## **Abstract**

In this degree project possibility of design of a multservisny network on the basis of the GPON technology in one of regions of Almaty area is considered. Technical characteristics of technology are described, the linear and station equipment is given, the choice of a fiber-optical cable is made and the most important parameters of the communication line are calculated.

In the section "Health and safety" calculation of natural and artificial consecrations and zeroing is made.

In economic part calculation of capital investments and operational costs is made, the payback period of this project is defined.