www.stl.tech

December 11, 2020

National Stock Exchange of India Limited
Exchange Plaza, 5th Floor,
Plot No. C-1, G Block,
Bandra Kurla Complex, Bandra (East)
Mumbai - 400 051.

BSE Limited
Phirozee Jeejeebhoy Towers,
Dalal Street,
Mumbai - 400 001.

Sub: Intimation of Key Discussions in STLescope Tech Talk – Virtual Meet

Ref.: Scrip ID - STLTECH/ Scrip Code – 532374

Dear Sir/ Madam,

Further to our intimation dated December 4, 2020 and pursuant to Regulation 30(6) of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015, we wish to inform you the key points discussed in the Virtual Tech Talk on December 11, 2020.

The presentation of the STLescope Tech Talk is attached herewith.

Kindly take the above on your record & acknowledge the receipt.

Thanking you,

Yours faithfully,
For **Sterlite Technologies Limited**

A.V. Deshpande

Amit Deshpande
Company Secretary & Corporate General Counsel

Let’s test our knowledge on optical fibre networks with a fun quiz!!

Go to www.menti.com

96 13 052

Jitendra Balakrishnan

CTO- Connectivity Solutions, STL

Dr. Jitendra Balakrishnan is a technology executive with nearly two decades of experience in research & development, manufacturing, business development, and leadership of technology organizations.

Currently, Jitendra is the Chief Technology Officer - Connectivity Solutions at STL. Technology innovation is at the heart of STL's mission to design, build and manage smarter networks. Jitendra is driving an expansion of STL's R&D in telecom products, is developing a long-term vision and roadmap for the technology unit, and is integrating it with other functions within the company. Previously, Jitendra was Research Director - Innovation & Technology - Emerging Markets at Corning Incorporated. In this position, he founded and established Corning's R&D operations in India, which became Corning Research Center India.

Sam Leeman

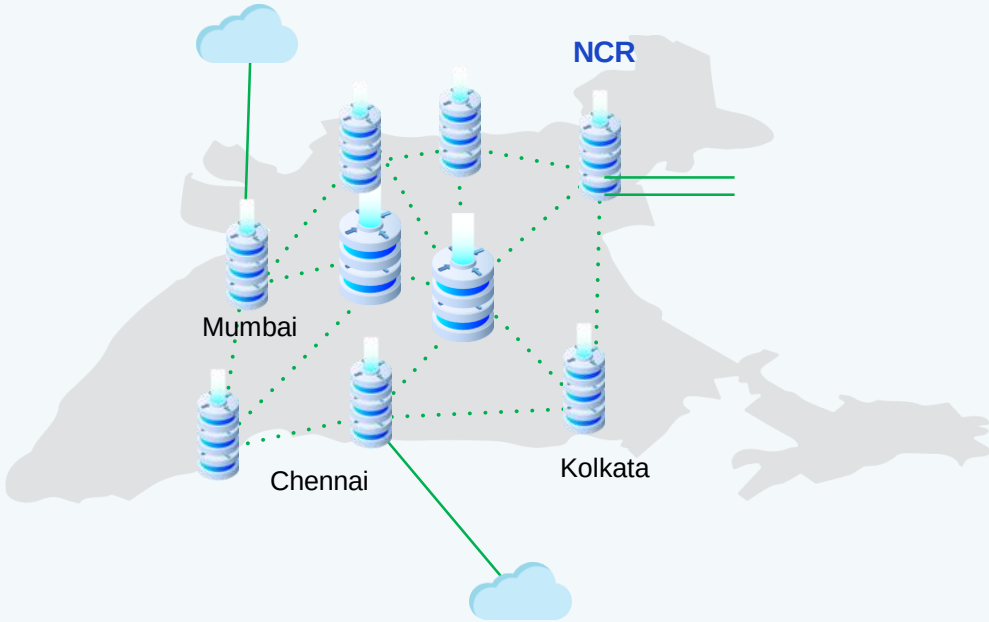
PLM Head - Optical Interconnect, STL

Sam Leeman, a thought leader, an innovator, and an expert in the field of fibre network builds. He joined STL in 2019 the global PLM leader for the Optical Interconnect portfolio driving the product roadmap and aligning it with customer requirements

Sam brings with him over two decades of leadership experience in Product Development, Product Management and Business Development in the telecom industry. He has been actively involved in both emerging as well as established markets and has worked with multiple telecom operators around the world, leading from the front to develop renowned TCO solutions.

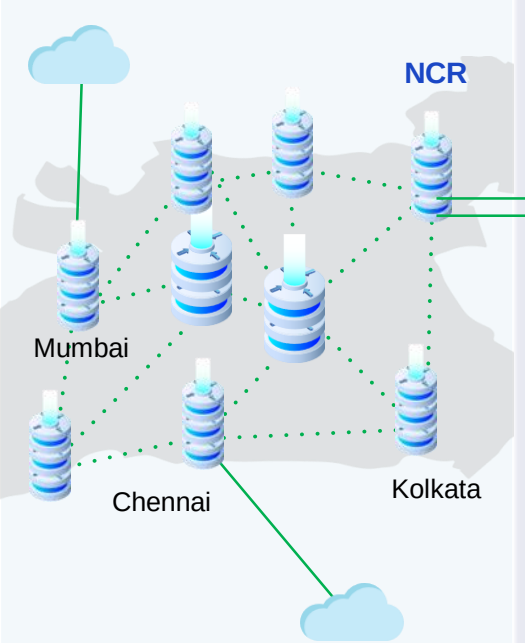
What is a Digital Network?

National CORE

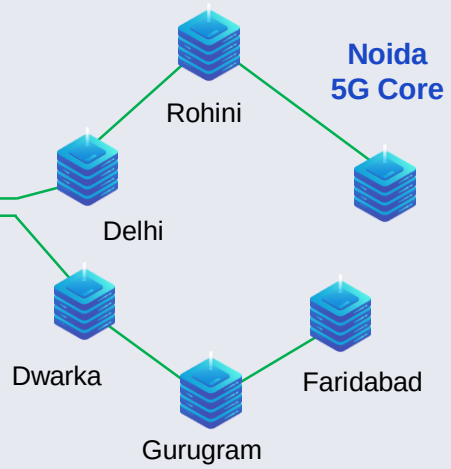


What is a Digital Network?

National CORE



Metro CORE



What is a Digital Network?

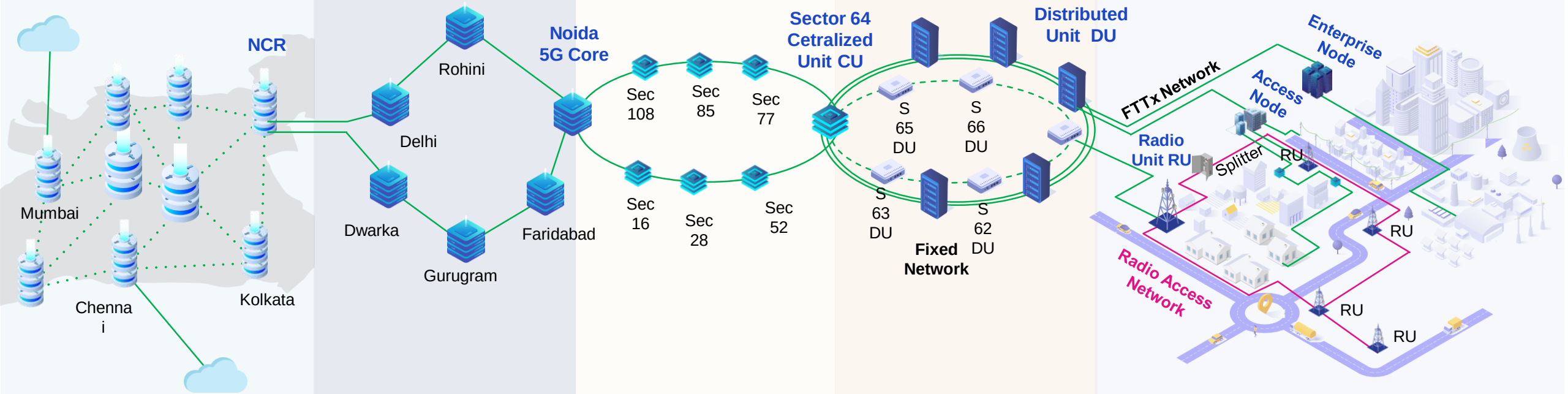
National CORE

Metro CORE

Aggregate Network

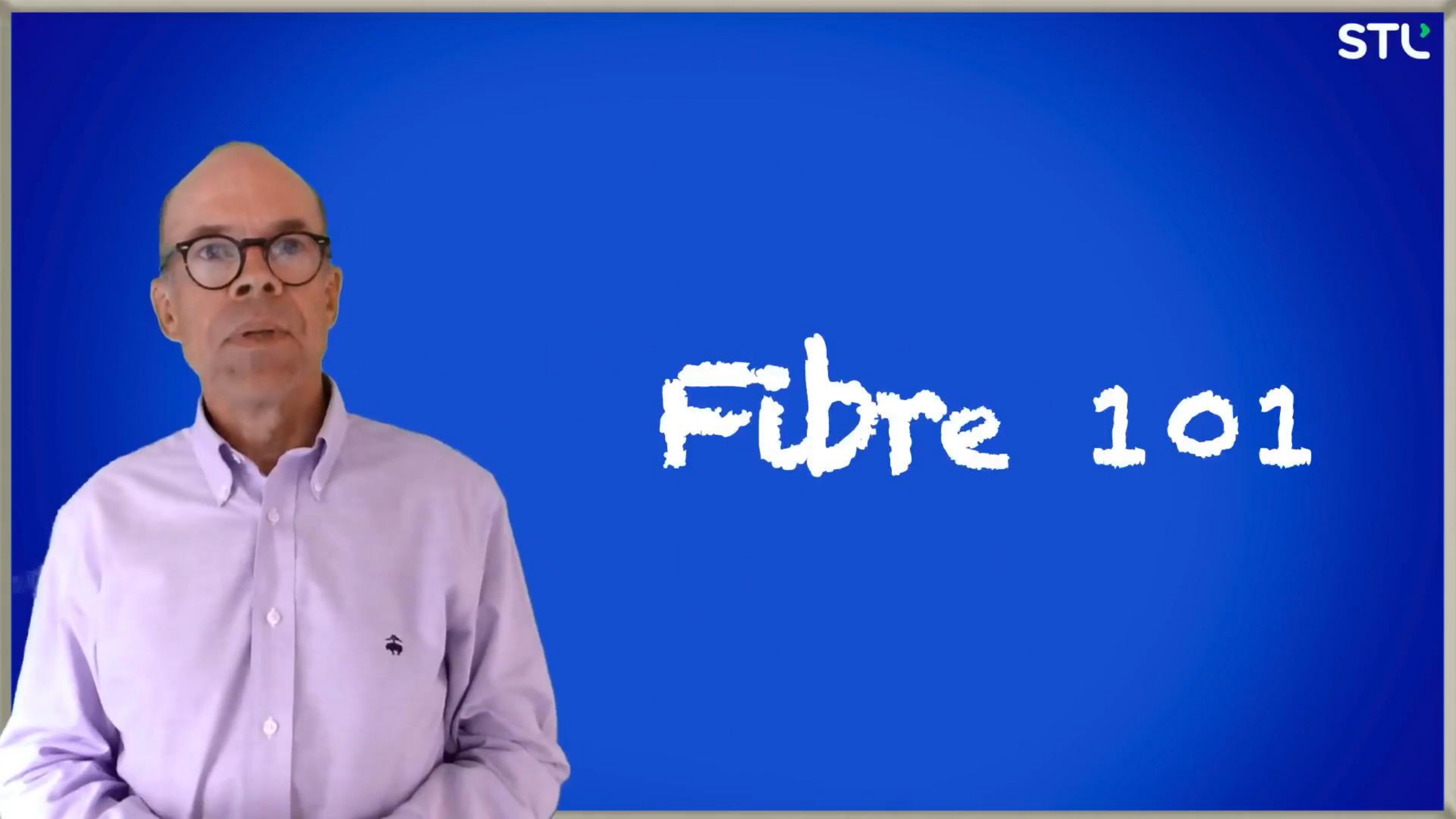
Access Network

“ The Edge”



OPTICAL FIBRE

What is it !! How does it work !!


Fibre 101

Fiberization

What is it ?

Fiberization means connecting telecom network termination points with optical fibre cables.

Fiberization

Why is Optical Fibre Better ?

Primary Method of long distance Communication in 70s

Coaxial Cable

Microwave

Satellite

Now it is a preferred medium for Long Distance Communication

Optical Fibre Links

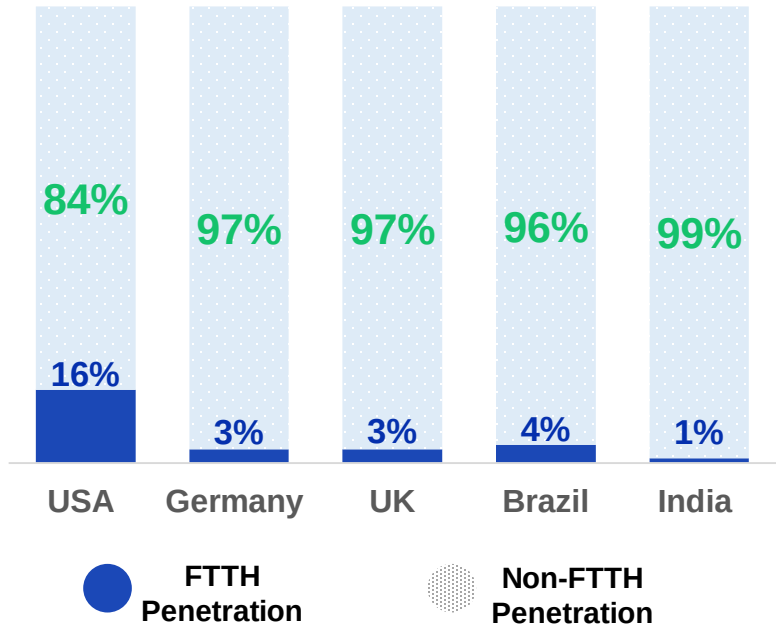
- Fastest Communication Speed
- Infinite Bandwidth and Capacity
- Low Interference
- High Tensile Strength
- Secure Communication

Fiberization

Why should we care about it ?

By 2025, the number of network end points will surge due to increasing penetration of ….

Current FTTH Penetration



5G

20%

Global Connections will be 5G

IoT

21.5 Bn

IoT connected devices

All this will require high speed and low latency network creation which can be possible with Deep Fiberization and High Densification

Fiberization

What does Optical Fibre means to 5G

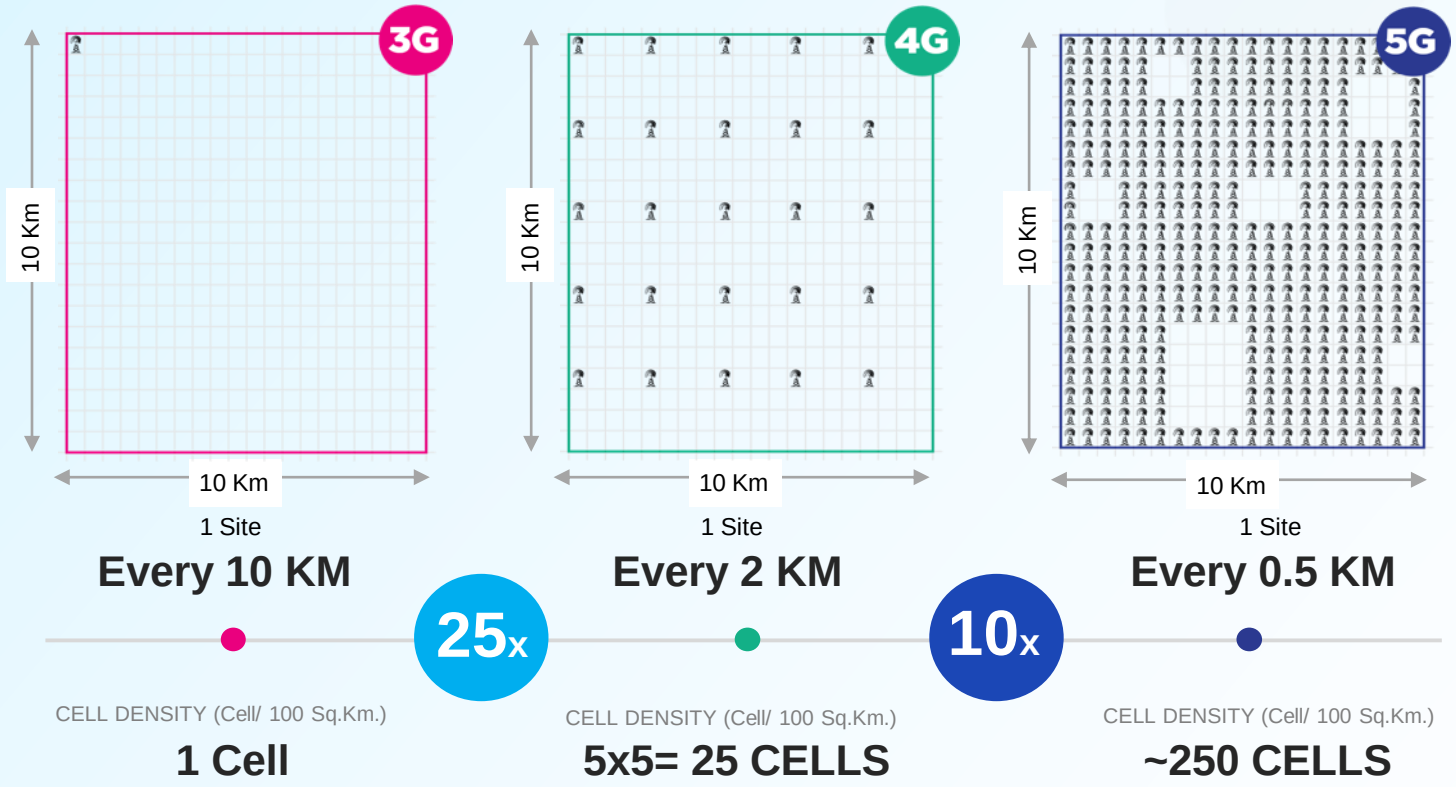
3

Operators per site in shared microsites

30% - 60%

YoY Growth rate of urban small cells

Small cell requirements for full 5G commitment



10x

Amount of cell towers to accommodate full 5G services

Demand of Optical Fibre to roll out 5G

Fiberization

What does Optical Fibre means to FTTx

FTTH

70M
Urban Households

~1.5%
Current FTTH Penetration

~25%
Target FTTH Penetration by 2024

Bharatnet

World's largest rural broadband project

0.25M
Gram Panchayats

0.15M
Connected with Fibre

0.1M
To be Fiberized

P2P

50M
MSMEs

High Bandwidth Infrastructure Across


Metro Cities


Corporations and Enterprises


Hospitals


Transportation


Education Institutes

Fiberization

The Challenges – A, B, C and D

A

Attenuation

Signal Decay

B

Bend Sensitivity

Signal Leakage

C

Compatibility

Legacy and Future Technology

D

Duct Space

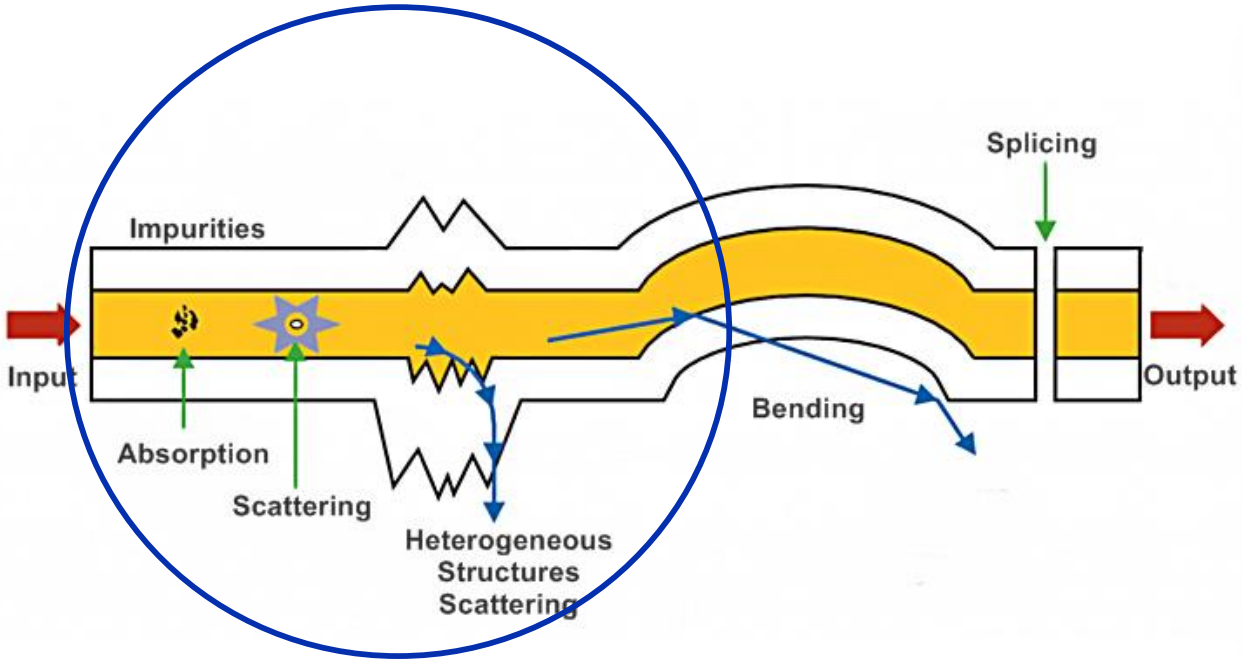
Optimize Limited Space

Source: GSMA, Canalys, Company & Industry Estimates

Fiberization

Attenuation

Increasing geographical spread



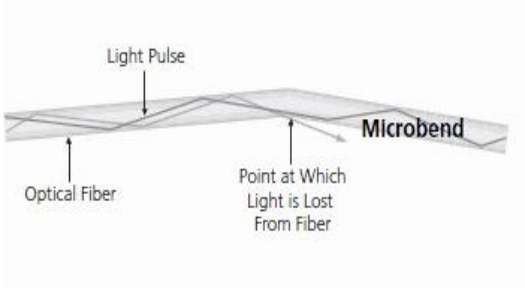
Attenuation refers to signal loss along the length of the fibre.

Attenuation happens due to absorption and scattering of light signal inside the core

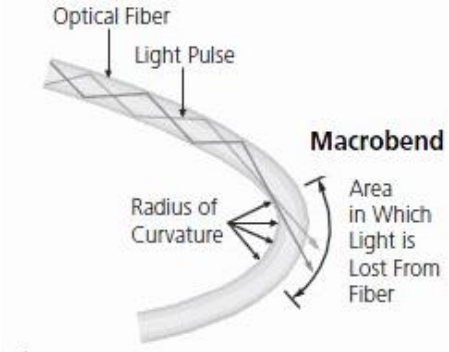
Fiberization

Bend Insensitive Optical Fibre

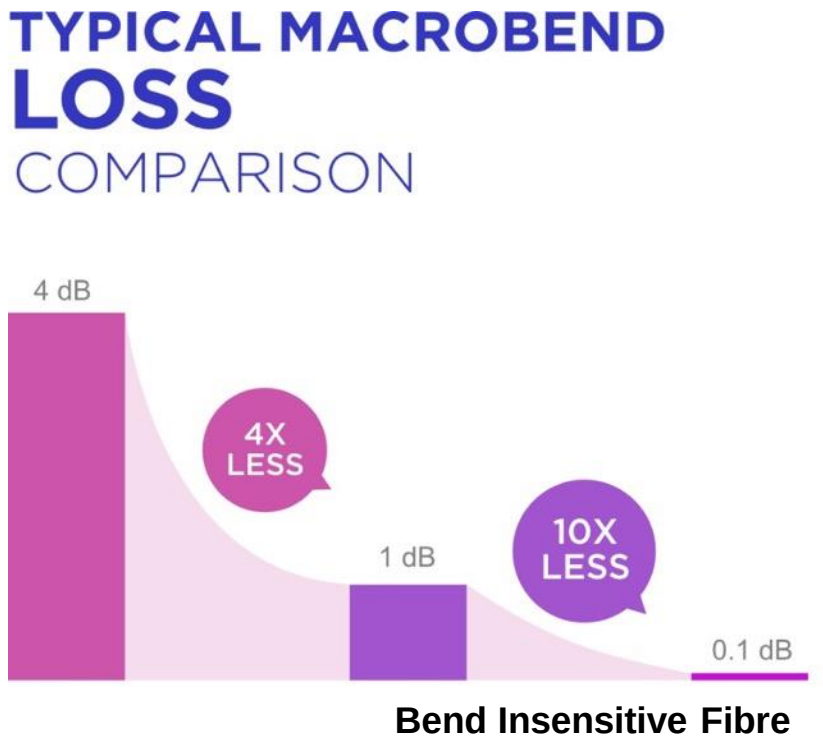
Bend Insensitive Fibre provide more than **10x reduced Macro Bend Loss**



Microbends are axial distortions on core cladding interface caused majorly by the local mechanical stress placed on the cable during manufacturing, packaging or installation



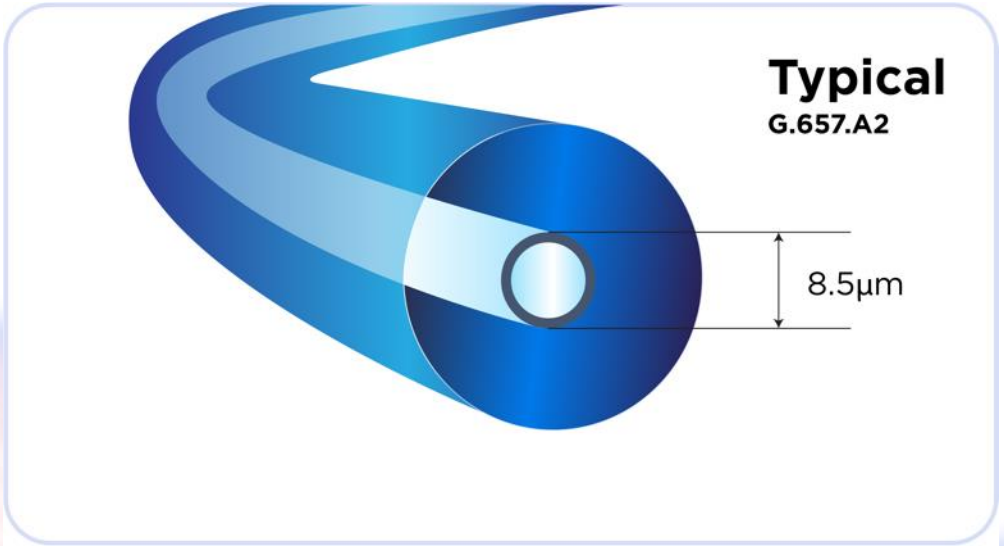
Macrobends, which results in light leakage due to cable bends beyond the specified bend radius during installation

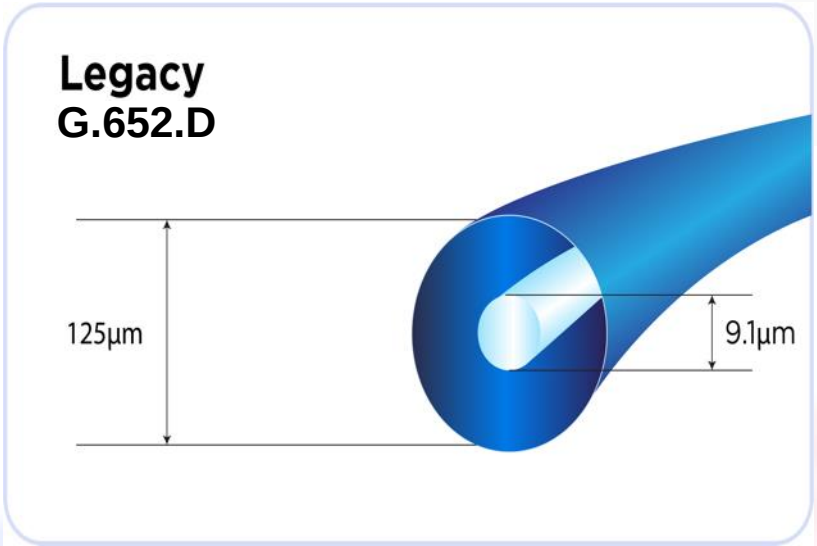


Source: Sterlite Tech calculations

Fiberization

Compatibility with Legacy Network and Future Technology





MFD of Typical G.657. A2: **8.5 micron**

MFD of Legacy G.652. D: **9.1 micron**

MFD Mismatch

Actual Splice Loss 0.056dB

A2 to D Apparent Loss **0.12dB**

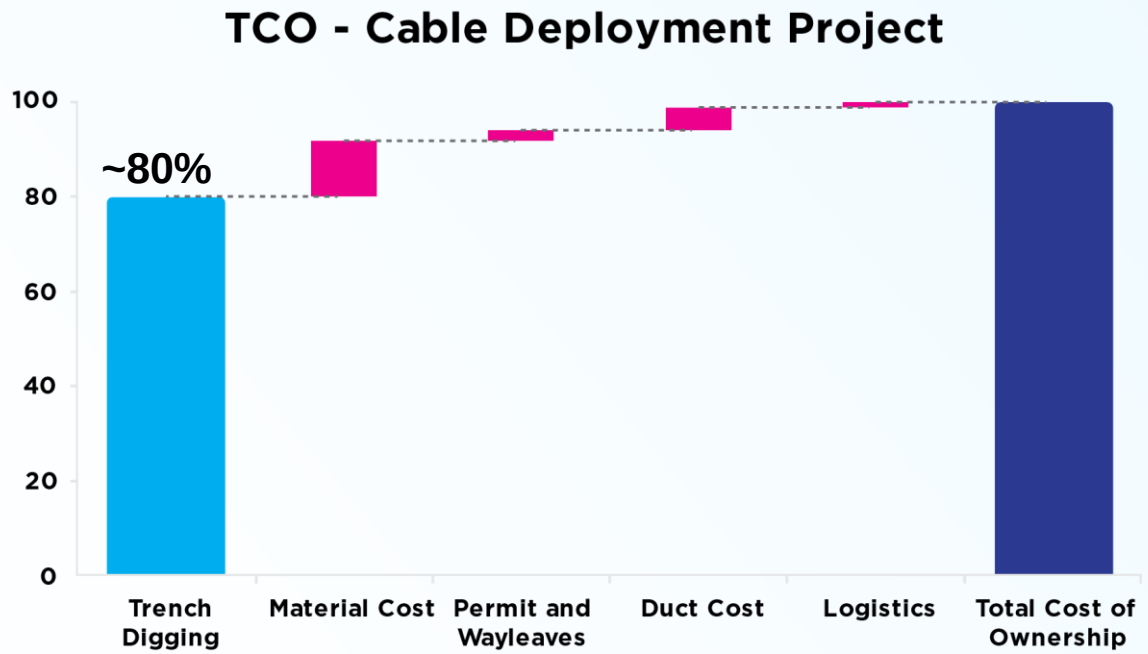
D to A2 Apparent Loss: **0.24dB**

Fiberization

Bottleneck in achieving Higher Bandwidth: Limited Duct Space

80% **Cost share of civil work in a Cable Deployment Project**

Rest 20% constitutes Cables, Ducts and supplementary products



To meet this exponential growth

Need 10X Fibre

In the same available duct space

Minimize the size of Cable as per requirement and provision for future requirement

Maximize Fibre Count on the basis of forecasted future demand

Opticonn

Increased technical and commercial integration

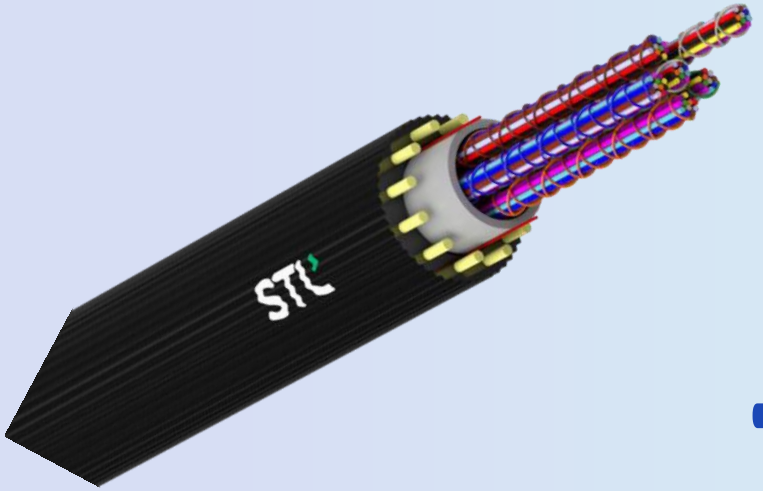
Generating value

by solving an end to end problem for customer, improving overall network experience

Global innovations for Indian deployment scenarios

Enabling Future Readiness at Lowest Total Cost of Ownership

Backward Compatible
Bend Insensitive Fibre



High Density Ribbon Cable
Intelligently Bonded Ribbon (72F - 6912F)

Underground and Aerial
Optical Interconnect Kits

25% faster deployment of future proof bend resilient network

opticonn

Optical Connectivity

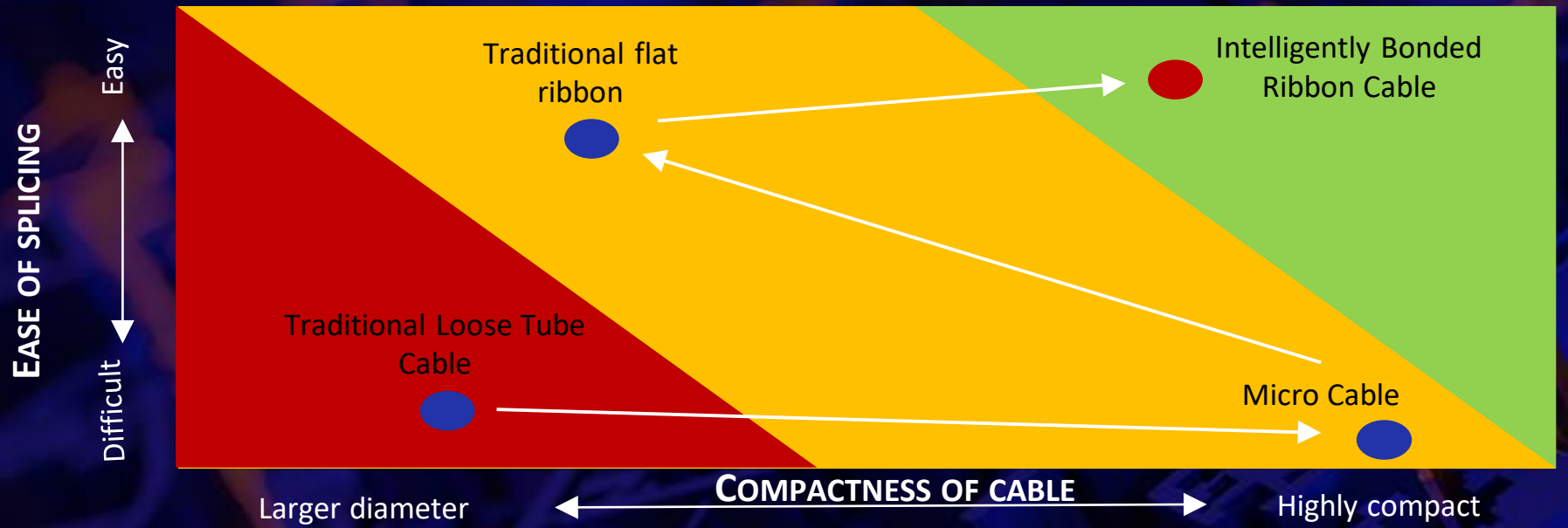
Global leader in E2E optical physical layer solutions

Higher density network - 100% existing duct capacity augmentation

Next Generation Ribbon Technology

Modern networks require more fiber per cable and Minimize new duct installation and construction

Better TCO from one-time deployment with compact cables in choked ducts



Traditional Loose Tube Cable

Splicing is difficult and time consuming in high fiber count cables

Micro Cable

- *Slimmer Jacket & 200um fibre reduces cable diameter*
- *Splicing is still time consuming*

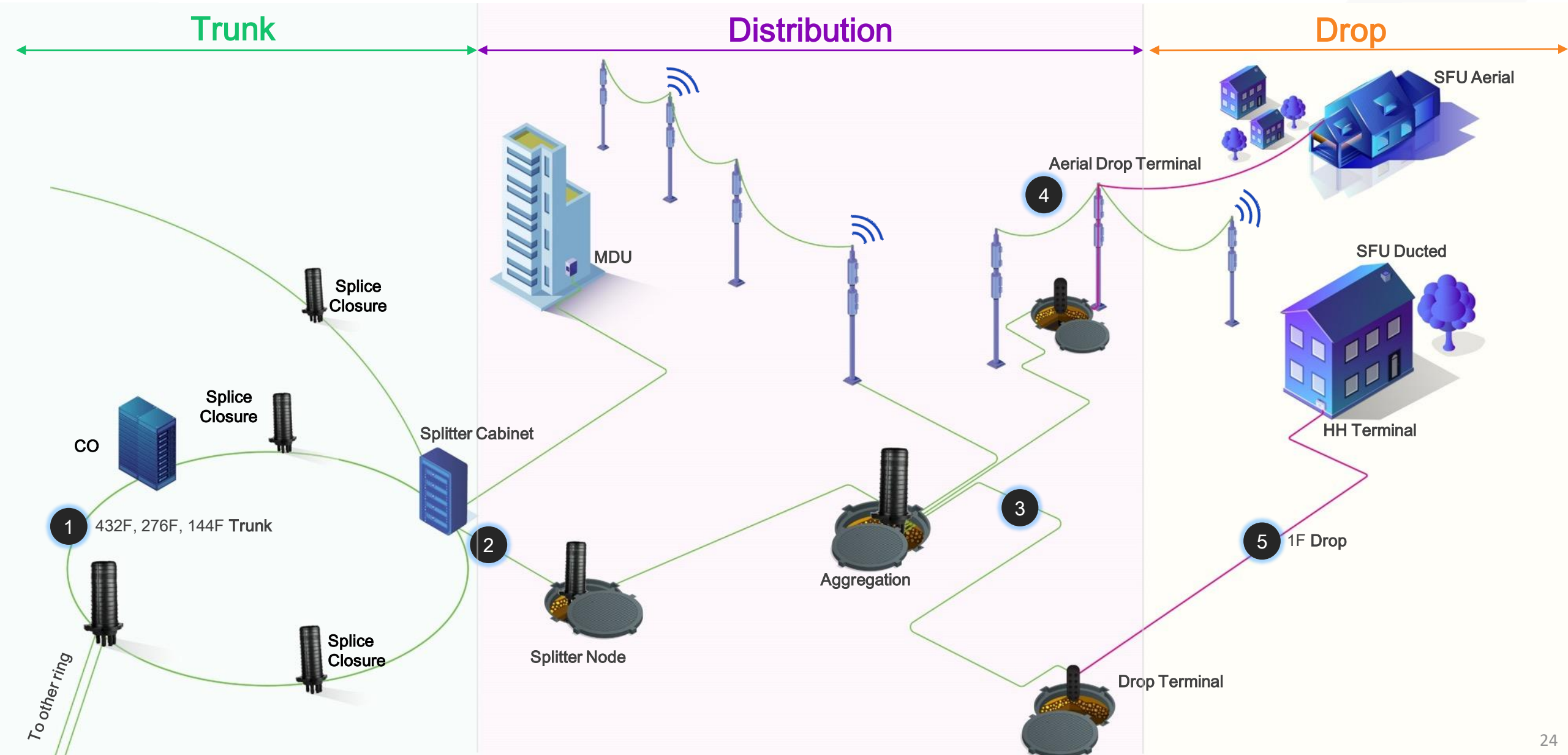
Traditional Flat Ribbon Cable

- *Ribbon, bundle of Fibres expedites splicing process*
- *Unoptimized cable space with flat ribbons in a round cable*

Intelligently Bonded Ribbon Cable

- *Improved form factor due to bond design*
- *Collapsible ribbon transforms into flat ribbon for fast splicing*

Next Gen Fibre Distribution and Termination Technology



Opticonn Process

CONSULTATIVE
Design

ENGAGE
Customers

ASSESS
Challenges

CUSTOMISED
Solutions

PROPOSE
Solution

BUILD
Products

COMPREHENSIVE
Value

VALIDATE
Performance

PARTNER
For Growth

CRS System: Opticonn @ Work

1 **Assembling inner CRS to outer CRS shell**

Push all the way through the outer shell

2 **Connecting to main housing**

3 **Disconnect from main housing**

In Summary

25 Years of Leadership in Optical Fibre Innovation

Optical Fibre is the right choice for digital networks

- Fastest Communication Speed
- High Bandwidth
- Low Interference

Optical network roll-out is a complex task

- ABCD of Fiberization
- E2E Solutions View
- Innovation across the value chain

7 Production Facilities

425 + Patents

4 Innovation Labs

900+ Engineers

Photonics | Chemical, Materials, Process


Q&A


STL'25
YEARS OF OPTICAL FIBRE