

ABSTRACT

A company or organization must have the network infrastructure to support internet facility, and today many are using mobile services, therefore considered appropriate wireless network technology as the network infrastructure in the company or organization. Wireless network is a network that uses radio or electromagnetic waves as the transmission medium.

In this study, the design of wireless network take the object at Pusat Dokumentasi dan Informasi ilmiah – Lembaga Ilmu Pengetahuan Indonesia (PDII-LIPI) by using Network Development Life Cycle (NDLC) method. This method is useful in developing wireless network infrastructure and can monitor network performance in PDII-LIPI.

Analysis and testing wireless network is done by simulating the suggestion wireless network prototype and measure the access point signal distribution at predetermined locations. Result from this study is a draft design with measurement and analysis of the proposed network which will improve the shortcomings of the existing network conditions in PDII-LIPI.

Keyword : Wireless Networks, NDLC, Network Infrastructure, Access Point.