ABSTRACT

Nowadays, the rapid development in telecommunication highly motivates business person or organization to compete in telco-based business by offering various kinds of its product to gain some profit from the customer. Unfortunately, Indonesian citizens who have access to the technology and also as a customers of a telecommunication operators are statistically limited in numbers, moreover some people who lived in rural. By the 2012, Indonesia has 70,611 rural village with the number of people living in rural areas are 119 321 070 people or equal to 50.21% total population of Indonesia. The problem is that the operators find it unfeasible to invest in the rural area because of the costs required to build a conventional telecommunications infrastructure are very high, eventhough they are potential as a new market for the operators. Besides, the limitations of the spectrum that should be allocated for wireless acces telecommunication becomes another particular issues that reduce the amount of new operators who want to get involved in the telecommunications industry by developing telecommunications network to rural areas.

In order to overcome such unconstructive outstanding issues, the research entitled "Design and Analize of Franchise Mobile Operator Network In Rural Areas", is held to formulate a new

network cellular technology and business model to suit rural needs. Thus, the people in village will have a better access to information, and the operator had no difficulties to cope with the barrier in profitability issues by firm cooperation based franchise business model. It is also expected to become solution for the frequency spectrum limitations. Because franchisee (new operators) only use the frequency spectrum had by the franchisor (legacy operators) who has government permission to use the frequency so it does not require a new frequency allocation for the new operators.

Technically, technology called open BTS only requires investment cost of about Rp 200 million, much lower than the conventional infrastructure cost. The results of sensitivity analysis showed that by invested capital Rp 223 million to build telecommunication infrastructure in remote areas with potential customers as many as 64 people, the payback period required only after 4 years, with NPV 10Miliar rupiahs and IRR 46.64%. So it will feasible enough for Open BTS to be implemented as a new opportunity for the development of telecommunications infrastructure in remote areas.

Keywords: Open BTS, Franchise Operator, Regulation