

Annotation

The significance of the work relies on the development of methods, algorithms and ways to control the redistribution of all data to improve the performance of uniform loading of communication flows in the backbone networks, taking into account restrictions on their throughput. In carrying out such tasks, methods of global analysis, data processing, control theory, combinatorial discrete methods of mathematics, the theory of computer data networks, and artificial intelligence were used. The application of the methods and software implemented in the work allows us to improve the efficiency of the use of resources of backbone networks with MPLS-TE technology.