

Atman E-Line

Layer 2 transport service



www.atman.pl

 **atman**
non-stop-data

High quality Ethernet network

Atman perceives the global trend to offer high quality Ethernet based data transmission and network services adapted to clients' demands as an opportunity to expand by offering solutions tailored to international standards, and use both Atman's own resources and Atman's subcontractors capabilities. It creates an attractive alternative to the traditional data transmissions services.

We have prepared services that meet the recommendations of the MEF both UNI-to-UNI access services and aggregated handovers through Ethernet NNI.

Our goal is to reduce operational costs by simplifying ordering process, implementation and service management, reducing time to market while maintaining a consistent client experience.

Flexibility and scalability

Broad range of transmission speed and network capacity options ensures efficiency throughout life cycle of the service and easy to modify service options. In most cases service modification requires only reconfiguration of service parameters, without any infrastructure changes. The E-Line service is suitable for such applications as:

- Site-to-site access
- Server consolidation
- Business continuity/disaster recovery
- Enterprise-class cloud-based applications
- Distributed imaging
- Distributed storage area networks
- Voice over IP
- Streamed/interactive video
- Layer 2 VPNs for IT infrastructure
- Virtualization

Guaranteed quality

Service Level Agreement covers availability guarantees as well as core technical specifications – packet loss, latency, TTR.

Reports are handled by the Atman Network Operations Center (NOC) in accordance with the report and escalation procedure set forth in the Agreement. Reports are received 24/7.

Last mile options

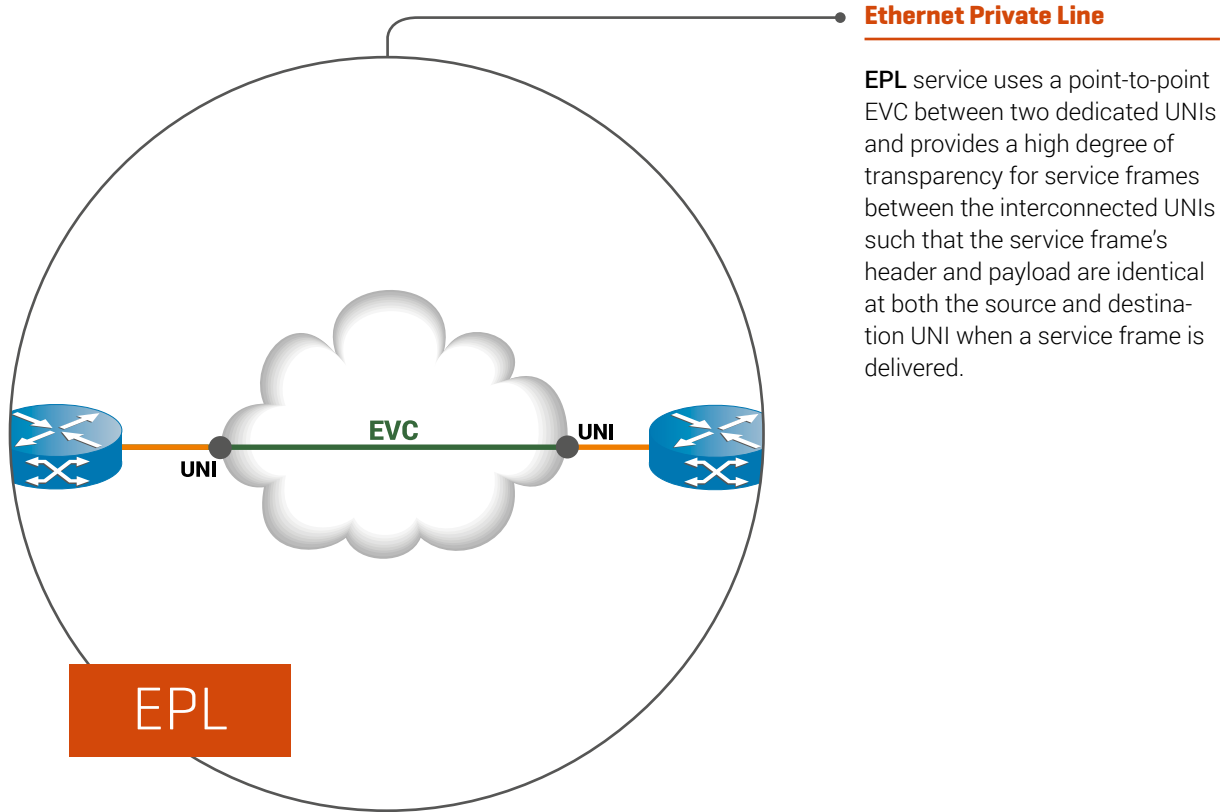
Atman operates a countrywide fiber optic network directly connecting main cities and more than 1000 multitenant office buildings, data centers and telecommunications hubs. For wireless transmission we use point-to-point radio links and point-to-multipoint LMDS systems. In cooperation with our local subcontractors, the Atman network covers most area of Poland.



Technical description

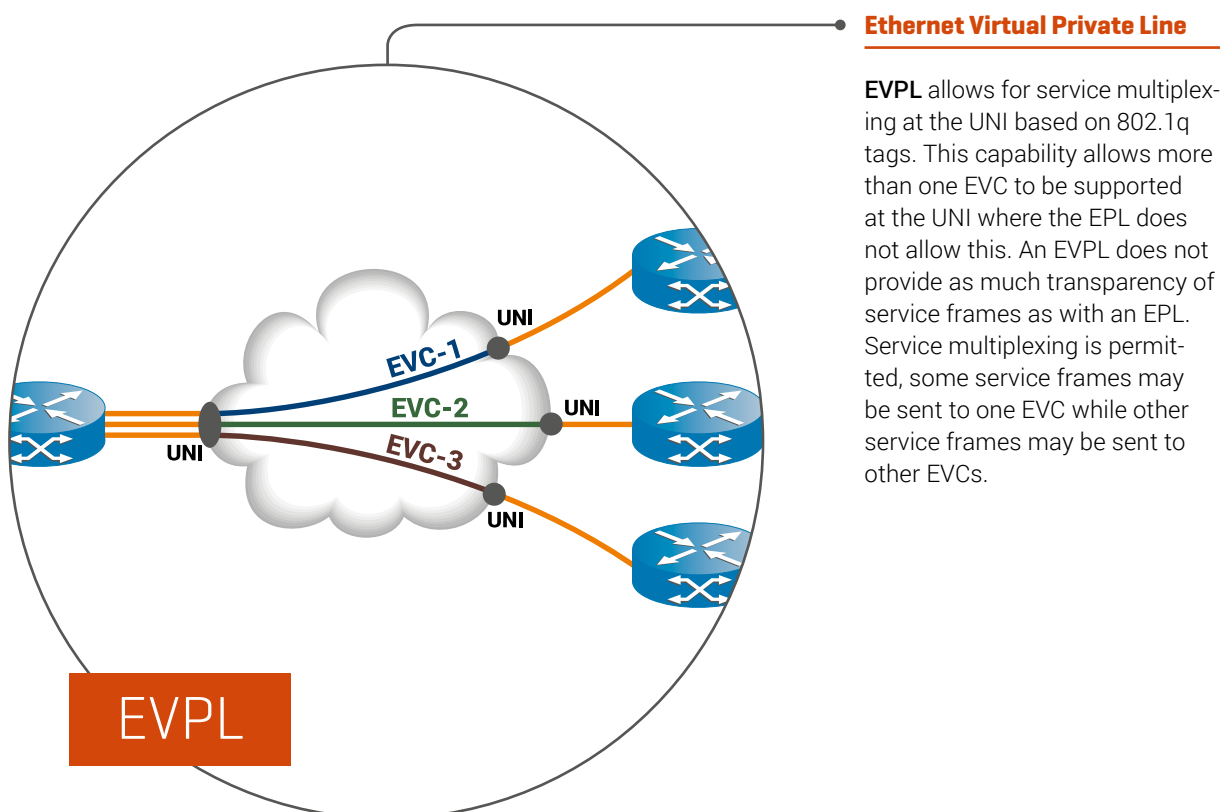
The E-Line service is based on MPLS network. This type of service provides symmetrical bandwidth for Ethernet data sent in either direction between two UNIs with performance

assurances according to SLA. E-Line supports a variety of access data transmission bandwidths with 10 Mbps, 100 Mbps, 1 Gbps, and 10 Gbps UNI speeds.



Ethernet Private Line

EPL service uses a point-to-point EVC between two dedicated UNIs and provides a high degree of transparency for service frames between the interconnected UNIs such that the service frame's header and payload are identical at both the source and destination UNI when a service frame is delivered.



Ethernet Virtual Private Line

EVPL allows for service multiplexing at the UNI based on 802.1q tags. This capability allows more than one EVC to be supported at the UNI where the EPL does not allow this. An EVPL does not provide as much transparency of service frames as with an EPL. Service multiplexing is permitted, some service frames may be sent to one EVC while other service frames may be sent to other EVCs.



	EPL	EVPL
Service multiplexing	No	Yes
Service transparency	Full	Limited
CE-VLAN assignment	Managed by the client	Managed by the carrier
UNI dedicated for one service	Yes	No
IP DSCP QoS transparency	Yes	Yes
Service bandwidth	From 1 Mbps up to 10 Gbps, FULL DUPLEX	
MEF compliance	Yes	Yes
Multicast transparent	Yes	Yes
Max no. of MAC addresses	Unlimited	May be limited
New UNI for next service setup required	Yes	No
NNI handover supported	Yes (individual arrangement)	Yes

Find out more at www.atman.pl

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ATM S.A. is the WSE listed Polish data center market leader as well as an expert in security of data transmission and processing. Under the Atman brand the company provides colocation, hosting and cloud computing services in its data centers with 13,600 sq m [146,400 sq ft] of the total space. Using own international links and fiber-optic networks in the largest Polish cities, Atman offers broadband IP services, including Internet access and data transmission. Major recipients of the services are telecommunications operators, traditional media, Internet portals, financial institutions, commercial and industrial companies.