



Key Features

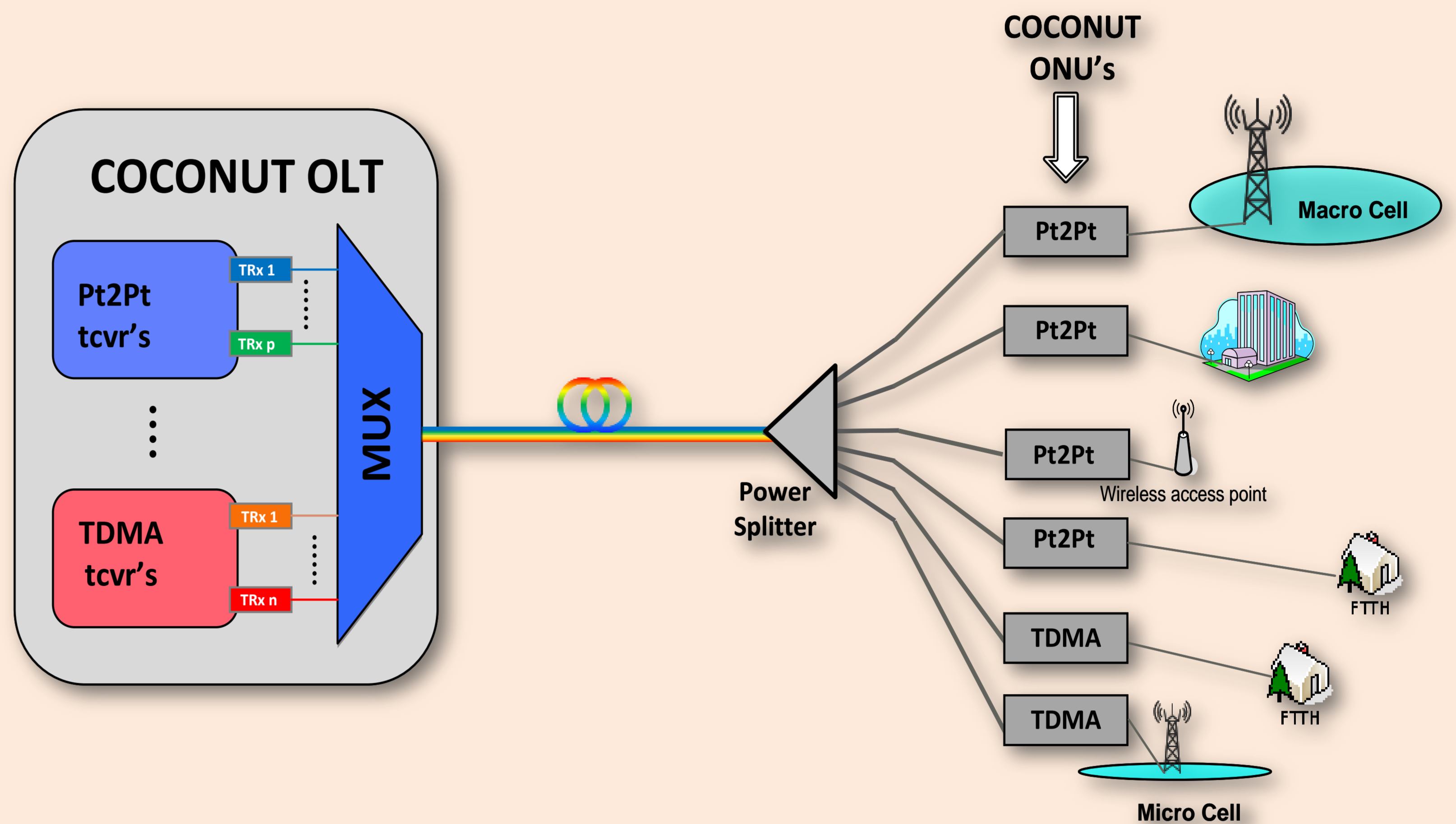
Main target → demonstrate simple coherent solutions at 1 and 10 Gbs allowing:

- ✓ ultra dense WDM (UD-WDM), with no/limited filters
- ✓ higher power budget
- ✓ network scalability
- ✓ simplified network operation
- ✓ higher power efficiency
- ✓ low-cost levels

Expected Results

- Access network architecture and system design
- Network feasibility study
- Identification of system requirements and specifications
- Development and characterization of the coherent UD-WDM prototype transceivers
- Development and implementation of the appropriate control protocol for the proposed network
- Integration and testing, which will be including lab tests and **field trial**

The COCONUT Reference Architecture



The COCONUT Novelty

- Definition, study and realization of a **new fully scalable optical access network significantly extending the network dimensions** (bandwidth utilization, reach and number of users)
- Evolution from the TDMA-PON and almost-commercial WDM-PON architectures to the **Ultra-Dense WDM solutions** (also allowing “wavelength-to-the-user”)
- Key enabling technology will be a **new cost-effective coherent** detection scheme, to implement “cheap” coherent terminals

General Information

GA Number: 318515

Duration: November 2012 – October, 2015

Funding scheme: STREP

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