

FTTx Connectorized Solutions

Steve Dick

Director, Field Application Engineering, APAC

Megatrends drive
the need for fiber
connectivity.

High-bandwidth, low-latency,
ubiquitous fiber provides the
foundation. Last mile access
provides the connection.

Cloud DOCSIS 3.1

FTTH

FTTX

autonomous
vehicles

broadband

IP TV

IoT

5G

Big Data

CONVERGENCE

virtual
reality

HFC

cell
densification

4K
HDR
video

digital economy

CRAN

wearables

smart
cities



Speed of Deployment

- Use robust products that install quicker, require less training and tools, simplify logistics, and are easier to maintain
- Increase labor productivity by streamlining deployments and reducing the time spent on site



More capacity

- Implement network migration strategies that are scalable, flexible, and cost-effective
- Lay higher fiber count cables, multiplex more wavelengths onto the same fiber, and deploy high-density space saving solutions
- Pave the way for SDN/NFV and virtualized access architectures



Multi-Service

- Build a single converged network to support residential, business and wireless services – including small cells, CRAN, and 5G
- Accelerate ROI by gaining efficiencies, economies of scale, and delivering new services

Fiber optic networks – evolutions & trends

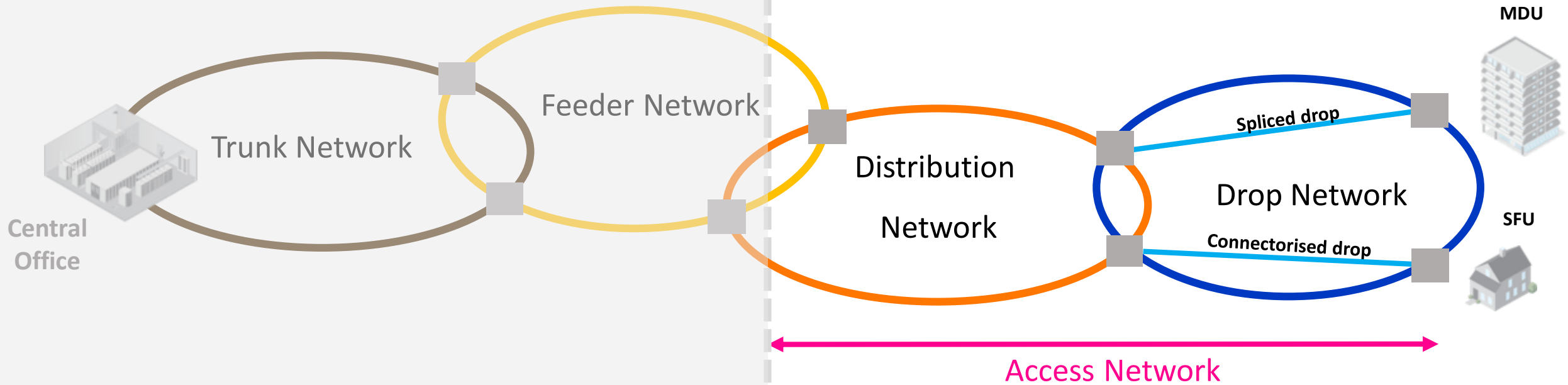


Reliability

Installability

Flexibility

Speed



Key Characteristics

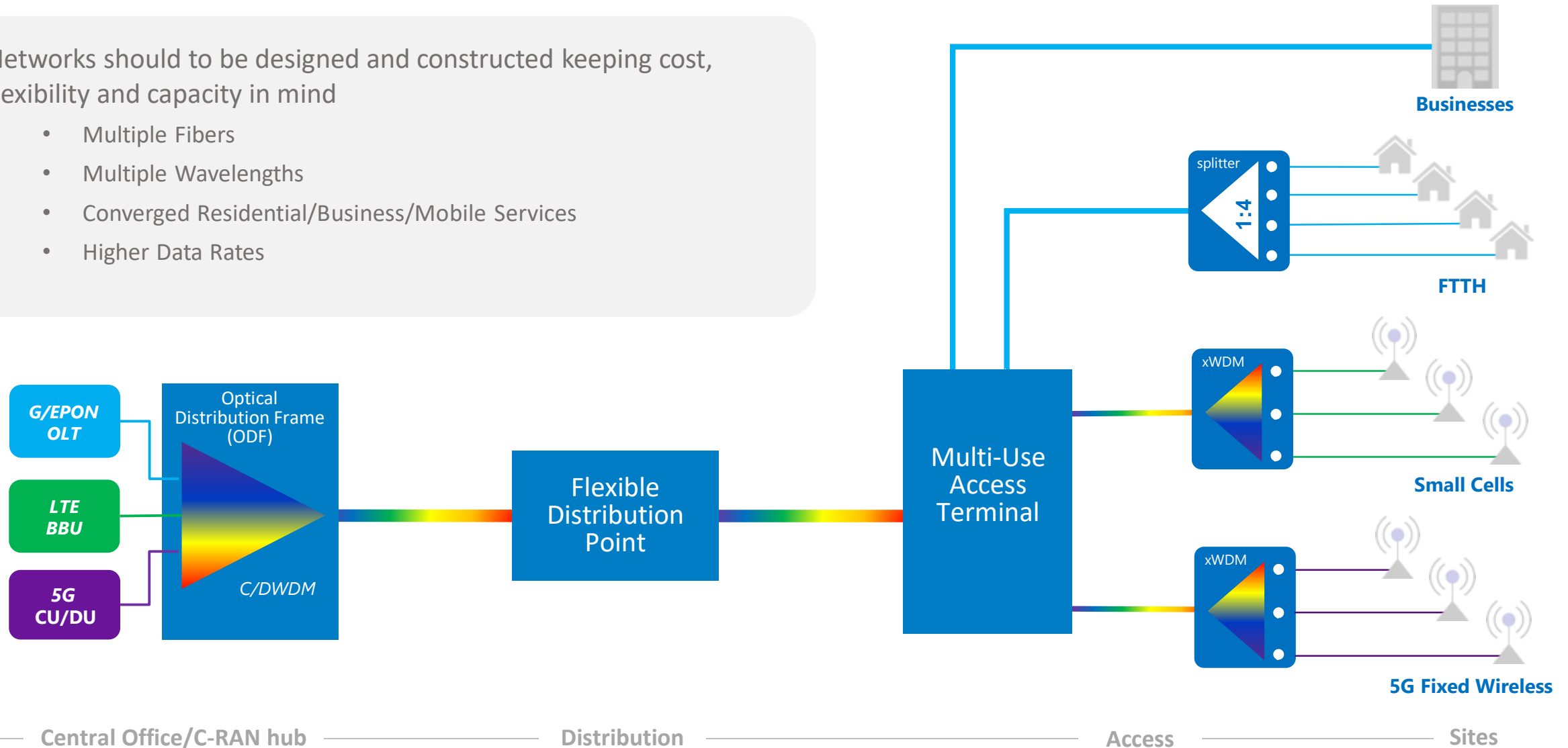
- Construction type (fit and forget)
- Highly trained & skilled personal
- Expert tools for all intervention
- Limited flexibility over time

Key characteristics

- Need for faster but reliable rollouts
- Lack of (skilled) installers
- Access point for diagnostics & demarcation
- Expand as you grow

Converged Access Network Architecture Overview

- Networks should be designed and constructed keeping cost, flexibility and capacity in mind
 - Multiple Fibers
 - Multiple Wavelengths
 - Converged Residential/Business/Mobile Services
 - Higher Data Rates



Converged Networks will provide leverage

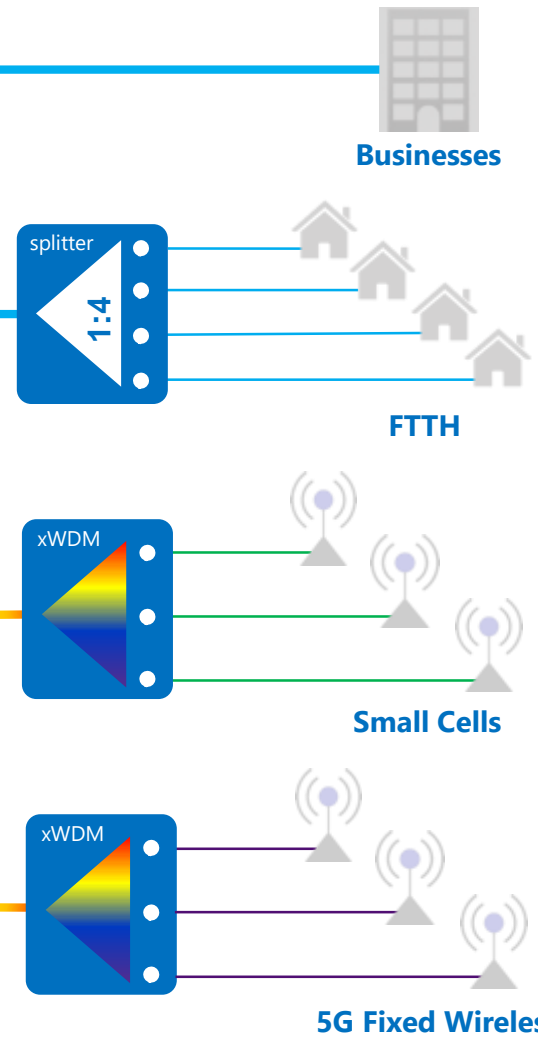
Flexibility is Key

- Fiber Counts
- Test Access
- Optical Components
- Plug and Play

Speed and Access

Hardened connectivity for Low Skill/High Speed

Internal for Expand as you grow and Lower material cost



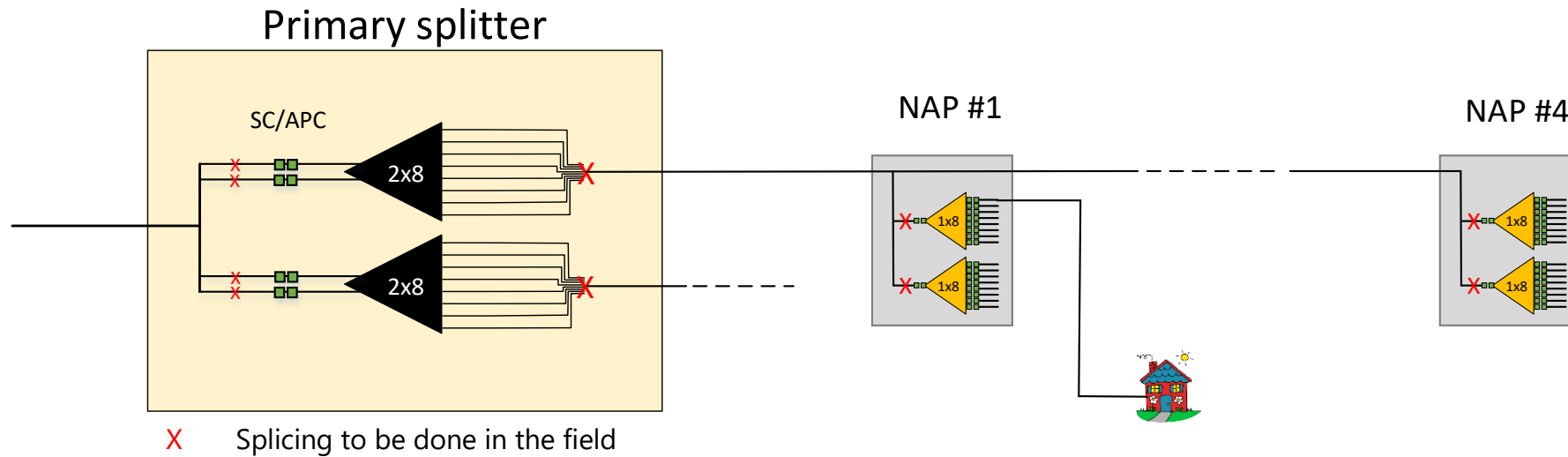
Central Office/C-RAN hub

Distribution

Access

Sites

Spliced FTTH Network Architecture



36 Splices + Cable Prep

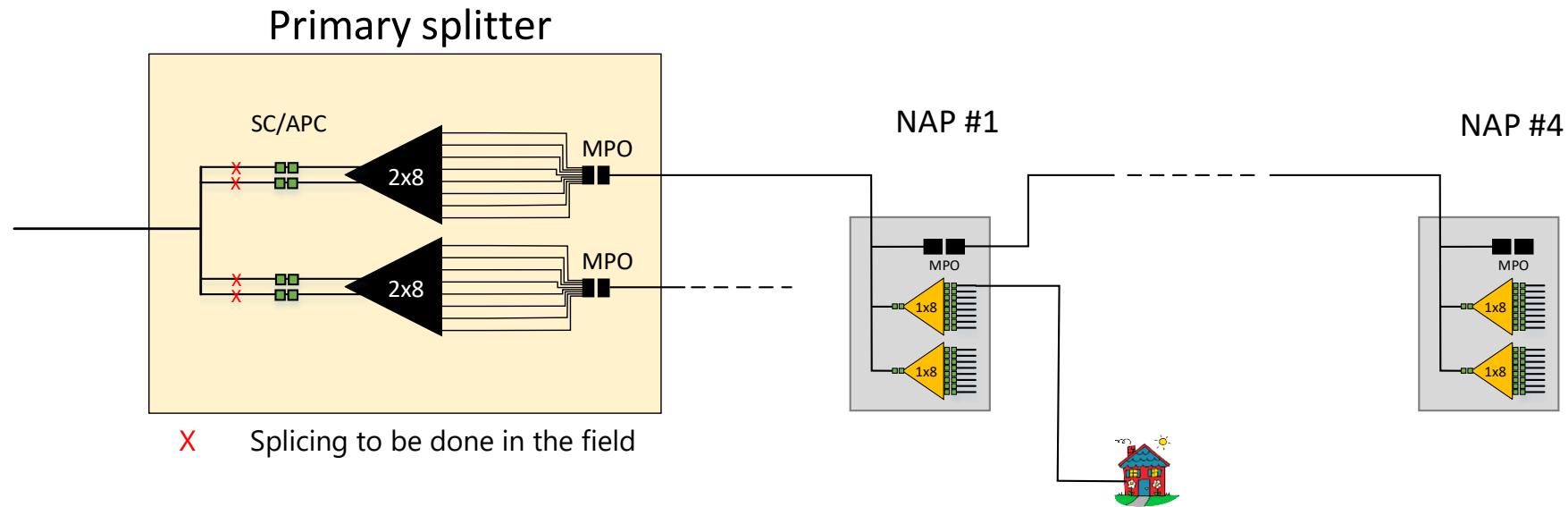
9 Locations

Per 128 Customers

Challenges:

- Speed of deployment – VERY SLOW
- High labour skills - splicing
- High labour content - truck rolls
- High tools investment
- Less flexible

Connectorized Daisy Chain using Plug and Play



~~36~~

4 Splices + Cable Prep (1/9th)

~~9~~

1 Location

Per 128 Customers

Benefit:

- Speed of deployment – VERY FAST with **connectorized plug and play** for fast turn up
- **Low labour skills** – splicing only on input fibre (day 1 activity only)
- **Improved performance** – factory terminated cable assemblies

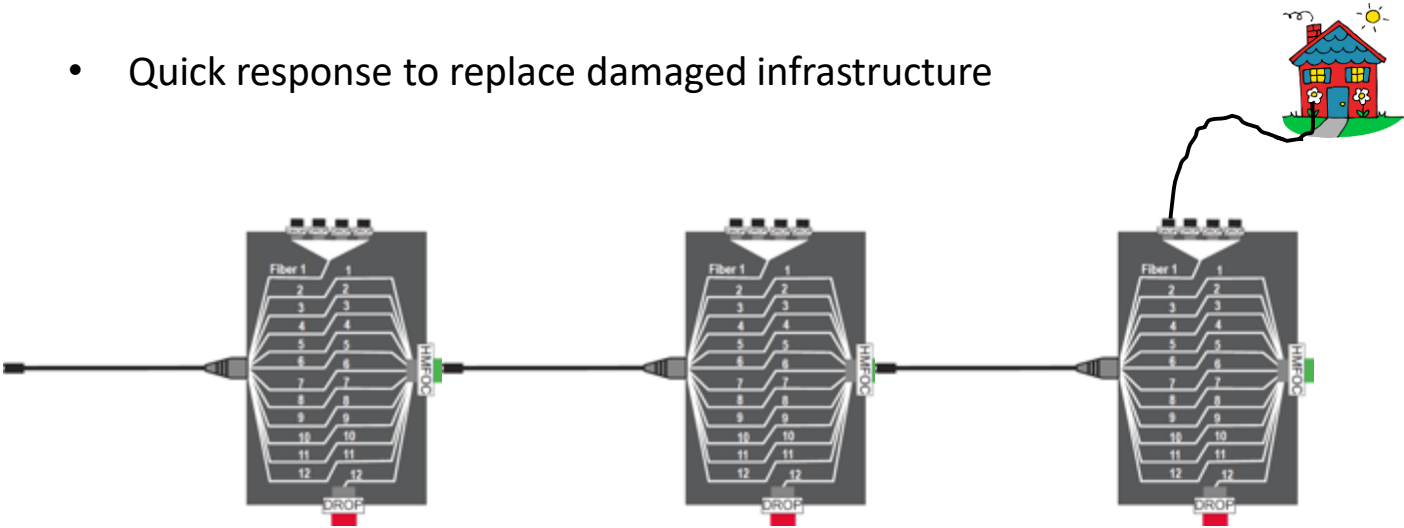
Case Study – Hurricane Sandy

In the wake of a massive hurricane, carriers needed products to quickly repair damage



Solution:

- Plug and play hardened terminals using indexing technology
- Fast mobilization capability
- Quick response to replace damaged infrastructure



Plug and Play :

Speeds deployment and adds Points of Flexibility



Non Hardened Terminals



MDU Solutions



Hardened Terminals





now meets next

Visit us at Stand 14

Thank you

LOOK AT US NOW!

TOGETHER WE HOLD
15,000
PATENTS 


**BROADEST
PORTFOLIO**

Choice for 
constant,
low-latency, and
 *ultra-high speed*
connections

WE INVEST 
\$800+
MILLION
EACH YEAR IN
R&D 

 **A global team of**
approximately
30,000
TALENTED 
INNOVATORS.

FORTUNE
250
SIZED 

TRACK 
RECORD
of operating in a
socially responsible
and **SUSTAINABLE**
 **MANNER.** 

>10,000 
PARTNERS
SUPPORTING CUSTOMERS
 **IN MORE THAN**
150 COUNTRIES.

SHAPING THE FUTURE OF CONNECTIVITY

STRONGER

WIRELESS | ENTERPRISE
MANAGED SERVICES | VIDEO

INNOVATE FASTER

SMALL CELL | INTEGRATED ACCESS
WIRED & WIRELESS | PRIVATE NETWORKS
CONNECTED HOME

COMMSCOPE®

COMBINING EXPERTISE AND EXPERIENCE IN
BROADBAND, WIRELESS AND VIDEO



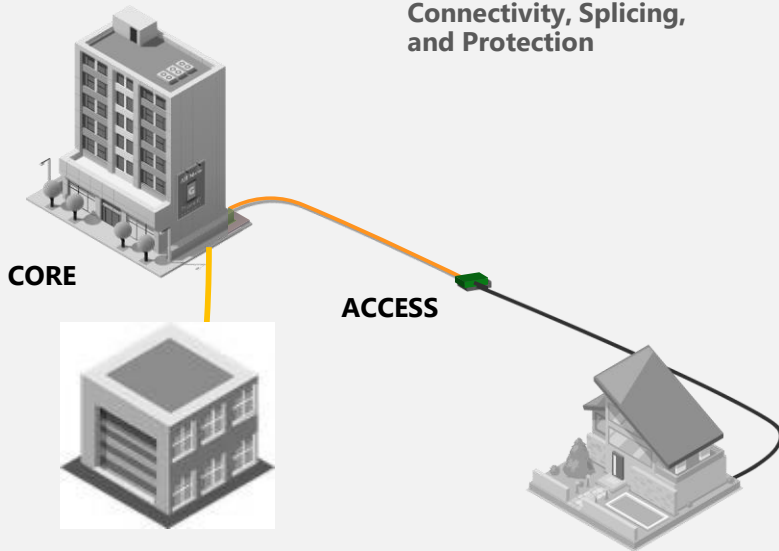
HELPING CUSTOMERS

OPTIMIZE PERFORMANCE | ENABLE DISTRIBUTED COMPUTING EVOLVE
NETWORKS | DELIVER AMAZING WI-FI
PROVIDE NEW VIDEO AND CONNECTED EXPERIENCES

TOGETHER: UNLOCKING THE NETWORK'S FULL POTENTIAL

Residential Broadband Delivery

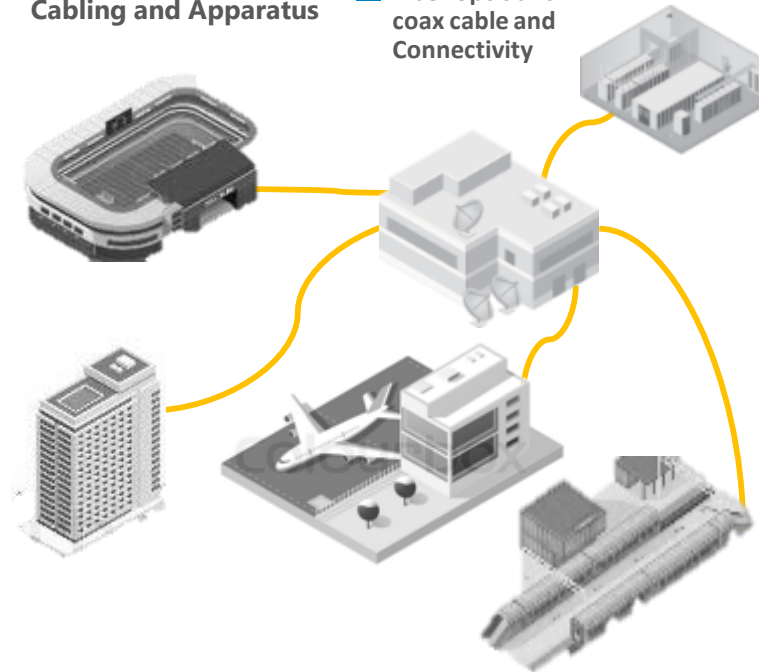
- Headend and Central Office aggregation and transport equipment
- High density/high performance fiber data center solutions
- Fiber optic and coax cable and Connectivity
- Outside Plant Closures, Terminals, and Cabinets
- Optical nodes
- Fiber and Copper Connectivity, Splicing, and Protection



- CONTENT**
- Video Encryption
 - Video Processing
 - Advertising Insertion
 - Cloud Services
- EDGE**
- Set Top Box
 - Residential Connectivity
 - Broadband Gateway
 - In-home Wi-Fi

Venue Coverage & Capacity Solutions

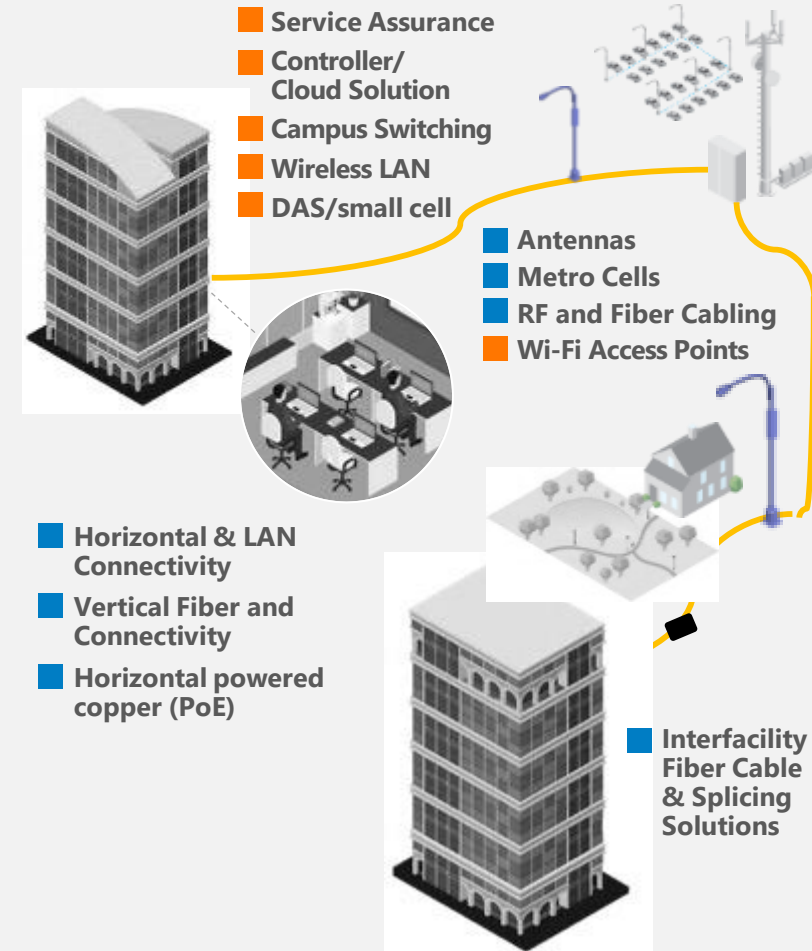
- Small cell / OneCell
- Distributed Antenna System (DAS)
- Wi-Fi Access Points
- Fiber and Copper Cabling and Apparatus
- SAS
- Controller/ Cloud Solution
- Ethernet Switch
- Fiber optic and coax cable and Connectivity



- ARRIS solutions
- CommScope solutions

Macro, Metro, and Enterprise Wired and Wireless

- Service Assurance
- Controller/ Cloud Solution
- Campus Switching
- Wireless LAN
- DAS/small cell



- Antennas
- Metro Cells
- RF and Fiber Cabling
- Wi-Fi Access Points
- Horizontal & LAN Connectivity
- Vertical Fiber and Connectivity
- Horizontal powered copper (PoE)
- Interfacility Fiber Cable & Splicing Solutions



**REDEFINING
TOMORROW.**
TOGETHER

COMMSCOPE® +


ARRIS


RUCKUS™