

Welkom Welcome

*Using Existing Wires For Cost Effective Broadband Networking
A Case Study Success Story*

For Brownfield Fiber networking deployment in MDUs and Commercial Buildings

MoCA AccessTM 2.5 Multi-Gigabit Network Extension Technology
InCoax Networks, MDU Solution

A Word about MoCA Technology Standards



Connecting devices in a single family home

(Mesh)

MoCA Home™ 2.0 (1 Gbps)
MoCA Home™ 2.5 (2.5 Gbps)
MoCA Home™ 3.0 (10 Gbps)



Connecting apartments/units in a MDU, ADU, MTE

(P2MP)

MoCA Access™ 2.5 (2.5 Gbps)
MoCA Access™ 3.0 (10 Gbps) -
2022



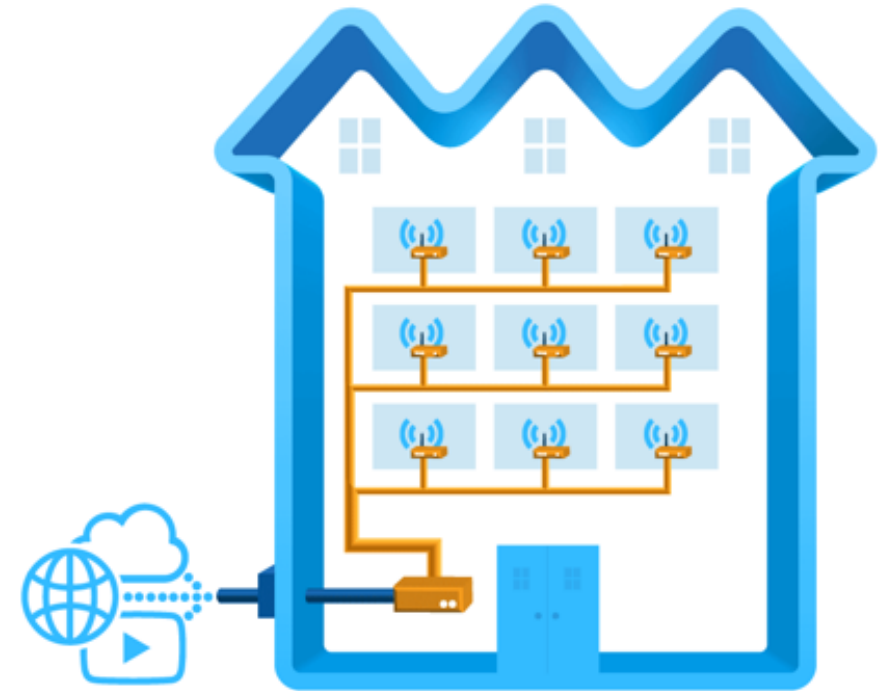
Bridging from exterior access network to home interior network

(P2P)

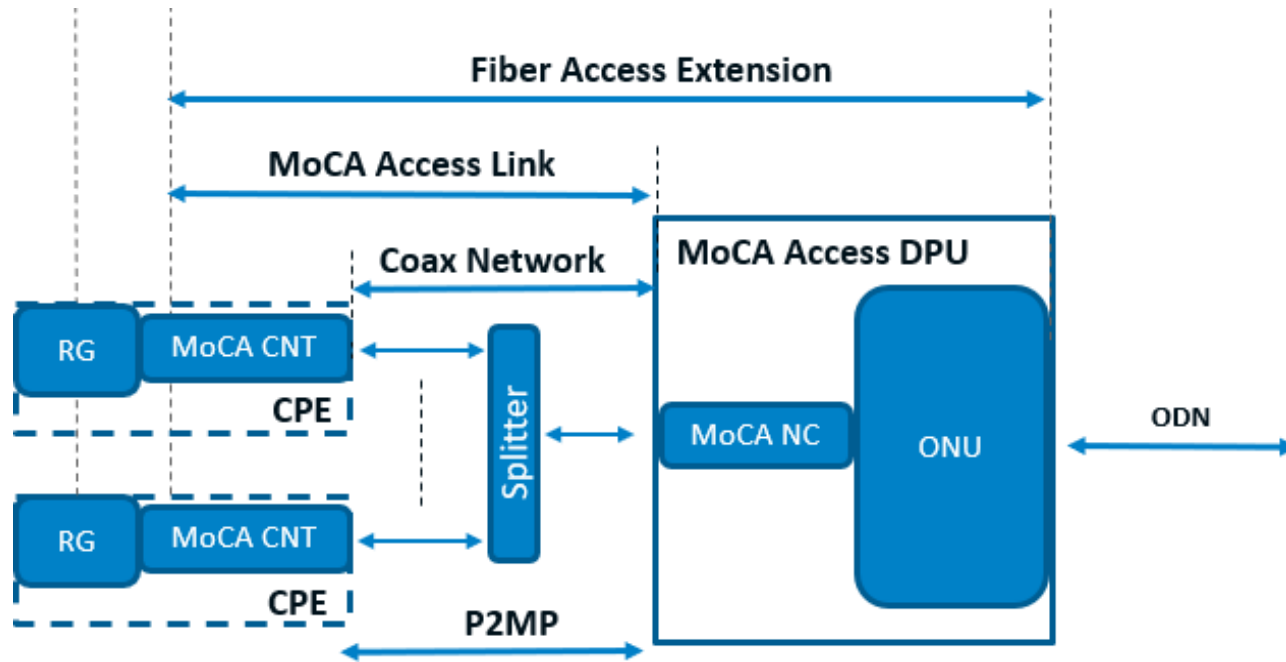
MoCA Link™ 2.5 (2.5 Gbps)

About MoCA Access™

- Developed for secure point to multipoint networks
- Enables fiber speeds over existing MDU coax cable
 - MoCA Access 2.5 supports 2.5Gbps bandwidth
- Repurposes existing in-building coax wiring
- Enables reverse power feed
- BBF standardized data models
 - TR-181, Yang, SNMP
- TR-419 Fiber Access Extension over Copper support
- Individual client provisioning supported



About BBF TR-419



- Describes architectural, management and operational aspects of FTTEp deployments
- Supports PON fiber extension of P2MP topologies
- Leverages Netconf/YANG for management aspects

- **The challenge** for MDUs and service operators is keeping PON fiber installation costs under control, eliminating fiber ducting issues, and minimizing tenant unit disruptions.
- **The good news:** A vast majority of MDUs built between 1960 and 1990 are wired with reusable coaxial cabling. Coaxial cabling can be the ideal, shielded conduit for PON fiber gigabit and multigigabit networking to each unit.
- Using the MoCA Access 2.5 technology, a fiber broadband solution can be deployed cost-effectively with minimal tenant unit disruptions.

Case Study – Stoneridge Apartments

256 apartment Affordable Housing complex,
Pflugerville, a suburb of Austin, Texas

How stay attractive to present and future tenants?

High-speed broadband access throughout the complex

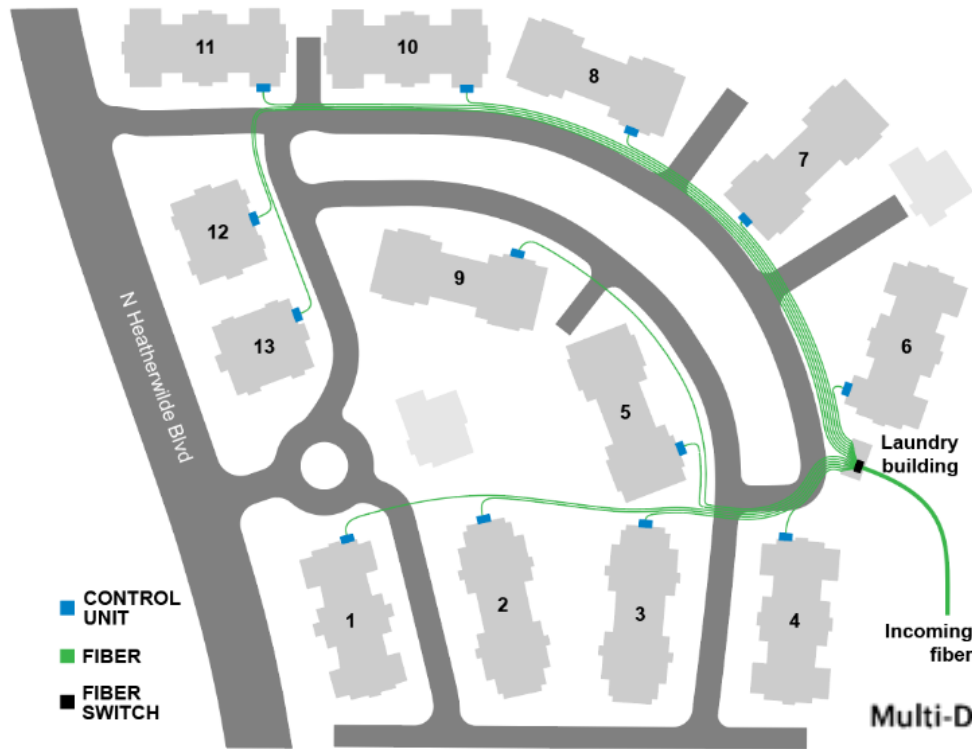
- in every apartment
- in all service areas
- all outdoor premises
- included in the rent



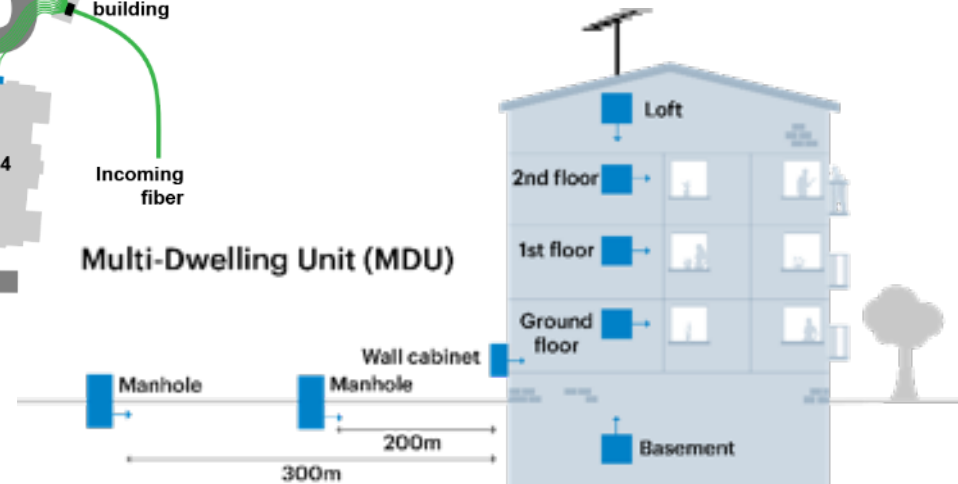
Cost estimates showed full-fiber solution would cost \$440/apartment

Comparison with InCoax solution for Fiber Access Extension cost \$125/apartment

Case Study – Deployment FTTB edge/FTTep inside

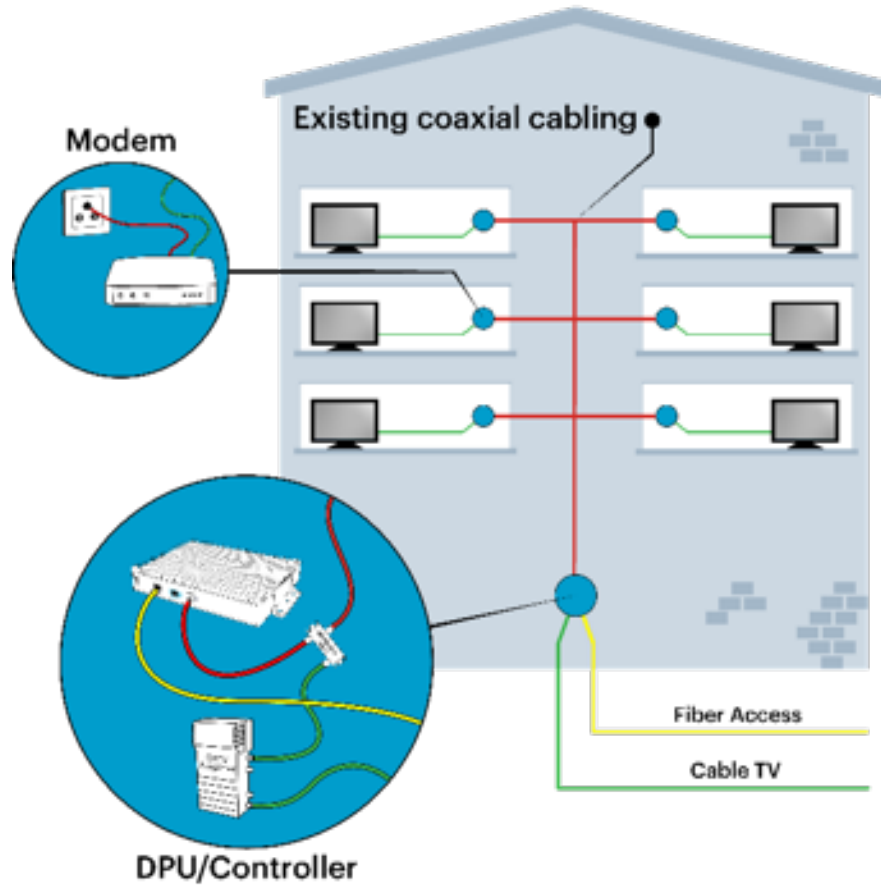


Multi-Dwelling Unit (MDU)



Case Study - Fiber Access Extension

Fiber Access Extension in a Cable-TV network environment



Case Study – Conclusion & Moving forward

- Prior to deployment: Appr. 50% occupancy rate
- After deployment: Over 90% occupancy rate
- Cost to install: \$125/apartment

- MoCA Access™ + TR-419 provides service operators and ODMs multi-gigabit fiber access network extension capabilities over existing coax cables in brownfield MDUs
- Extends street fiber to each apartment
- Gigabit and Multigigabit symmetrical data rates
- Cost-effective, Nonintrusive & Fast deployment
- 5Gbps & 10Gbps subscriber service performance ahead
- Complement to FTTH deployments that solves the Last Mile Challenge

Thank You!

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