

Annotation

This graduation project discusses the design of a multi-channel telecommunication network using 2G, 3G, 4G and 5G technologies in the metropolis of Almaty. In the process, a number of equipment manufacturers documentation was studied with a description of technologies related to the technical characteristics of base stations, leading functions and data, internal interfaces, and in accordance with this, the coverage area of the base station and equipment reliability were paid.

In the section of life safety, lightning protection is performed, issues are considered during the maintenance and operation of the designed wireless system.

In the economic part, absolute financial productivity and payback period are calculated, covering annual operating costs and benefits.