## Annotation

This diploma addressed issues of ensuring the quality of service for networks based on MPLS, the quality of traffic transmission in MPLS, and an example and principle of operation are also given.

The mathematical modeling of the core of the multiservice network is analyzed and the queuing system for one selected type is calculated.

The chapter on life safety examines the analysis of working conditions and fire safety, provides basic rules for handling equipment.

In the economic part, the economic efficiency of the project was given.