

Abstract

The purpose of this degree project is expansion of the NGN network in Atyrau on the optical GPON technology.

The distributive network of access of PON based on treelike fiber cable structure with passive optical splitters on knots, perhaps is provided to the most economic and capable to provide broadband transfer of various appendices. Thus the architecture of GPON possesses necessary efficiency of building of knots of a network, and capacity, depending on the real and future needs of subscribers.

Calculations of the main characteristics of the NGN network are executed and the analysis of mathematical methods of improvement of quality of service is made.

Questions of labor protection are developed and economic calculation is carried out.