Sify Infra Capability

October, 2022   v1.0

SIFY INFRA CAPABILITY

sify

01 Network Strategy

02 Hyper Reach Network

03 Hyper Scale Network – Metro Cities

04 Domestic Backbone Infrastructure

05 International Backbone Sub Sea cable

06 International Backbone Capacity Split

SIFY – NETWORK STRATEGY

sify

HYPER REACH

- Hyper reach – many sites; small bandwidth
- Focussed on enterprises participating in the domestic consumption economy
- Strategy backed by significant investments into creating a large fixed wireless network in India:
  - 3200 base stations
  - 1500 cities and towns
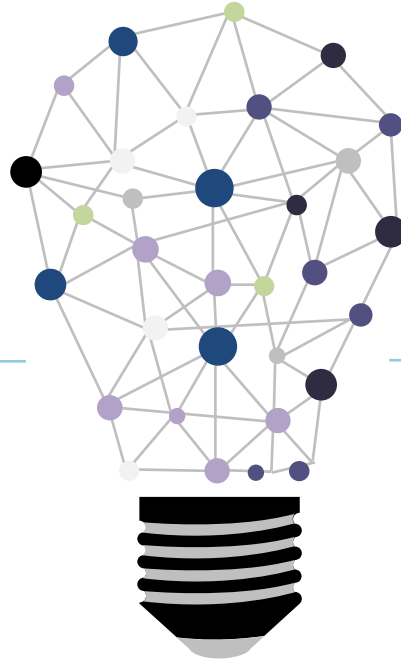
HYPER SCALE

- Hyper scale – few sites; large bandwidth
- Hyper scale network strategy – focussed on enterprises participating in the digital transformation journey
- Strategy backed by significant investments into metro networks
  - Fiber in 7 cities – 43 DC's/CLS and cloud providers
  - Nx400 G metro networks deployed in India
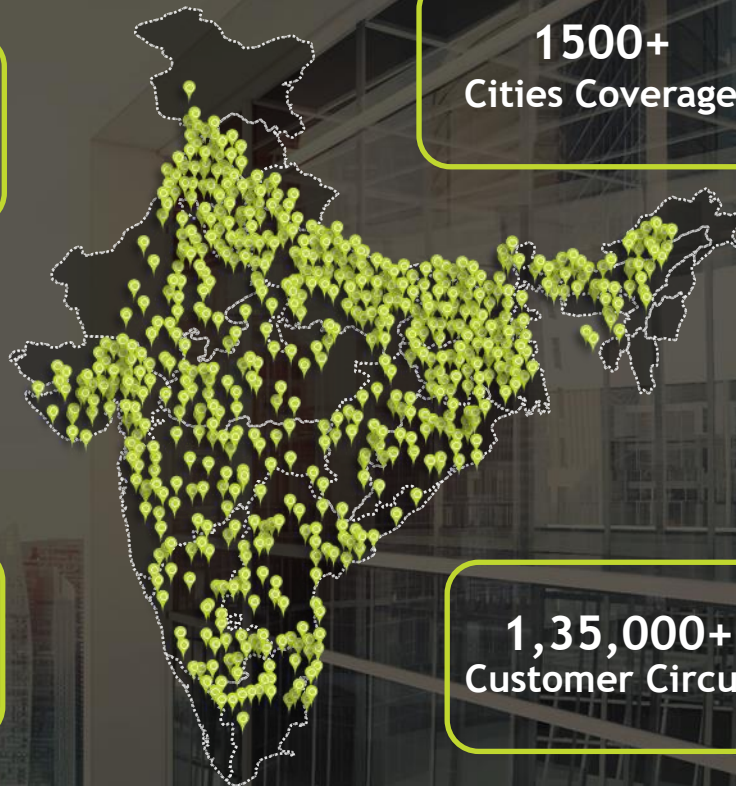
HYPER REACH

3000+
BaseStations

1500+
Cities Coverage

100+
Network-Network
Interconnects

**3 tier hierarchical
topology for better
scalability**

1,35,000+
Customer Circuits

HYPER SCALE NETWORK

Metro Cities

sify | myacademy learn to excel

sify

Mumbai
- 16 data centers /CLS sites.
- 1200+ Kms of fiber
- 500+ buildings connected
- 7.6 Tbps lit capacity

Chennai
- 9 data centers/CLS
- 530 Kms of fiber
- 200+ buildings connected
- 12.6 Tbps of lit capacity

Delhi/NCR
- 7 data centers
- 1300 Kms of fiber
- 200+ buildings connected
- 6.6 Tbps lit capacity

Hyderabad
- 3 data centers
- 1100 + Kms of fiber
- 450 + buildings wired
- 1TB of lit capacity

Bangalore
- 8 data centers
- 1400+ Kms of fiber
- 600+ buildings connected
- 1.8Tbps of lit capacity

Kolkata
- 3 data centers
- 950 + Kms of fiber
- 350 + buildings wired
- 700GB of lit capacity

Note: CLS- Colocation Services

2020
THE YEAR OF
LEARNING AT SIFY

Pune

- 3 data centers
- 900+ Kms of fiber
- 300+ buildings connected
- 1 Tbps lit capacity

Ahmedabad

- 3 data centers
- 600+ Kms of fiber
- 300+ buildings connected
- 600 Gbps lit capacity

Jaipur

- 1 data centers
- 500 Kms of fiber
- 100+ buildings connected
- 300 Gbps lit capacity

4 Cities - Implementation Phase

Chandigarh	Nagpur
Bhubaneshwar	Coimbatore

Cochin

- 1 data centers
- 500+ Kms of fiber
- 100+ buildings connected
- 400Gbps of lit capacity

2020
THE YEAR OF
LEARNING AT SIFY

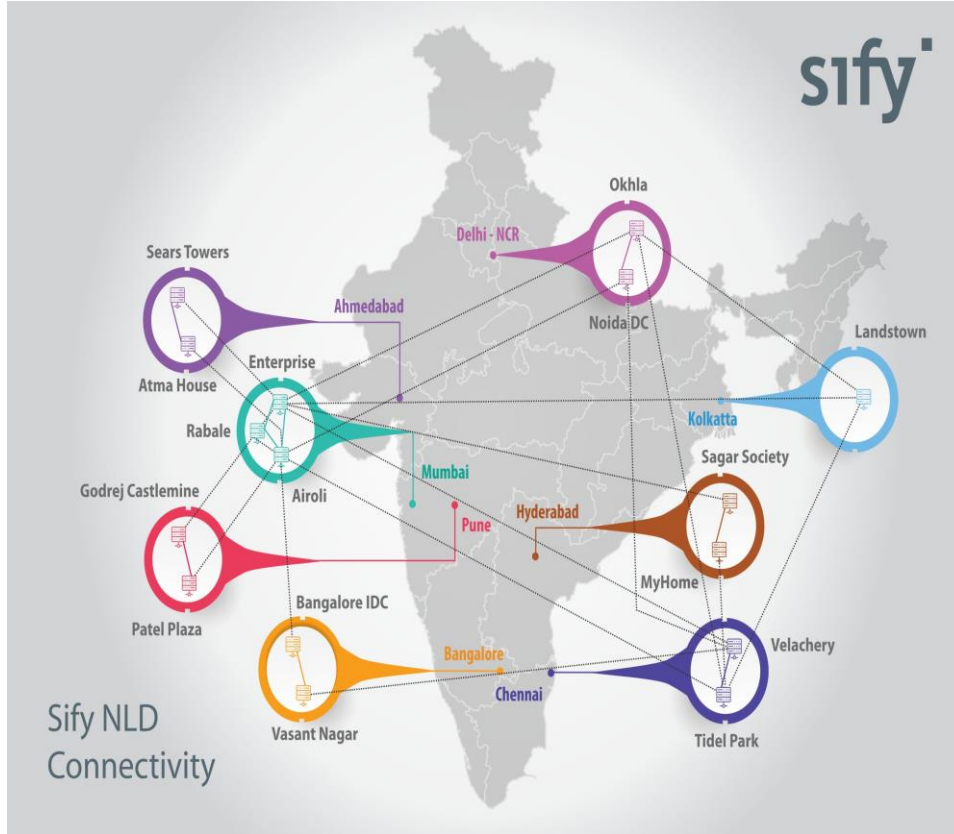|		
Mumbai 114	Chennai 63	Delhi NCR 103
Hyderabad 63	Bangalore 93	Pune 55
Kolkata 75	Ahmedabad 33	Jaipur 28
	Cochin 42	

NO OF CONNECTED BUILDINGS/CORE INFRA
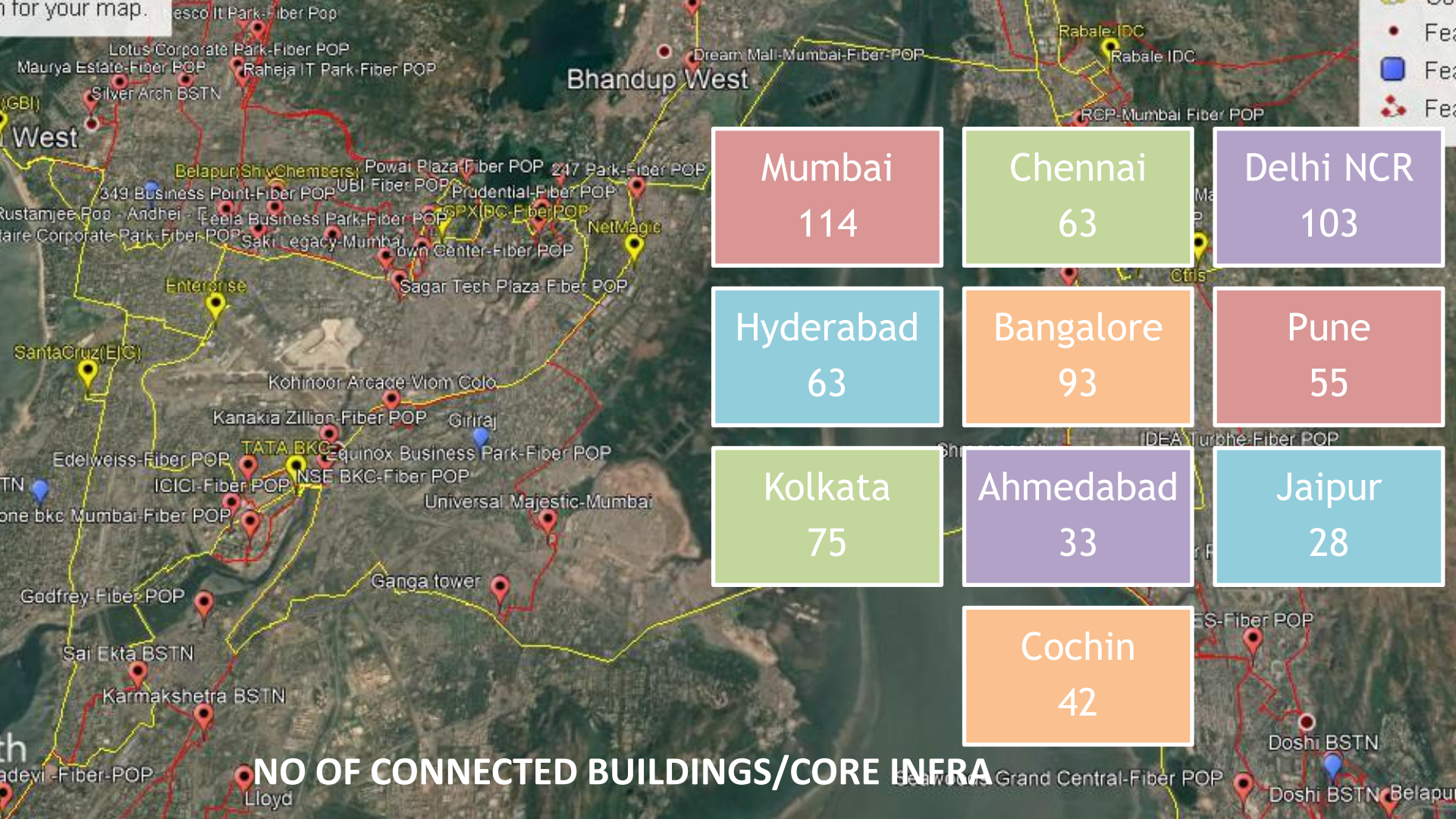
Domestic Backbone

SIFY'S NATIONAL 100G BACKBONE DESIGN

- India's regional coverage is the largest IP network covering 3150 BSTN's having 880 POP's in 1600 cities across India

- Sify NLD backbone is a combination of SDH circuits and wavelengths from multiple providers for maintaining carrier and path level redundancies.

- Every Tier 1 PoP features connections with capability of 100G between core backbones. POP level redundancies are maintained in that region

- Total Sify Connected building across metros comprises of approx. 700.

CORE BACKBONE TODAY

sify

| #	Segment		Capacity	POP	
	From City	to City		From	To
1	Chennai	Mumbai	100G	Tidel	Airoli
2	Chennai	Mumbai	100G	Tidel	Airoli
3	Chennai	Mumbai	100G	Velacherry	Vileparle
4	Mumbai	Delhi	100G	Vileparle	Okhla
5	Mumbai	Delhi	100G	Airoli	Noida DC
6	Bangalore	Mumbai	100G	Bangalore DC	Airoli
7	Bangalore	Chennai	100G	Bangalore Vasant Nagar	Velacherry
8	Hyderabad	Mumbai	100G	GDC	Airoli
9	Hyderabad	Chennai	100G	Sagar Society	Velacherry
10	Kolkata	Mumbai	100G	DLF	Airoli
11	Kolkata	Chennai	100G	Goldpark	Tidel

100G BACKBONE DESIGN ARCHITECTURE
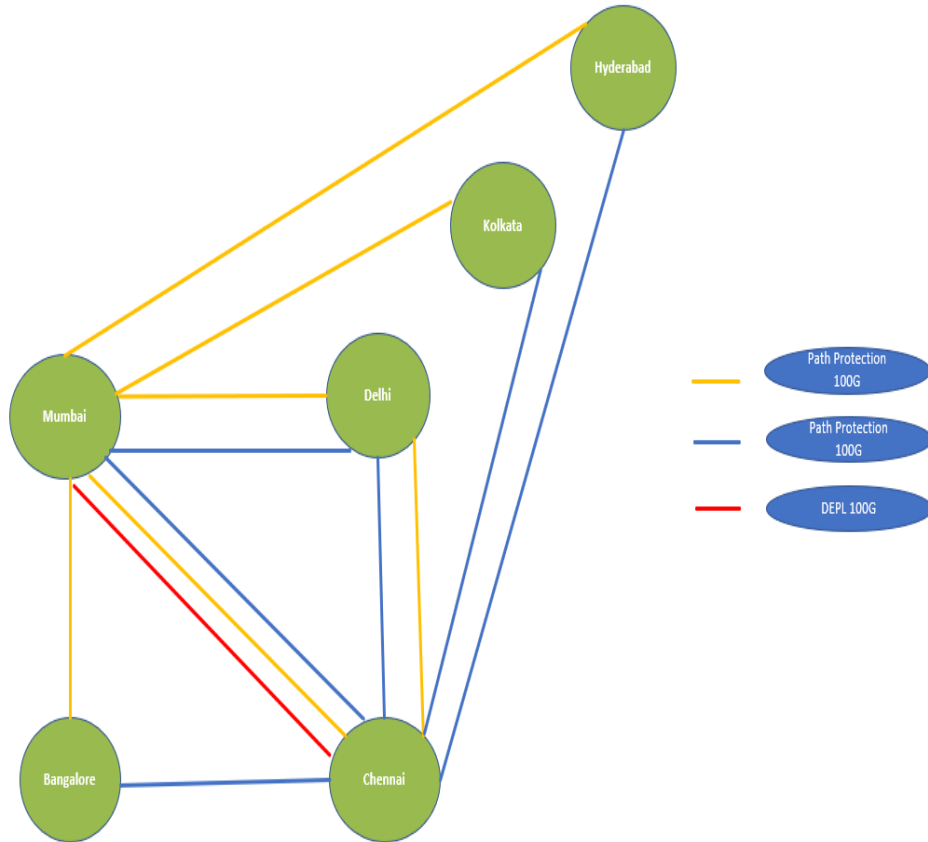
- 100G Build partial Mesh topology between Six cities

- Intra city link upgraded to 100G with 1+1+R protection

- All services are provided both path level & provider level protection

- 10X100G between 6 Cities

- 1X100G dedicated for DEPL service between Mumbai to Chennai

TIER 2 CITIES CONNECTING TO CORE BACKBONE
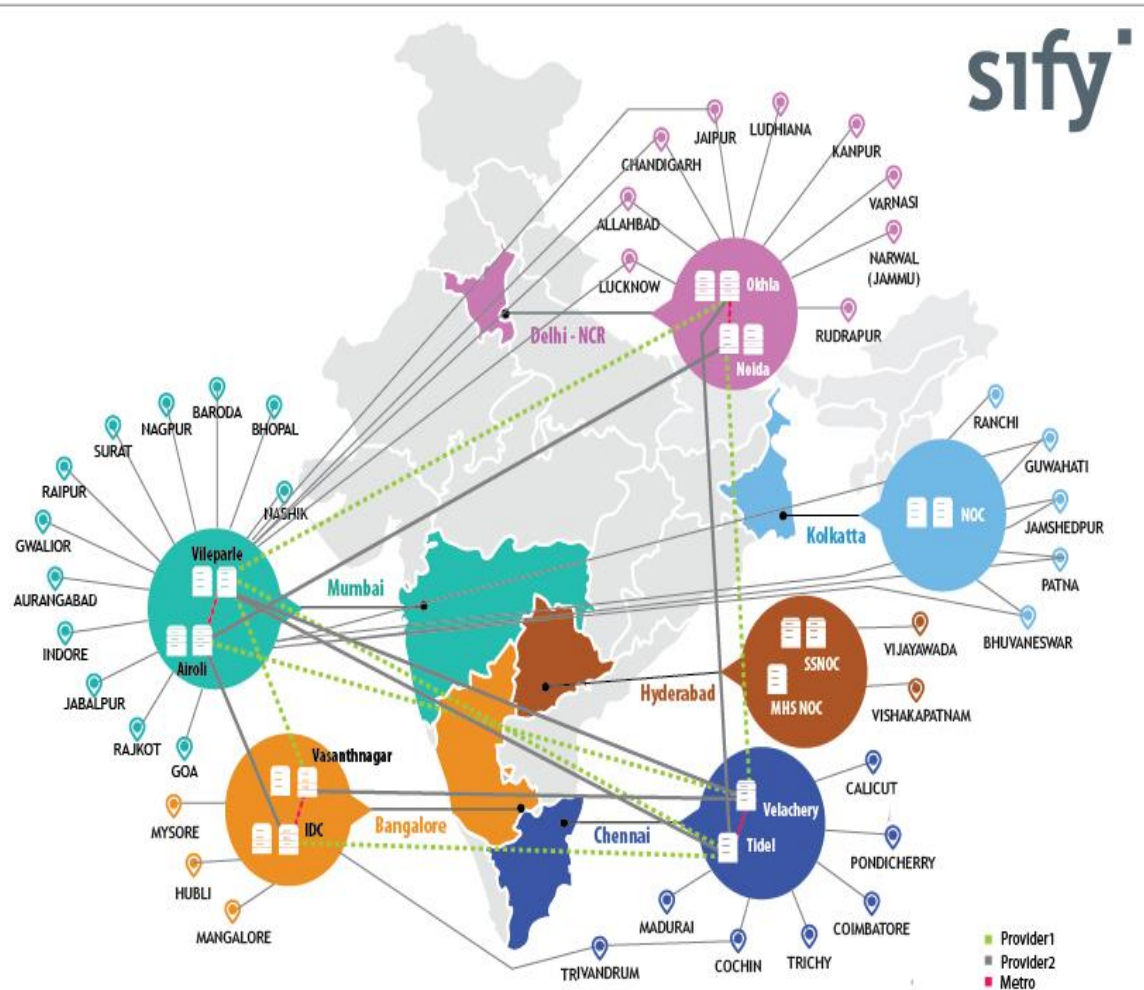
- PAN India n10G full Mesh network with 900 MPLS nodes.

- Engineered to be carrier agnostic.

- Sify investments in niche areas such as wireless access and metro fiber

- Dual POPs in Major cities for Highly available WAN solutions.
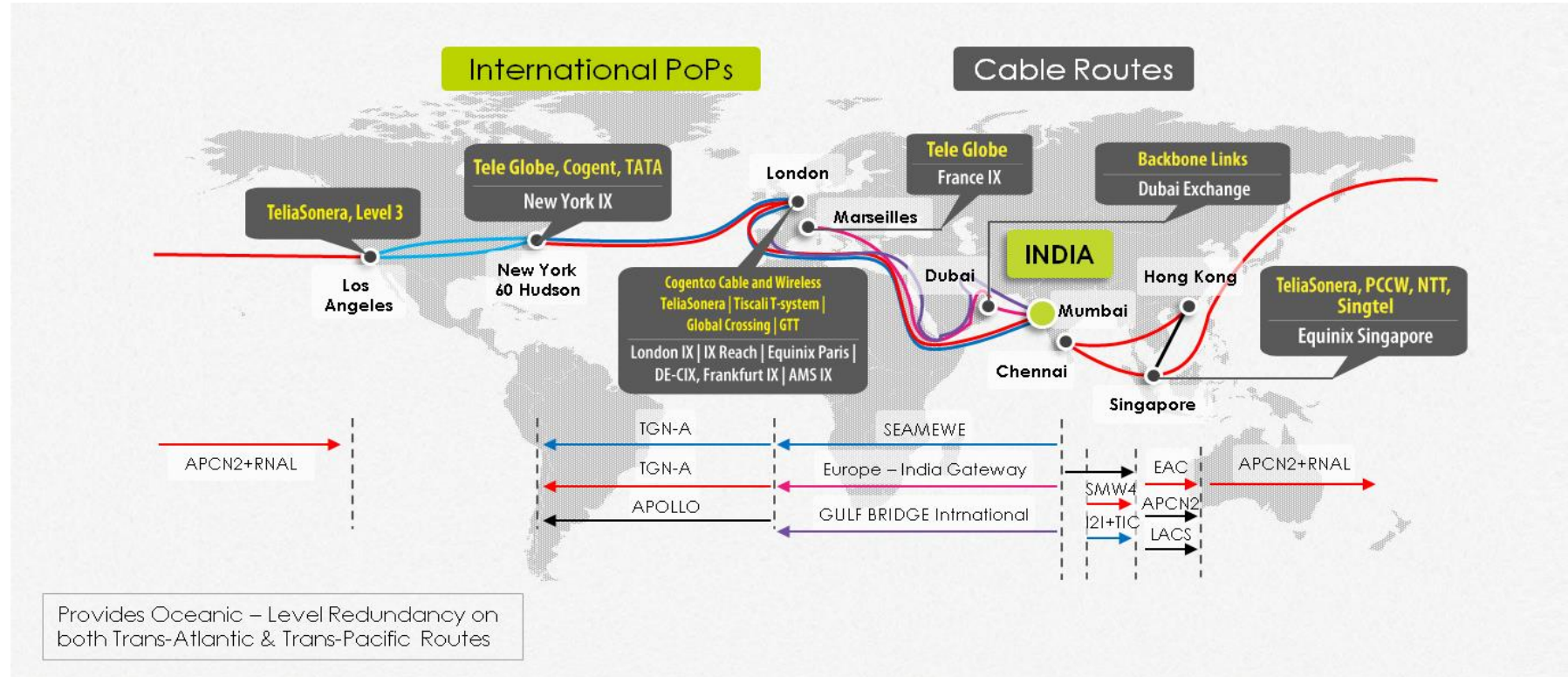
- Engineered for 99.99% uptimes

International Backbone

SIFY'S GLOBAL POP INFRASTRUCTURE

INTERNATIONAL CAPACITY SPLIT

Cable System	Type of Ownership	Location	Path	Lit Capacity by Sify
Gulf Bridge International	Cable Landing Station Owner/IRU Ownership	Mumbai	Trans-Atlantic	60 Gbps
Europe India Gateway	Consortium Partner	Mumbai	Trans-Atlantic	240 Gbps
SMW-4	IRU Ownership	Chennai & Mumbai	Trans Pacific/Trans-Atlantic	10G
MENA	Cable Landing Station Owner/IRU Ownership	Mumbai	Trans-Atlantic	80Gbps
BBG	IRU Ownership	Chennai	Trans-Pacific	40Gbps
TIC	Lease	Chennai	Trans-Pacific	10Gbps
I2I	Lease	Chennai	Trans-Pacific	10Gbps
TGN-A, Apollo, EAC, APCN2, RNAL	Lease	Hong Kong, Los Angeles, New York, London	Trans Pacific + Trans Atlantic - Backbone	10Gbps

- International Backbone infrastructure has been designed to assure the maximum level of IP service continuity and performance by providing diversity over following multi-cable systems

- Singapore to Chennai – 100G Completed in month of July 2022

- Singapore to Mumbai – 100G Completed in September 2022