FTTx GPON Products and Service Solutions

www.alfocom.com

ALFOCOM Technology Co., Ltd.

Contents

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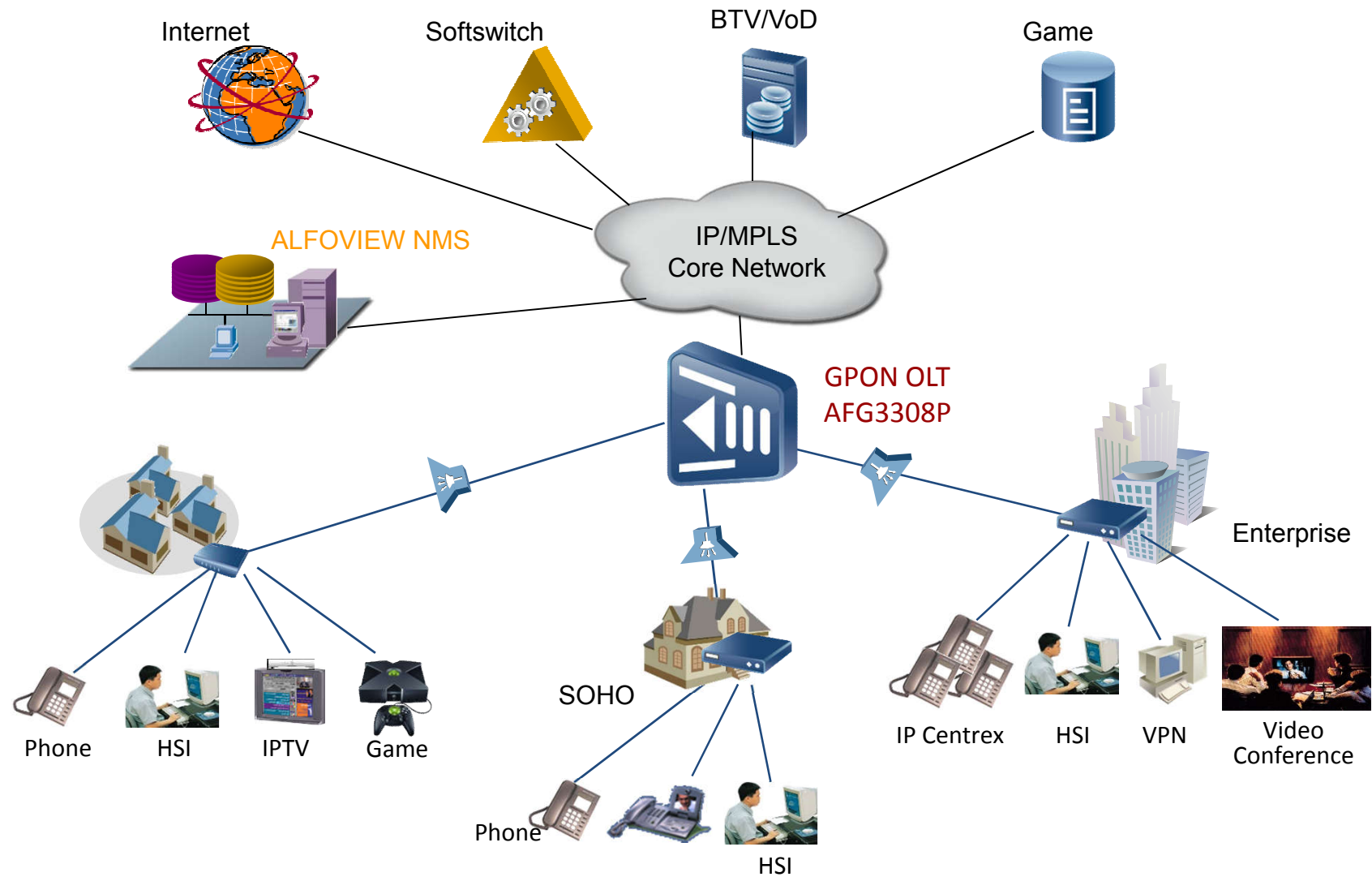
GPON Network
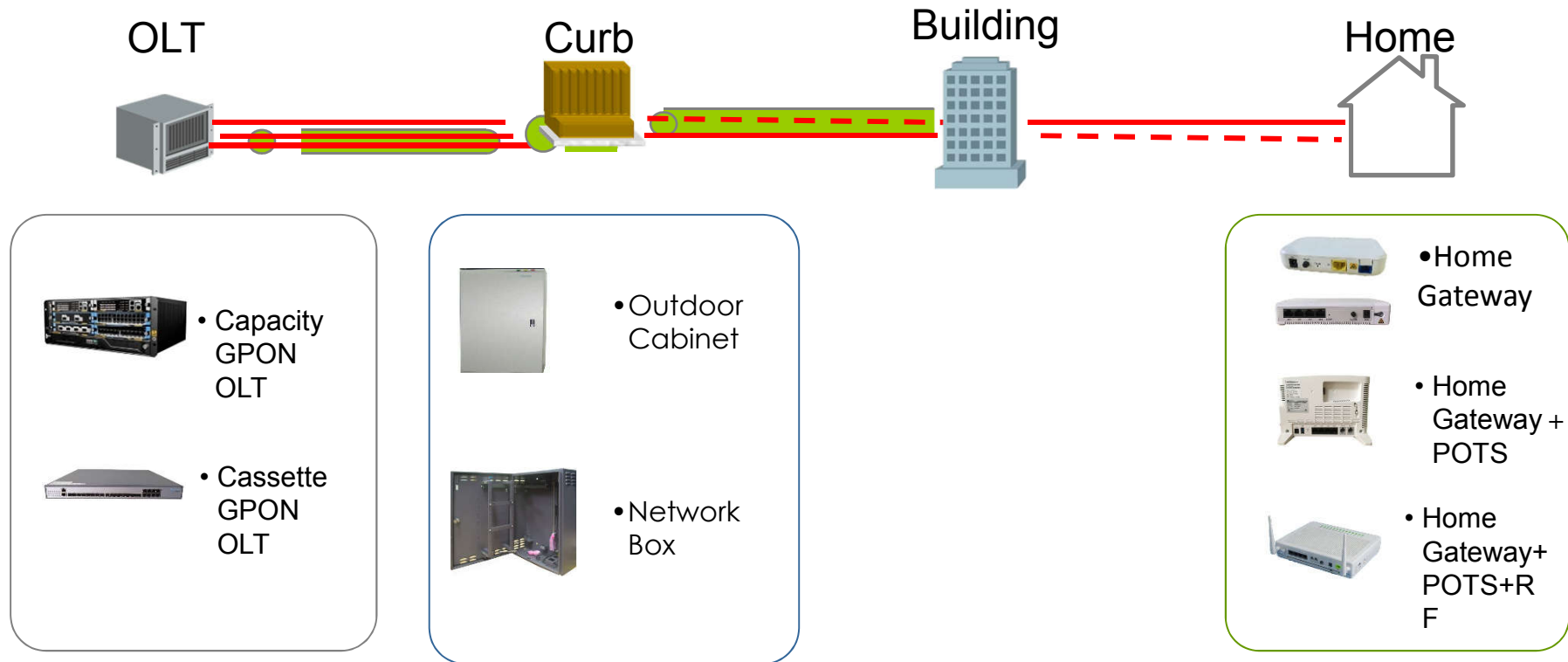
Internet   Softswitch   BTV/VoD   Game

ALFOVIEW NMS

IP/MPLS
Core Network

GPON OLT
AFG3308P

Phone   HSI   IPTV   Game

SOHO

Enterprise

Phone

HSI

IP Centrex   HSI   VPN   Video Conference

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ALFOCOM GPON Products

OLT   Curb   Building   Home

- Capacity GPON OLT
- Cassette GPON OLT

- Outdoor Cabinet
- Network Box

- Home Gateway
- Home Gateway + POTS
- Home Gateway+ POTS+RF

➢ All the GPON series products can be management by ALFOVIEW unified NMS

GPON OLT

All levels of OLT adopt for different application.

Cassette 1RU Mini 4ports
AFG3304P

Cassette 1RU Mini 8ports
AFG3308P

Chassis 4RU 4 service slots
4096 ONT capacity
AF6000-04

Flexible Network Application

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GPON OLT

AF6000-04

AFG3304P/AFG3308P

- 4RU ultra-compact chassis, semi-slot high-density design
- 1+1 master control redundancy,1+1 power supply redundancy
- Hot plug fan tray, intelligent speed and temperature control
- 6 slots，2 main control slots, 4 service slots
- Support maximum 32* GPON port and 32* GE port
- Support maximum 64* EPON port
- Support maximum 32* 10GE EPON port and 32* 10GE port
- 1.6Tbps backplane capacity for smoothly upgrading to 40G/100G
- IPv4/IPv6 and MPLS line-rate forwarding ability based on hardware
- Full-loaded power consumption is 350W

- 1RU, 19 inches
- 1+1 power supply redundancy
- 4/8* GPON port, 1* console port
- 8*1000BaseX SFP port, 8*100/1000Base-T port
- 1*10GE SFP+ expansion slot
- Full-loaded power consumption is 40W

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GPON ONU

DATA	DATA+VoIP	DATA+VoIP+WIFI+CATV

AFGN-2F1V

AFGN-01GS

AFGN-04S-2VT

AFGN-02S

AFGN-04GS-2V

AFGN-04S-2VWT

AFGN-04GS

AFGN-04S-2VW

AFGN-02GS-W

AFGN-04GS-W

AFGN-04GS-2VW

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Contents

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Multiple Service Solution Based on GPON

RESIDENT

DATA

IPTV/ CATV — FE / RF

Voice — POTS

Global Eyes

ONU

BUSINESS

Voice

HS — FE

MDU

Splitter

ALFOVIEW NMS

AF series GPON OLT

AAA Server

IP Core

Internet

Softswitch
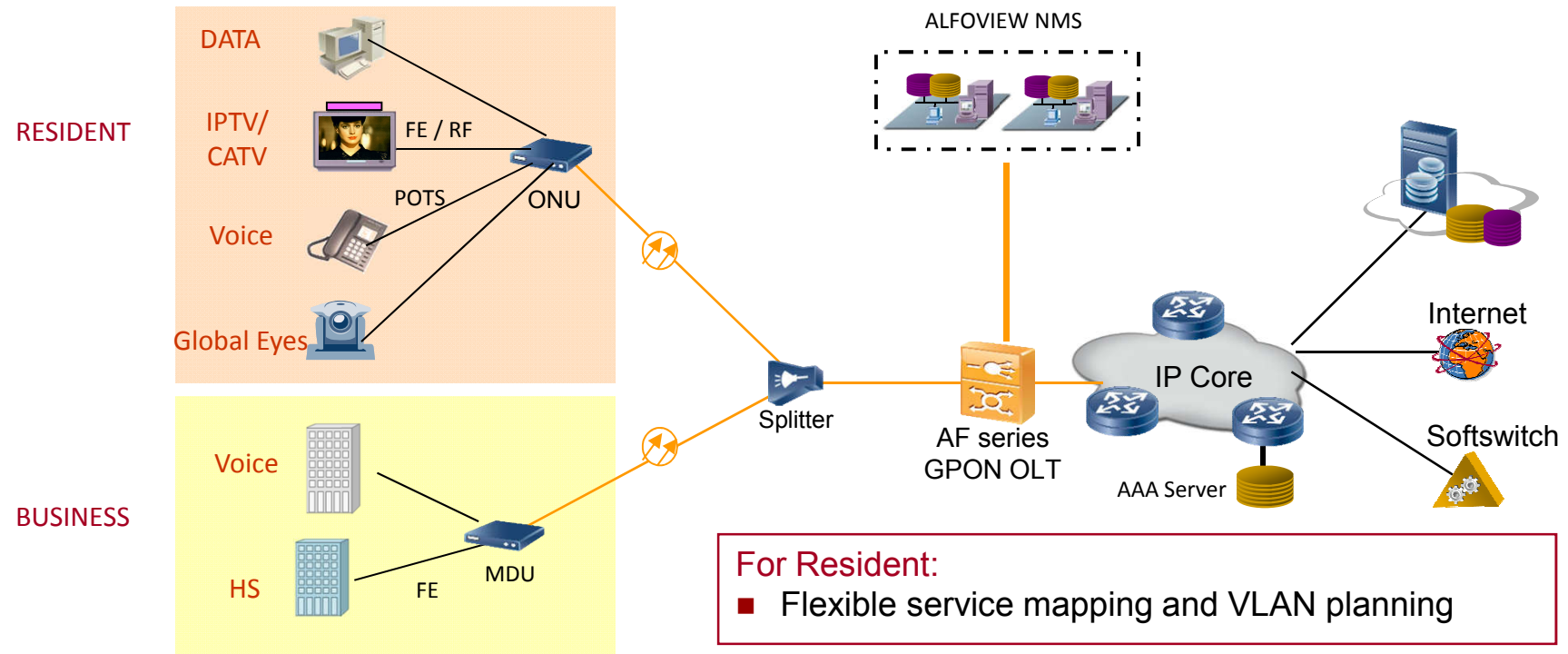
For Resident:
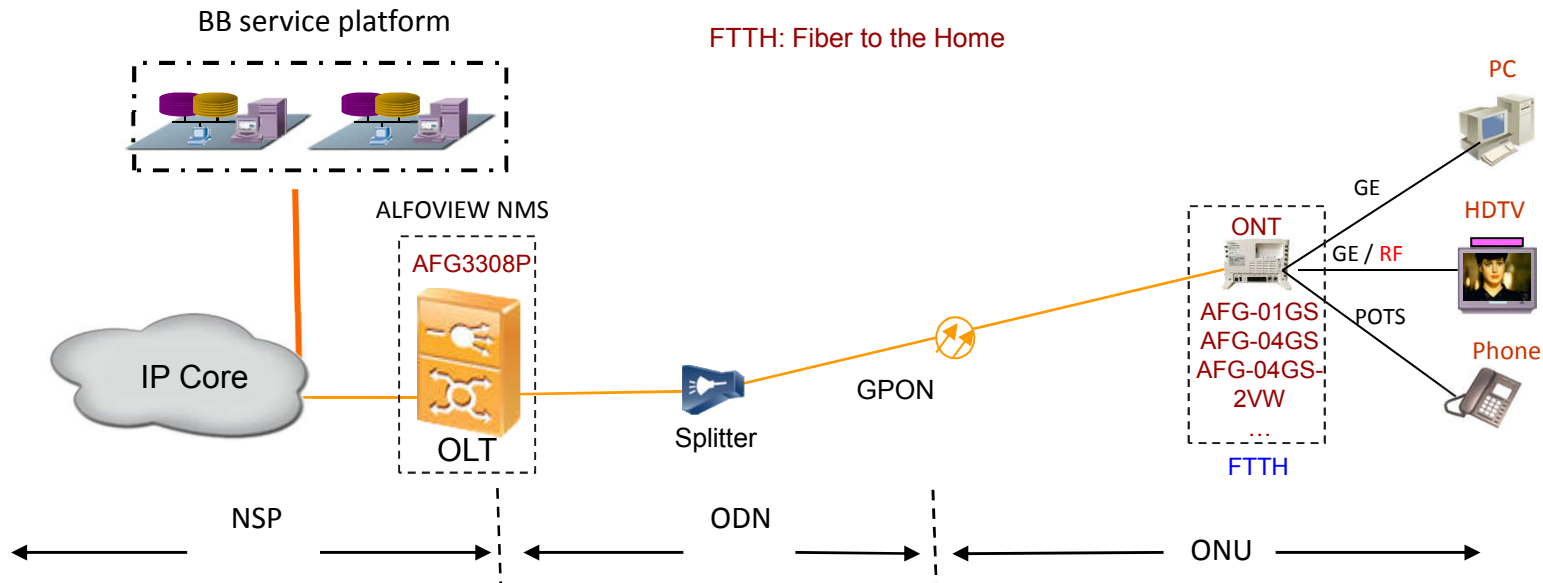- Flexible service mapping and VLAN planning

For Business:
- Hierarchical QoS
- High reliability and security

For Mobile:
- Native TDM and CESoP for 2G/3G backhaul
- Clock synchronization solution

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FTTH Scenarios

BB service platform

FTTH: Fiber to the Home

PC

GE

ALFOVIEW NMS

ONT

AFG3308P

HDTV

GE / RF

IP Core

AFG-01GS
AFG-04GS
AFG-04GS-
2VW

POTS

Phone

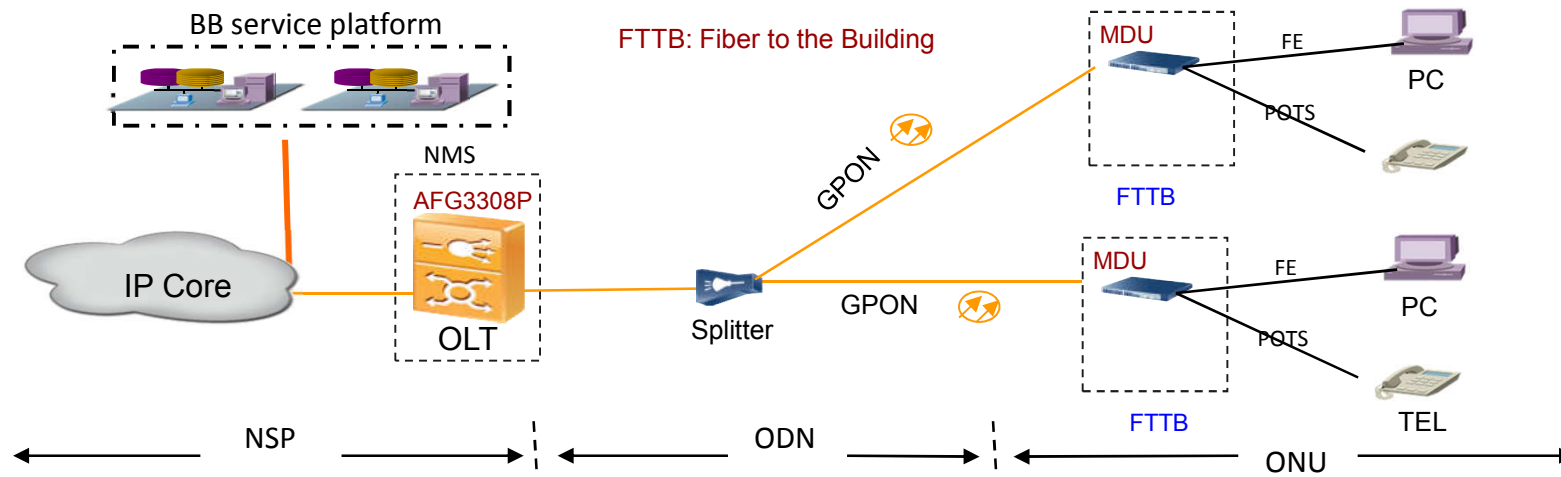GPON

Splitter

OLT

FTTH

NSP

ODN

ONU

FTTH:

CAPEX is **the highest** among the ones in different FTTX.

OPEX is **the lowest** among the ones in different FTTX

All the equipment of ODN are passive

FTTH needs lots of cables, so drop cables is the major cost in CAPEX.

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FTTB Scenario: LAN/VDSL+POTS

BB service platform

FTTB: Fiber to the Building

MDU

FE

PC

POTS

FTTB

NMS

AFG3308P

GPON

IP Core

OLT

GPON

MDU

FE

PC

POTS

TEL

Splitter

FTTB

NSP ← → ODN ← → ONU

Benefit:

CAPEX saved

High speed access 100M bps

Smoothly evolution to FTTH

Disadvantage:

Limited distance: 100m for Ethernet;

1.2km for VDSL

- FTTB:

- OPEX is higher than CAPEX in FTTB and it's also higher than the OPEX of FTTH

- MDU is the major cost in the CAPEX

- For there are lots of active equipment, the power expense is higher.

- The rent for MDU is also higher.

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FTTC Scenario: ADSL + POTS
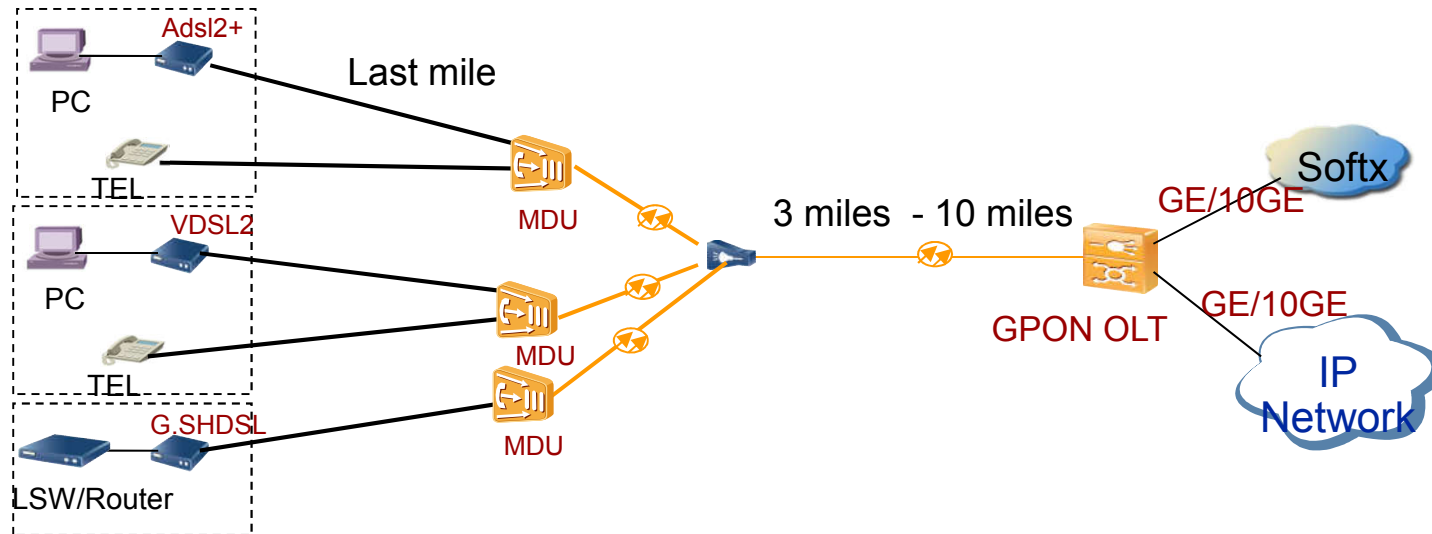
Benefit:

CAPEX saved

Make the best use of previous copper network

Smoothly evolution to FTTH
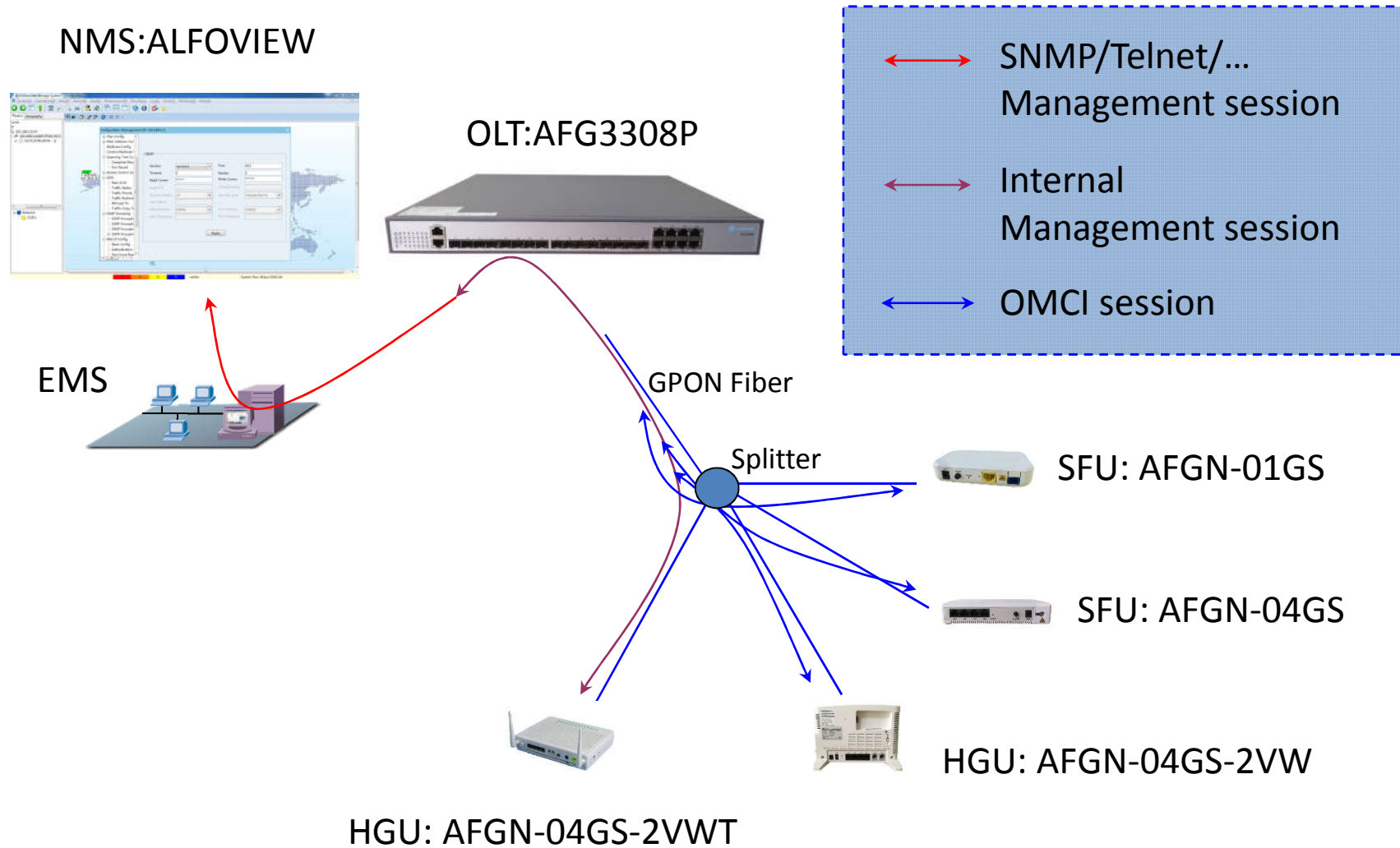
Disadvantage:

Limited bandwidth 25 M bps

FTTC:

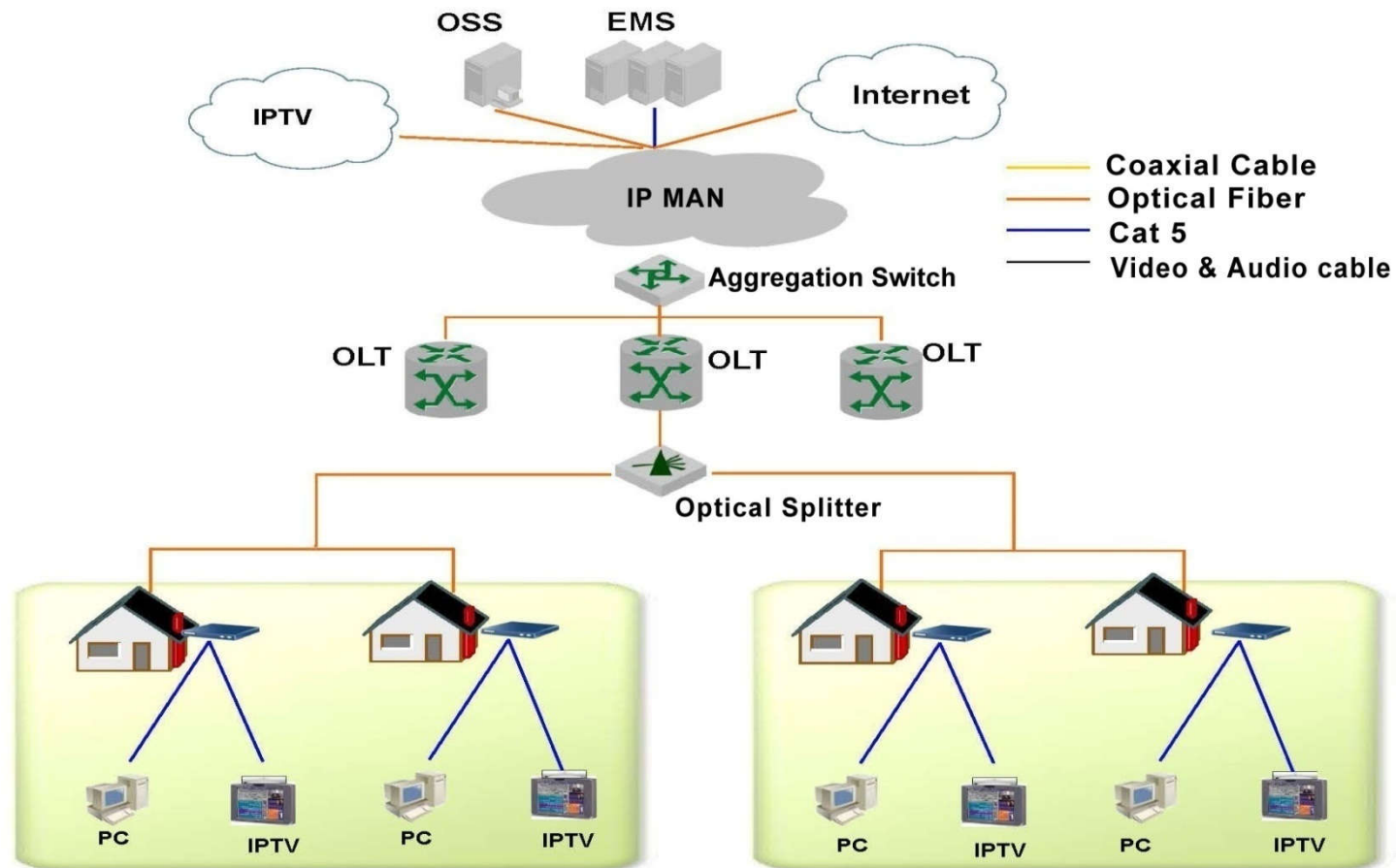CAPEX is the lowest among all the FTTX scenarios.

Compared with FTTB, its rent cost is much higher since it needs the cabinet

Power Expense and rent are the major costs of the OPEX

Evolution of management

NMS:ALFOVIEW

OLT:AFG3308P

EMS

GPON Fiber

Splitter

SFU: AFGN-01GS

SFU: AFGN-04GS

HGU: AFGN-04GS-2VW

HGU: AFGN-04GS-2VWT

SNMP/Telnet/... Management session

Internal Management session

OMCI session

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Vietnam Telecom Operator GPON solution

Thank you !

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