ABSTRACT

The vocal cords is human organs that can produce sound. Ganguan on the vocal cords will cause the sound to become hoarse vocal pitch even lost someone. Then it takes a medical check-up as early as possible to find out the conditions on the vocal cords. To ease the process of medical check-up a patient, then use method of non-invasive way to record sound network system patients using Voice over Internet Protocol (VoIP). Voice recording process done with say a vowel/a/in one breath for 10 seconds. The results of this research indicate that the recorded voice through the telephone network will be meyebabkan the presence of noise on the voice signal, so you can change the information on the voice signal. In the next process will be performed using FastICA filter and Wavelet Biorthoghonal to reduce the noise that occurs on a voice signal. After the reduction of noise, the noise will be analyzed using Dysphonia Severity Index (DSI) and Harmonic Noise to ratio (HNR) to find out the condition of the vocal cords.

Keyword : Voice Over Internet Protocol (VoIP), FastICA, Wavelet Biorthogonal, Dysphonia Severity Index (DSI), Harmonic Noise to Rasio (HNR).