## ABSTRACT

The existing local access at Kandatel Garut nowadays, especially in the city of Garut, commonly are still using copper as material of the local access, even though there are plenty of customers which can use fibre as the materials. The increasing of demand for new customer make copper as the material for local access, which technically couldn't support for new services of telecommunication, are limited to the existing network. Meanwhile, for building up a new network, fibre access is chosen. The technology that'll be aply should consider whether PON (Passive Optical Network) / OAN (Optical Access Network) or DLC (Digital Loop Carrier).

In this paper, we only discuss for the topics below: Distribution of network from local exchange until primary cable with calculation of power link budget analysis, limitted only at one local exchange, suitability analysis until 2008, customer's criteria cover up bussiness dan common, Analysis of Optical Channel Calculation, Analysis of Volume Calculation, Economical analysis, and Analysis of Planning Development, local fibre access network's forecast including Forecast of services, and Forecast of demand.