

Technologies of local and personal wireless networks allows building ad-hoc networks which don't require prepared infrastructure of optical or metallic wiring. Besides mechanisms of channel sharing and mechanisms of routing, also mechanisms of topology control are very significant, in these networks. The goal of this diploma project is to evaluate behaviour of chosen mechanisms for topology configuration of wireless ad-hoc networks, optimizing suitable criterion - required energy or interference. Real node distribution of nodes in wireless networks doesn't agree with uniformly or Poisson distribution, published solutions are related to. Interesting would be to evaluate methods minimizing interference for more realistic node distribution (groups of nodes) and also in case of using frequency multiplexing.