

# Semester Thesis

## Fiber-to-the-Home Access Technology

### Vision and Future Application

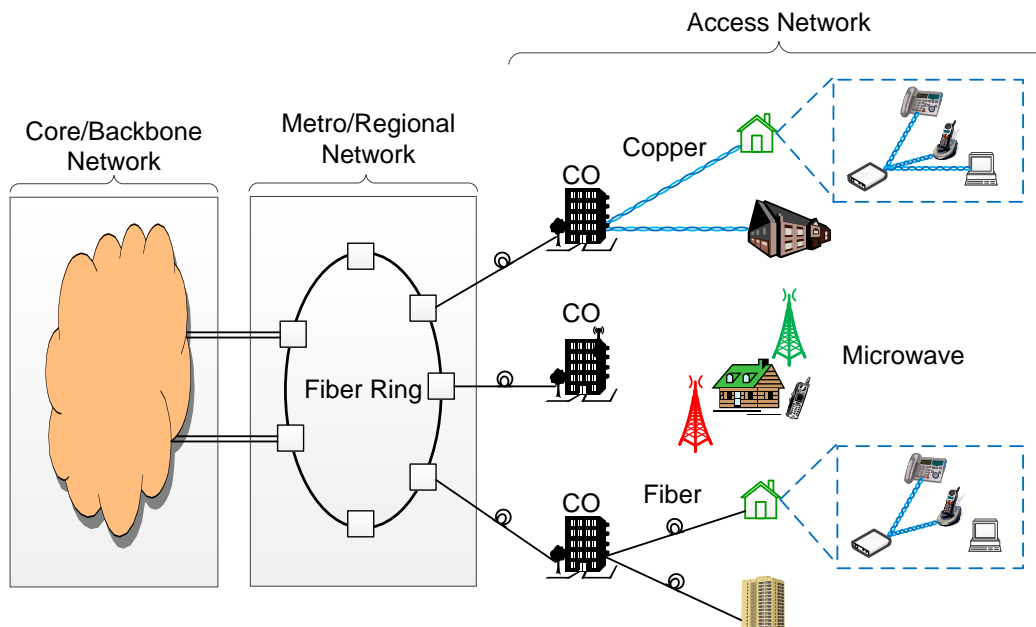
The recent popularity of bandwidth hungry services and high performance electronic devices requires a high capacity communication link. The bandwidth and other limitations of the electrical link are forcing service providers to shift to optical fiber.

### Type of Work

Simulation or experiment depending on your interest

### Requirements

Basic knowledge of optical communication systems and semiconductor devices.



The long reach and high capacity core and metro network signals are distributed to the end user through the access network

### Description

The low loss and quasi-infinite bandwidth of optical fiber make it an ideal solution for high capacity transmission. Fiber-to-the-Home (FTTX) is an access solution where optical fiber is used to interconnect the end-user with the service provider office.

For the deployment of FTTX technology, the transmitters must provide high performance with cost efficiency. Your task will be to perform both theoretical and experimental investigation to develop such a technology..

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