## **Annotation**

This graduation paper considers the analysis of improving the quality of service for a mobile network. In the process, it was said about the architecture of the LTE network. And also about the structure of the user level and external factors affecting performance in LTE networks.

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.