## ABSTRACT

PT. Mutiara Agung Perkasa is a company focused in installation of telecommunication access network. PT Mutiara Agung Perkasa is a partner of PT. Telekomunikasi Indonesia which is engaged in telecommunications as a provider of fiber optic communication systems for the needs of the main components, transmitters, receivers, and media. currently there is a problem that occurs during the process of installing a new customer connection. The occurrence of problems, both technical and non-technical. These problems result in the potential for customers which will affect the potential income for the company. Therefore, an analysis of service quality was carried out in the new pairing process using the six-sigma method. The results of this study using the dimensions of the level of customer importance, known that the value that has the lowest level of satisfaction is related to reliability. Furthermore, problem solved using fishbone analysis to develop a solution. Problem must be solved are Full ODP and ODP distance/path is too far. At the recommendation stage, company should to make standard operating procedures, designing capacity development and ODP lines, and visualizing the design of capacity improvement systems and ODP lines. This is to prevent the occurrence of full ODP and long distances and to complete the installation of ODP correctly and quickly in accordance with the standard procedures made.

Keywords: DMAIC; Service Quality; Quality Control; Six Sigma