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MEASUREMENT OF RADIO OKUPANSI USING MANUAL AND DYNAMIC METHODS IN KOMINFO BALAI FREQUENCY SPECTRUM OF BATAM II CLASS RADIO

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ABSTRACT

Class II Batam Radio Frequency Spectrum Monitor is a Technical Implementation Unit in the Field of Radio Frequency Spectrum Monitoring under the Ministry of Communication and Information of the Republic of Indonesia, the working area of Class II Batam Monitor Hall covers the entire administrative area of Riau Islands Province. To carry out its duties and functions in the supervision and control in the field of radio frequency spectrum usage, the Class II Radio Frequency Spectrum Monitoring Center Batam uses telecommunication measuring devices, such as: Spectrum Analyzer, Signal Generator, Field Strength Meter, Receiver, and others.

During this time Class II Batam Radio Frequency Spectrum Monitoring Center took data on the determination of the Threshold Manually, by taking the Threshold value manually the results of the graph are not too Precision, so a Dynamic Method was created to determine the Threshold value.

In the Occupancy measurement with this Dynamic Method there are 11 (eleven) Bands that can be measured by the Dynamic Method namely FM Radio (87.6 - 108 MHz) - BWA (3300 - 3400 MHz), where to find the Threshold value is taken from the measurement data The Noise Floor. The results of the Dynamic Threshold determination implementation have been able to make the Threshold value more precise. The disadvantage of this Dynamic Method is that it can only find the Threshold 11 Band value, because the Hf Band has no fluctuating Noise floor value so it cannot be made a reference value to find the noise floor. For this reason, the authors conclude that it is still profitable to use the Manual Method where the band can be measured thoroughly.

Keywords: Frequency, Radio, Threshold, Dynamic