by several factors such as: State Geographical area, quality and coverage (Coverage) of Radio Frequency (RF), as well as the condition and configuration of BTS. And QoS itself is determined based on Key Performance Indicators (KPI) as the value of CSSR, CDR, SHO has been determined. QoS of the network in order to fit the necessary KPI mobile network optimization. In the optimization is done in a way that will produce a Test Drive the measurement data of the parameters Rx Power, Tx Power. FFER. Ic / Io and Active PN. Drive Test Data results can be read by the color that appears in accordance with the table of performance indicators as well as the log file is analyzed to obtain the conclusion as well as the solution to the optimization problem of QoS service.

Keyword : CDMA 2000 1x, QoS of Voice Services, Key Performance Indicator, Drive Test