## ABSTRACT

Wartel as partner of the organizer of telecommunications network is requirement to overcome demand socialize service activities of telecommunications will so that earn to improve accessibility socialize in communicating. Request of new wartel founding will be follow to increase along with expanding the telecommunications business. Problem of new wartel acceptance represent problem needing special attention since concerning importance of organizer of wartel and PT. Telkom. Seeing growth sum up wartel which progressively mount and generate complex emulation progressively, hence need existence of a[n appliance assist management, monitoring, and the assistive appliance of efficient and effectively analysis.

GIS (Geographic Information System) represents information system being based on used computer to capturing, saving, checking, call return, managing, analyses, and yield data which relate at geographical thing. GIS integrates spatial data and attribute data. Pursuant to the clarification, hence GIS represents one of correct solution in supporting decision of new wartel founding and as a means of assist management. Things that must be considered in founding new wartel are the distance minimize and mount emulation from existing wartel, possibility of development and the location extension on the future, and also available of network.

To get optimal location in order to mount high accepted earnings, hence be needed some analyses methods these are available analysis of network, matrik kuadran wartel analyses, distance analyses, policy of operational of Kandatel Malang, and overlay analyses. Parameters that supporte these methods are mount wartel earnings, sum up SST, capacities of DP and RK, distance, spreading model of resident and general facility.

GIS designed is used to support decision of new wartel acceptance, and to give amenity of manage, reduce cycle time of existing business process and also replace survey location. There are potential location to found new wartel have been specified is the conclution of this research.