



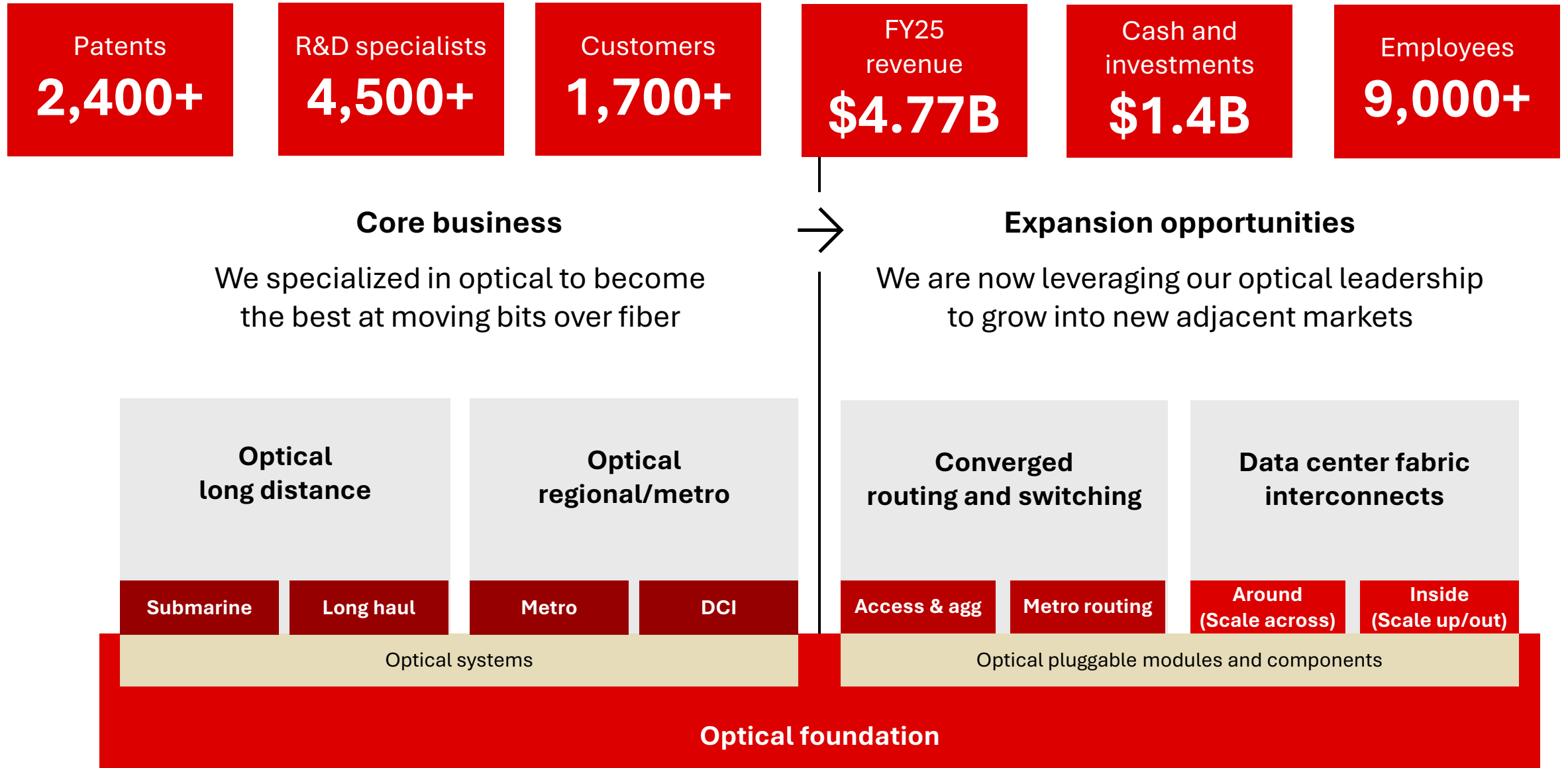
AI-fabrikkene i Nord-Norge gir muligheter for Operatører i Norge med MOFN (Managed Optical Fiber Network)

Telecom World Bodø 28. April 2026

Ida Elders, Sales Director, Ciena Norway

Anders Teslo, Senior Sales Director, Ciena Norway

Ciena - The global leader in high-speed connectivity



Ciena's Ottawa campus – unmatched expertise from components to systems

Cross-portfolio design and optical technology center



Overall Space: 425,000 sq. ft.

Lab Space: 83,000 sq. ft.

Employees: 2,000

Link
Engineering



Optical Platforms
Routers
Software



Clean Room

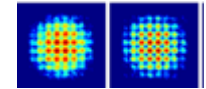
Epicenter of optical science and technology



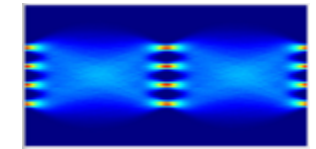
1st 3nm CMOS
in telecom



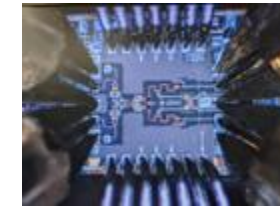
ASIC



DSP



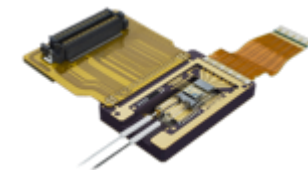
SerDes



High-bandwidth Converters



Coherent Driver Modulator
Indium Phosphide



Coherent Receiver
Silicon Photonics



Laser

Technology material-agnostic – fabless by design

What is an AI factory

Large-scale, AI-optimized data centers
Built for training and inference at massive scale

AI factories behave more like industrial production sites than traditional IT infrastructure

Key requirements:

- Power (GW-scale emerging)
- Cooling
- Connectivity

Two types of players:

Hyperscalers

- Massive global infrastructure
- Desire for velocity
- Need high capacity into the new AI growth zones
- Working tightly with the neo clouds
- Build for scale reliability and breadth
- High need for resilience

Neoscalers

- Built specifically for AI workloads (training-inference)
- GPU first deployments
- Faster deployment cycles, more opportunistic location choices
- Often collocate
- Network not first priority and may procure higher level of services.



Hyperscalers and Neoscalers

Major Hyperscalers



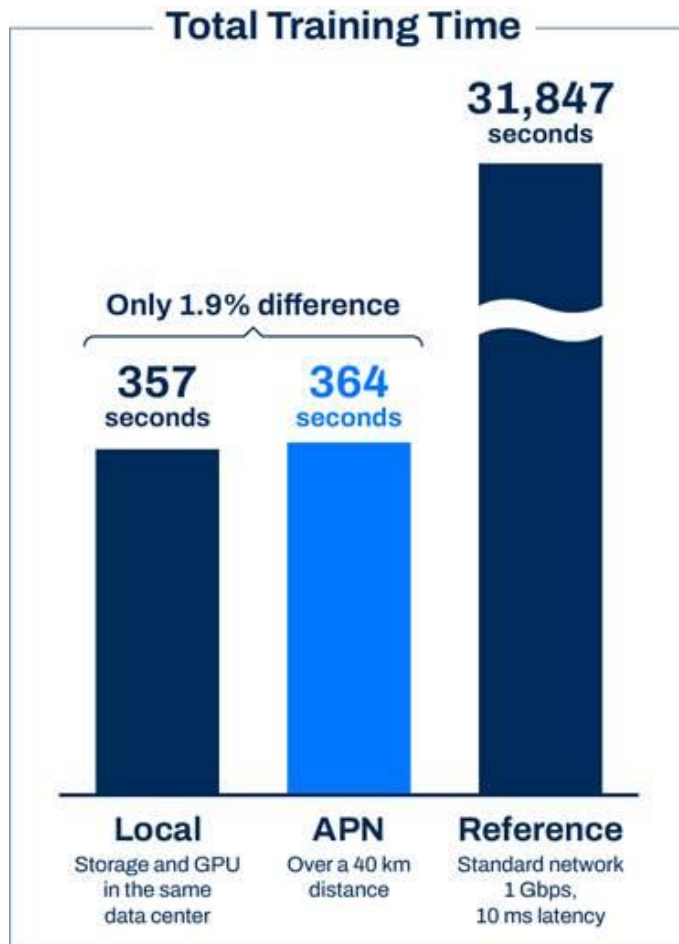
Giant Neoscalers



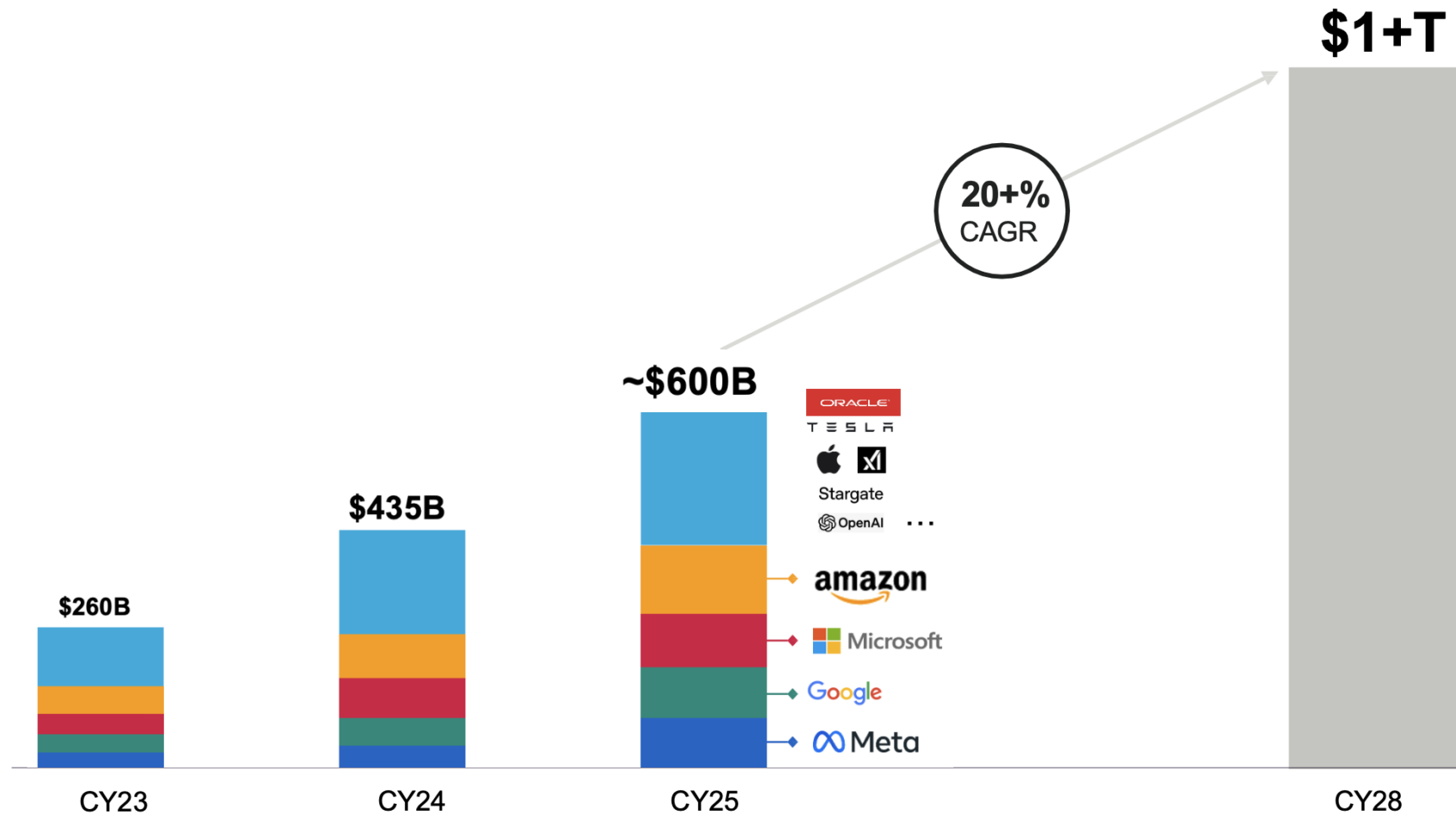
Emerging Neoscalers

Together Alg	Iris Energy	Lamini	HPE GreenLake	NexGen Cloud/ Hyperstack	CirraScale	Massed Compute	Northern Data/ Taiga	Sesterce	Backprop Cloud
GMI Cloud	AtNorth Compute	Atlas Cloud	Aligned.co	Tencent Cloud	Clear.ml GPUaaS	Runsun Cloud	ACECloud.ai	Soluna Computing	Applied Digital
Denvr Data	Runpod	Latitude.sh	Hut8	Fluidstack	ML Foundry	Vultr	Hypertec Cloud	Jarvis Labs AI	Dihuni
FlexAI	OVH Cloud	Oblivus Cloud	LiquidWeb	Alibaba Cloud	Hetzner GPU Cloud	banana.dev	Klustr.ai	Sustainable Metal Cloud	Scaleway
Genesis Cloud	Gcore	GreenAI Cloud	HyperStack	NeevCloud	Hot Aisle Cloud	EscherCloudAI	Ax3 AI	Airon AI	Ptmos
FastGPU	FastWeb Cloud	puzl Cloud	Contabo GPU Cloud	MegaspeedAI	Huawei Cloud	Baionity Cloud	TensorWave	LeptonAI	Nscale
TensorDock	PrimeIntellect	E2E Networks	Bitdeer Cloud	Arc Compute	Qubrid AI	Aperia Cloud	Leader GPU	CR8DL	Linode/ Akamai
Salad	Iren	IBM Cloud	DataCrunch	Horizon Compute	valdi.ai	Turboscale	hpc-ai.com	Seeweb	Ubitus
FlexAI	Sify Technology	Digital Ocean	Atos	Civo Cloud	VNG Cloud	Utho	Omniva	Voltage Park	Data4

Neosclaers are now serious about networks and are seeing the value of All Photonic Networks



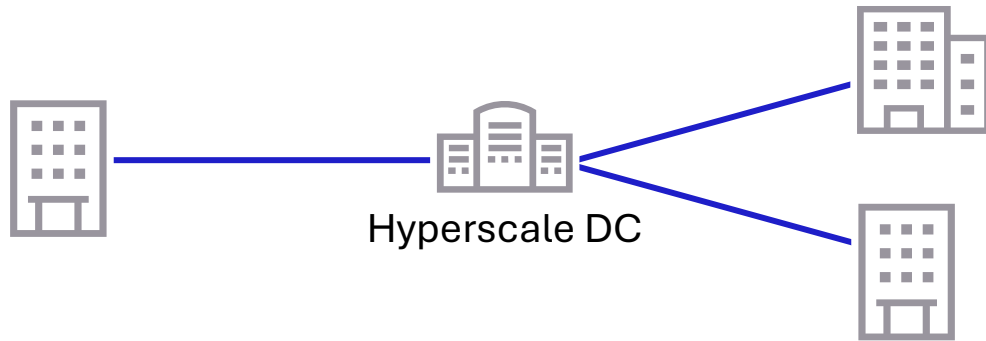
Total Data Center- related Cloud Provider Capex continues to grow



Data center infrastructure trends

Driving a hyperscaler network architecture shift

BEFORE AI | Centralized DCs

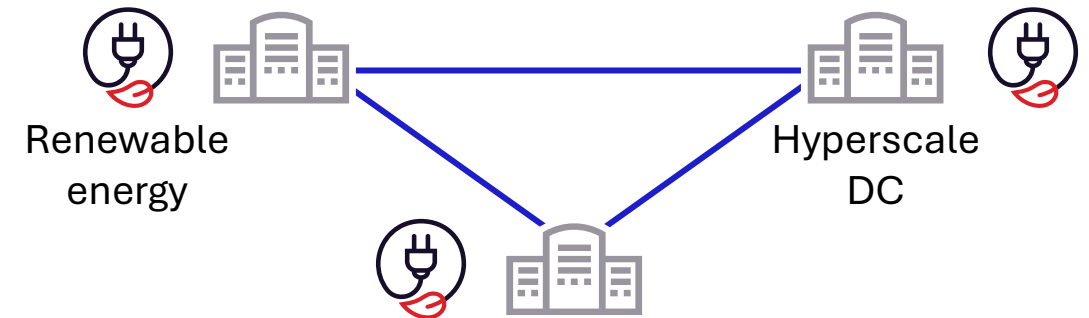


Close to customers

Near major connectivity hubs

Mean time to cloud

IMPACT OF AI | Shift to distributed DCs



Proximity to power and renewable energy

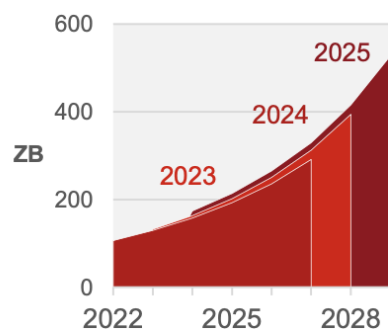
Connectivity to edge networks

Climate – cooler temperature locations,
safety from natural disasters

Service providers have an opportunity to help build connectivity for this distributed architecture

AI Impact on Bandwidth & Energy

Global Data Generation

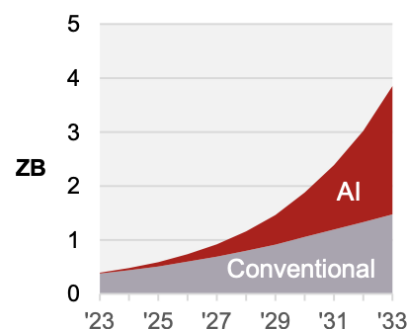


+24%

CAGR '24-'28

2025 forecast growing faster than 2023 & 2024

Data Moved per Month

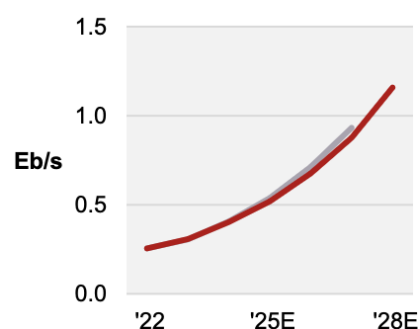


+25%

CAGR '24-'28

AI is accelerating total volume of data moved

Network Bandwidth

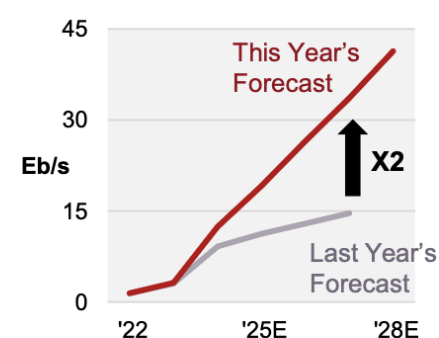


+30%

CAGR '24-'28

Sustained growth in the network

Data Center Bandwidth

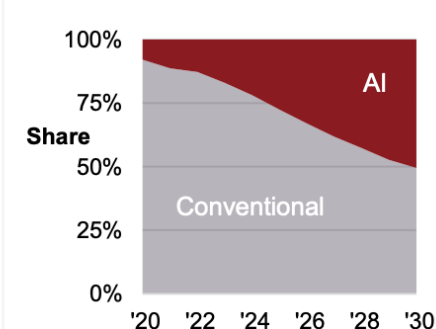


+35%

CAGR '24-'28

Large YoY acceleration in the data center

Data Center Energy Use



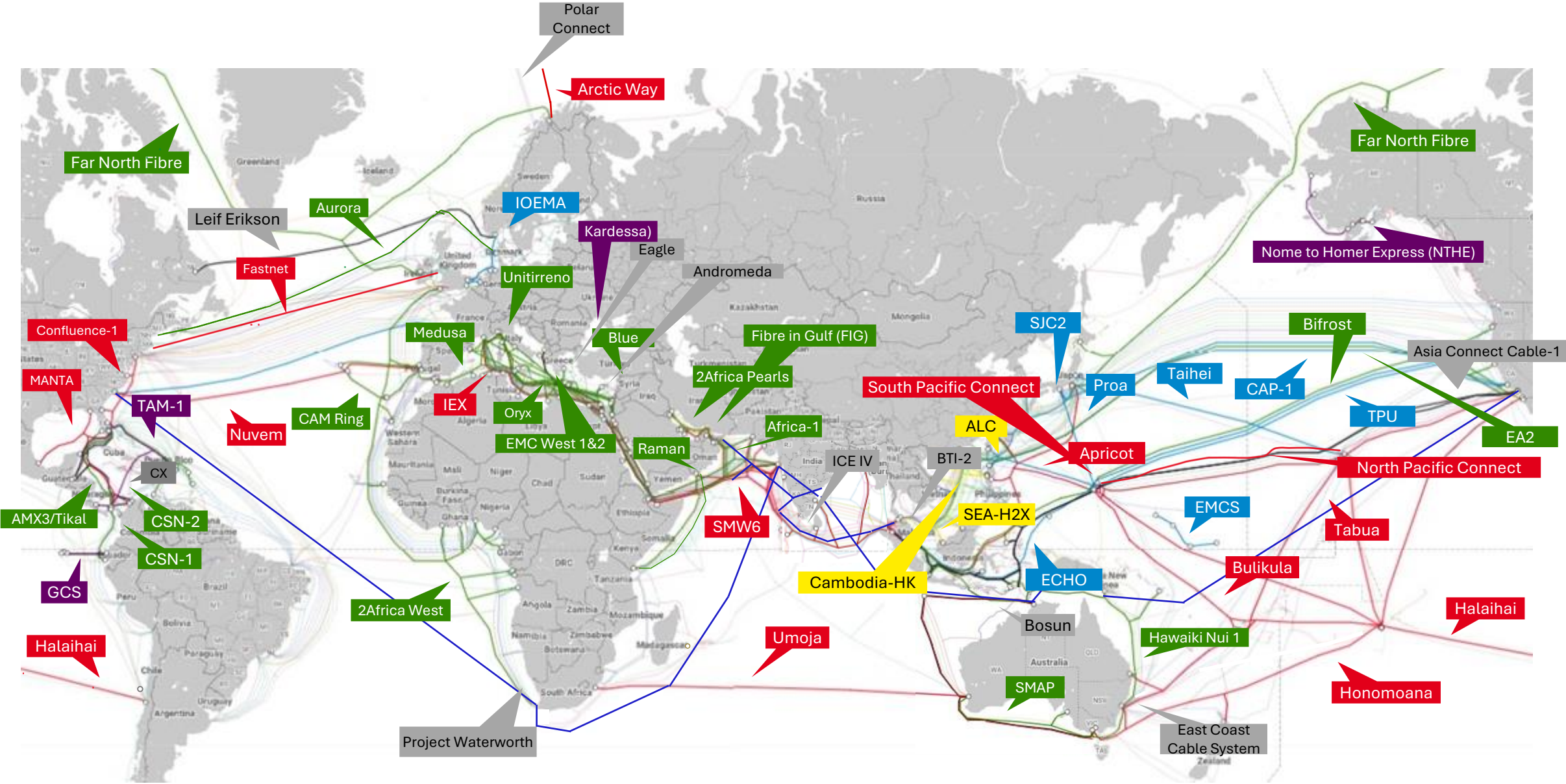
+38%

CAGR '24-'28

AI energy load will be half of DC total by 2030

Long haul Cable landscape

ASN	Subcom	NEC	HMN	Xtera	Not Awarded
-----	--------	-----	-----	-------	-------------



MOFN (Managed Optical Fiber Network) Team and Ciena Account Team Mission

To help Ciena service providers to grow their revenues in the Hyperscaler vertical through seamless integration and Collaboration.



What is a Managed Optical Fiber Network (MOFN)?

Service Provider builds a fiber network for the hyperscaler and provides it as a managed service to the hyperscaler



Technology decisions typically driven by the hyperscaler



Hyperscaler reimburses the Service Provider for the networking equipment



Service Provider owns the network infrastructure



Typical one-time charges to the hyperscaler:

- Fiber fees
- Regulatory charges
- Construction costs
- Installation charges



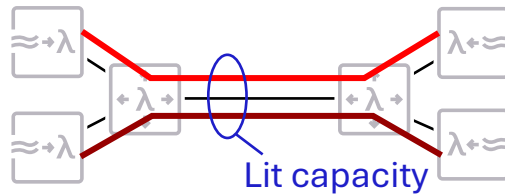
Typical recurring fees to the hyperscaler:

- Annual fiber /O&M fees
- Network management and maintenance
- Collocation
- Capacity turn-up



Service Provider must adhere to the MOFN Service Level Agreements

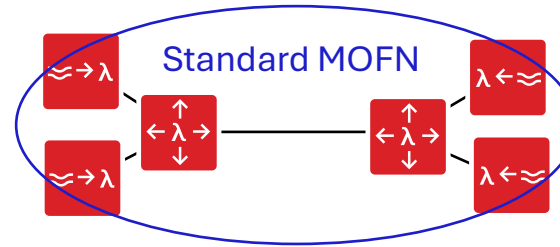
MOFN Commercial Models



Lit Capacity

- MOFN team adds GCN pricing to the BoM
- Service Provider deploys MOFN capacity as Lit Waves
- Hyperscaler pays Service Provider for Lit Waves

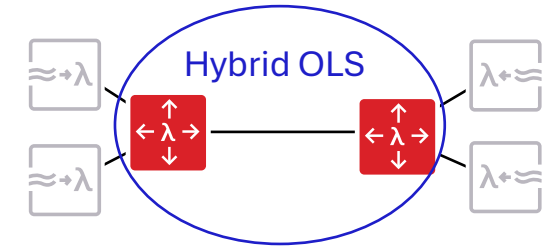
Typically used for SP & Hyperscaler to prove Bus Case or lower cost



Standard MOFN

- MOFN team adds GCN pricing to the BoM
- Hyperscaler pays Service Provider capex for fiber and HW plus a Mgmt. fee

Typically used for Hyperscaler to obtain speed, scale and lower cost



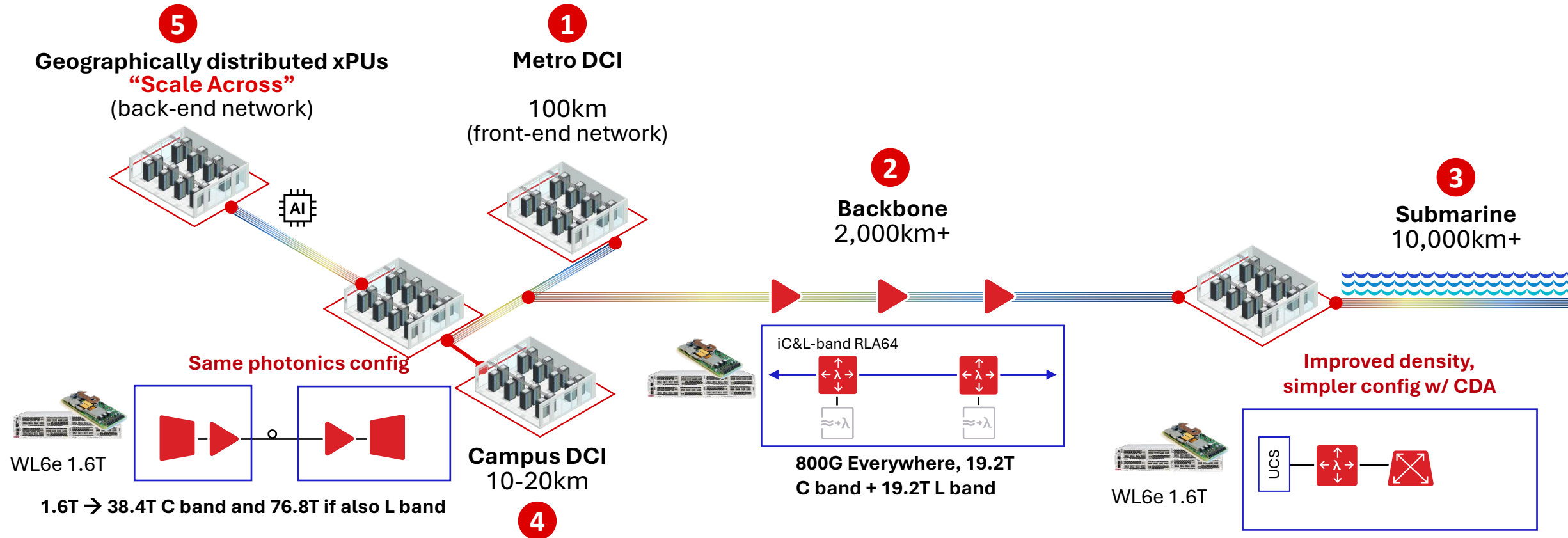
Hybrid OLS

- MOFN team adds GCN pricing to the BoM
- Hyperscaler pays Service Provider capex for fiber and photonic line system plus a Mgmt. fee
- Hyperscaler places separate PO with Ciena for own Transponders

Only used by few hyperscalers

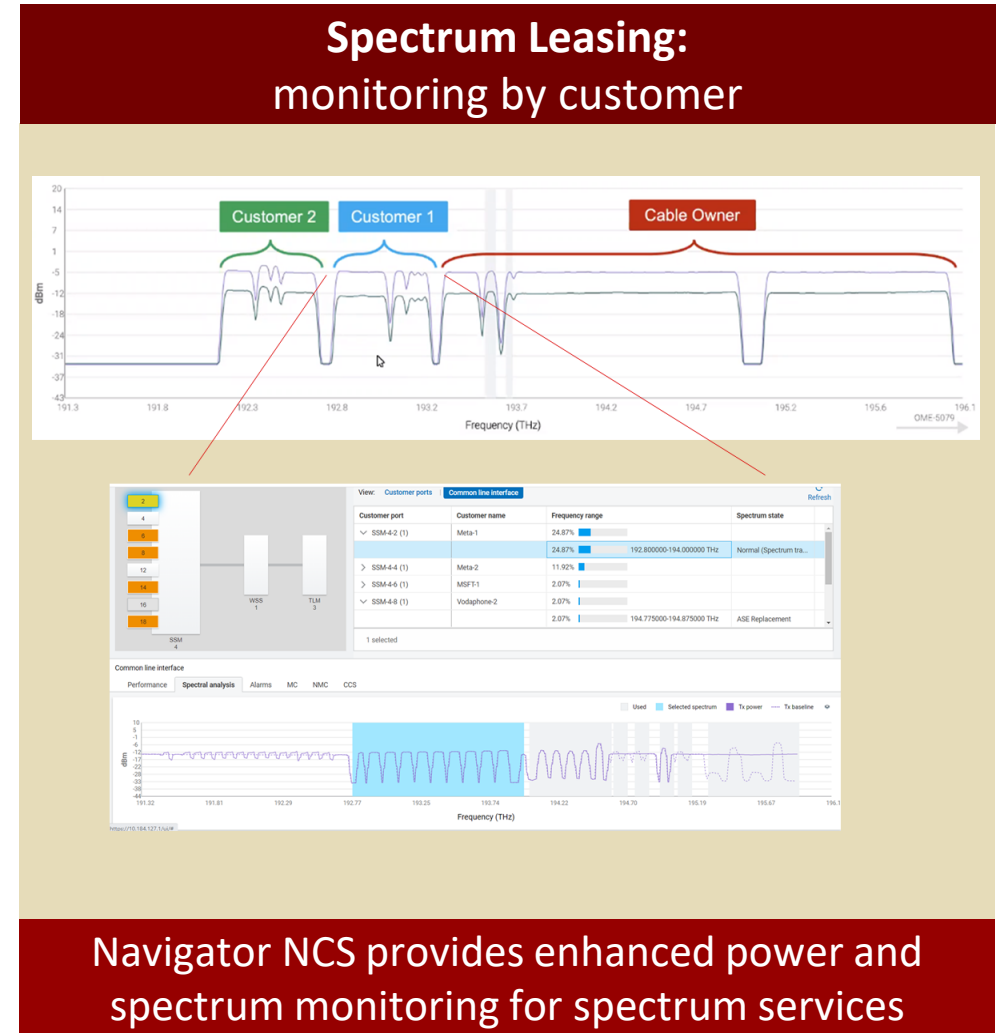
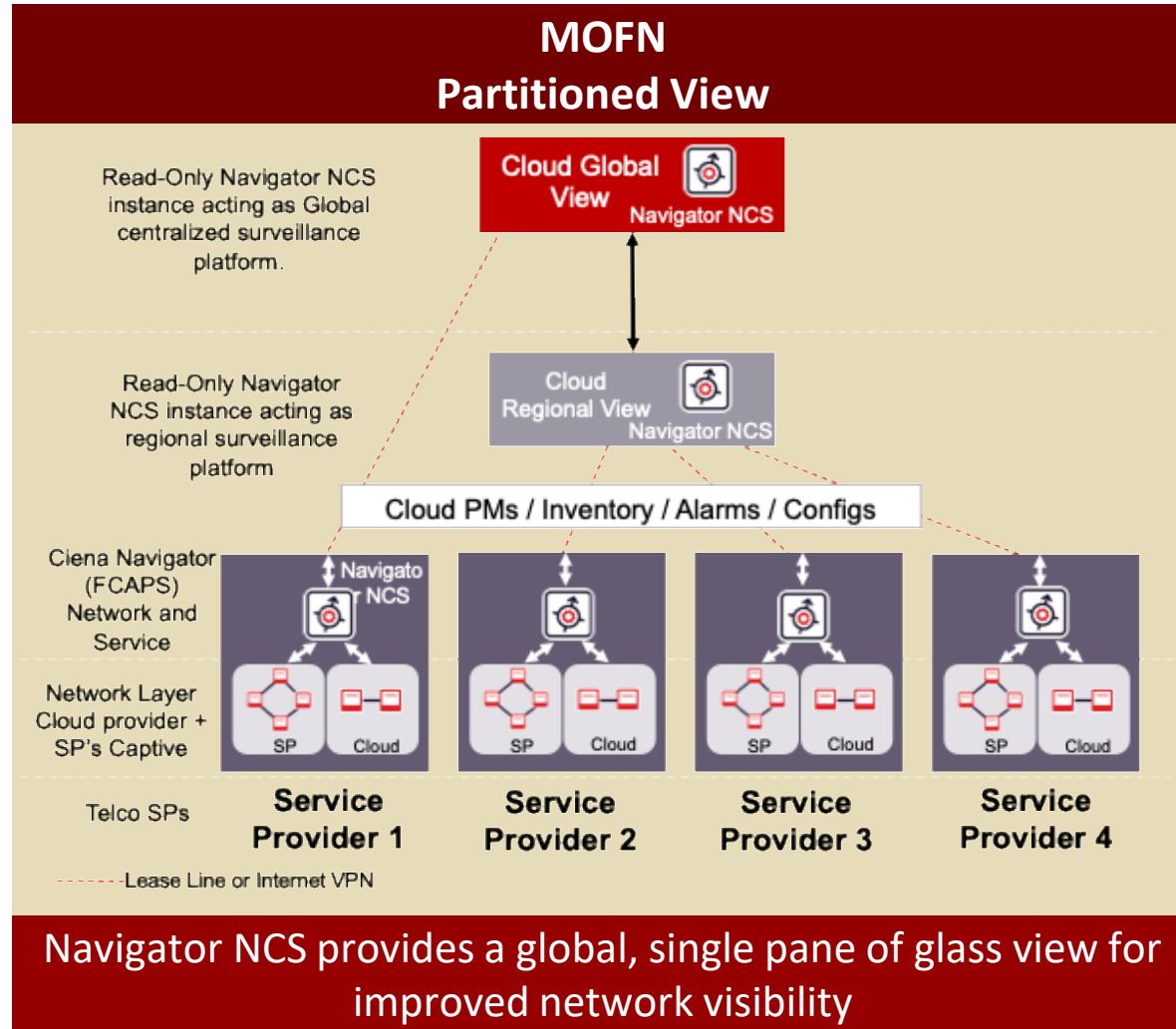
Ciena Supports All MOFN Consumption Models

Tailored optical solutions for data center interconnect



Ciena broad, industry-leading portfolio to address all use cases, for all cloud and AI providers

Ciena enables new operational models with Navigator NCS



Benefits

- Additional Revenues – One time markup & regular maintenance fees
- Better monetization of fiber assets – value-based offering versus selling dark fibers
- Leverage – Existing operational resources can also manage MOFN Networks
- Cross sell opportunities with MOFN

Thank you