ABSTRACT

Indosat PT. is one of telecommunication that has fixed wireless access license.

StarOne is one of it's product that had been licensed. Starone is using CDMA 20001X

technology that already classified on 3G network.

In demand of developing the StarOne network coverage, Indosat has build a new

MGW at Tasikmalaya to cover east areas in West Java. Due to the areas infrastructure in

Tasikmalaya has not supported the CDMA20001X network, so the connection routes that

has been built has not support the actual reliability that already established in other areas.

Beside of that, due to the elimination of interconnection monopoly causing every

operators has its own interconnection that affect in the increasing of workload in

switching devices.

This final task is analysing the Post Dial Delay by recording the CCS7 signalling

messages, also signaling timming in MSCe. In measurement, it obtained that the ISUP

messages traffic differences is affecting Post Dial Delay (PDD) results. At high traffic,

which is in 0.0044 Erl, the Post Dial Delay (PPD) mean is 7.28 seconds. The differences

in messages signalling flow is not affecting the Post Dial Delay (PDD) results, but it

affect the processing delay in Bandung's GMSC up to 0.16 seconds. The differences in

receive signal power affect the Post Dial Delay (PDD) results. Post Dial Delay (PDD)

mean at 100dBm sampai -110dBm receive signal power is 10.07 seconds. The

differences in StarOne that using Ring Back Tone (RBT) is affecting affect the Post Dial

Delay (PDD) result up to 6.76 seconds. To optimize the performances of call setup

proccess between StarOne Bandung's areas with StarOne Tasikmalaya's areas, it needs

SS7 signalling link and voice link between Bandung's MGW and Tasikmalaya's MGW.

It doesn't violate the rules that has already issued by the Department of Communication

and Information.

Keywords: Post Dial Delay(PDD), CCS7, ISUP messages

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