

**Abstract**

In this thesis project is considered 3G UMTS wireless network.

To construct the network is determined by the number of subscribers is calculated load per base station (voice and packet traffic), calculated energy characteristics and the range of the BS. Developed scheme of communication and lay out of the BS on the city map . There is a choice of equipment designed network and its placement on one of the nodes .

In organizational economic section lists the capital investment and payback period.