Telia Carrier Ethernet

YOUR OWN PRIVATE NETWORK

Any Shape	Any Size	Anywhere

Quality and security are increasing concerns on the open Internet. Telia Carrier Ethernet lets you create your own private network to address all of these concerns – and do it on a global scale.

Shape it to your needs

Create your own private network that suits your geography, topology and traffic requirements.

Choose a point-to-point, hub-and-spoke or any-to-any network configuration to suit your business configuration – with the flexibility to change it.

Class-of-service (CoS) options are available to prioritise your traffic depending on your applications.

Our Advanced NID options provide end-to-end network performance assurance and reporting and are available in over 120 countries including key markets such as Central Asia and Russia.

Managing your Ethernet connection is easy. You can view all of your circuits on a single screen via our Ethernet Performance Portal.

Whether you need a PoP-to-PoP SLA or an extensive premises-to-premises SLA, we guarantee a connection you can rely on.

Unmanaged CPE options are also available so you no longer need to provide routers and equipment, or the personnel to maintain them.

Scale it to grow with you

Bandwidth-on-demand (up to 10 Gb/s for EVPL/ELAN) lets you build your communications infrastructure for tomorrow – without having to pay for it today.

Usage based billing means you can burst and only pay for what you use, with the flexibility to scale up as you grow.

We are constantly scaling up our network to meet constantly growing demand, so that your network will never hold you back.

Connect to anywhere you want

We own and operate one of the world's largest IP/MPLS backbones and because we own it from end to end, we can guarantee reliability and security.

You can have your own private, global connection almost anywhere; secure and insulated from the risks of the open internet.

And with over 140 Ethernet certified access partners around the globe, Telia Carrier Ethernet connects your organization where ever you are.

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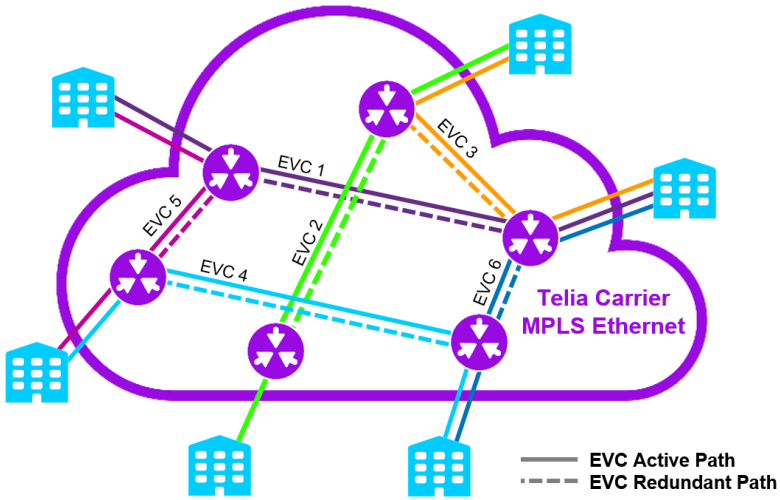

Carrier Ethernet
Whatever you want it to be

Telia Carrier Ethernet

Technical Specifications

Port

Advanced (with NID)	Basic (without NID)

NID = Telia Carrier Managed Ethernet Demarcation Device

Connection

Point-to-Point (EVPL)	Multipoint-to-Multipoint (ELAN)

Access Port Options

- Multiple Connections per port (VLAN mode) or Single connection per port (Port-mode)
- 100 / 1000 / 10000 Mbps port speeds
- Electrical or Optical interface

Connection Options

- Class-of-Service (CoS): Standard, Single Prioritised CoS (sCoS) or Multiple (5) service classes per connection (mCoS)
- Performance reporting (with Advanced NID option)
- Flat-rate or Usage based (burstable) billing

Connection Bandwidth Options (Mbps)

1	2	3	4	5	6	7	8	9
10	20	30	40	50	60	70	80	90
100	200	300	400	500	600	700	800	900
1,000		1,500		2,000		2,500		

Port Types

Electrical	100Base-TX		10/100/1000Base-T
Opt 1G LC	1000Base-SX	1000Base-LX	1000Base-EX
Opt 10G LC	10GBase-LR		10GBase-ER

Advanced NID options

For the Advanced Access port option a managed Alcatel Lucent 7210 SAS-D or SAS-M is provisioned:

1G	SAS-D	64 EVCs	1 RU	4 RJ45 + 6 SFP	25W‡
10G	SAS-M	256 EVCs	1.5 RU	2 XFP + 24 SFP	100W‡

‡ Typical power consumption

SAS-M is provisioned for applications needing either 10G interfaces, more than 64 EVCs or dual-resilient power.connections.

Unmanaged CPE options

Cisco CPE with hardware support.

Service attributes §

Maximum Frame Size (DA to FCS) PoP-to-PoP excluding local access tail	4458 bytes
Maximum RT1 + RT2 CoS bandwidth RT1: Lowest latency and jitter RT2: Low latency and jitter for TCP	The lower of: 300 Mbps or 60% of EVC B/w
Maximum prioritised Single CoS or Multiple CoS connection bandwidth	1,000 Mbps
Maximum bandwidth for Standard CoS (up to 10 Gbps available on request)	2.5 Gbps
Maximum EVCs per Port	32
Maximum number of UNIs in an ELAN EVC	32
PoP to PoP Service Availability	≥ 99.99%
End-to-End Service Availability †	≥ 99.5%
Average pack loss †	≤ 0.1%
Average Frame Delay Variation †	≤ 10 ms
ELAN MAC Addresses per EVC	≤ 1,024
ELAN MAC Addresses per UNI	≤ 256
Maximum ELAN Multicast bandwidth	Full EVC B/w
Max. ELAN Broadcast B/w per EVC	1 Mbps
Max. ELAN Broadcast B/w per UNI	256 Kbps

§ Attributes are for Standard service;
other values may be supported on request
† SLA KPI applies with Advanced NID option;
monthly accounting

Our Ethernet services are MEF CE2.0 certified and SLA guaranteed for performance, reliability and security.

About Telia Carrier

Telia Carrier owns and operates one of the world's most extensive fiber backbones. Its mission is to provide exceptional network infrastructure and services – empowering individuals, businesses and societies to execute their most critical activities. By working close to their customers, Telia Carrier makes big ideas happen at the speed of fiber. Discover more at http://www.teliacarrier.com/