

## ***ABSTRACT***

Minister of Communications and Informatics Regulation No. 17/2005 on “Licensing Procedures and Operational Conditions for the Use of Radio Frequency Spectrum” establishes an important regulatory framework for the telecommunications industry in Indonesia. This regulation aims to prevent the concurrent use of radio frequencies between organizations, thus ensuring efficiency in frequency spectrum utilization, especially in the context of new technologies such as 5G.

This study focuses on the analysis of license fees for 5G New Radio in Band N8 frequency in Surabaya. In this study, the BHP fee parameter, ISR, is analyzed by considering two main variables, namely  $I_b$  and  $I_p$ , which are adjusted to the specific needs of Band N8 frequencies. Sensitivity analysis method is used to evaluate the feasibility of the license fee that has been determined previously.

The results of this research are to provide recommendations for new values for  $I_b$  and  $I_p$ , which will be further analyzed to determine their feasibility as recommendations for telecommunications operators. Sensitivity analysis aims to determine how effective the calculation results obtained by changing the parameters with new variables, namely  $I_b$  and  $I_p$  values. In the sensitivity analysis, the value of  $I_b$  was modified. BHP ISR on 35 MHz bandwidth is Rp326,130,790 per site. The N8 band requires 41 sites and results in a total BHP ISR value of Rp 13,371,362,382. The BHP ISR must be paid by the operator every year. This value is obtained by considering cost efficiency and operator stability in the telecommunications industry.

**Kata Kunci:** *License Fee, Frequency, 5G Band N8, Surabaya*