IP Transit

Elisa IP Transit is a high-quality service that allows your company to access the global Internet by utilizing Elisa's proprietary national and international backbone network and Elisa's interconnection agreements.

The IP Transit service is suitable for Internet service providers and other service operators with a public AS number (Autonomous system) and the hardware and competence to operate dynamic BGPv4 routing.

Our connection speeds range from 100 Mbit/s to 10 Gbit/s or as agreed (minimum 100 Mbit/s).

Elisa IP Transit offers traffic to the entire global Internet network, including domestic traffic. Domestic and international capacity will not be itemised.

Service content

Principle of service implementation:
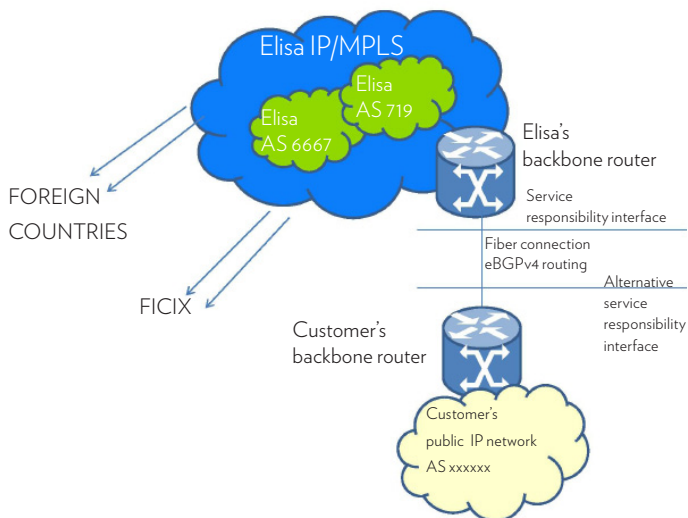
The Elisa IP Transit delivery interface is a 1 Gbit/s Ethernet port (single-mode fibre, 1000 BaseLX standard) at an Elisa equipment facility room specified by Elisa. The logical speed of the service may be agreed on a case-by-case basis.

Subject to separate agreement, the service may be extended to the customer's facilities through an unsecured fibre connection supplied by Elisa. In this case, the delivery interface is the end of the single-mode fibre at the customer's house cross-connection point.

Elisa IP Transit key features

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Connection speeds	100 Mbit/s, 500 Mbit/s, 1 Gbit/s, 10 Gbit/s or subject to agreement, however a minimum of 100 Mbit/s
Symmetry	Symmetrical, same speed in both directions
Number of logical networks	One (global open Internet)
Quality of service (QoS) of the IP traffic	Not supported
Supported protocols	IPv4. Also IPv6 subject to agreement on a case-by-case basis

Examples of advertising alternatives of BGP routing:

- Elisa only advertises the default route
- Elisa advertises routes in Elisa's proprietary network
- Elisa advertises the entire global Internet table
- A combination of the above or separately agreed advertising

Elisa supports the use of community parameters in network advertising. Community parameters are available at www.elisaip.net.

Additional services

- Redundancy from two different backbone router ports.
- Elisa SLA. The service always includes at least the Basic Service Level.

In the SLA service, the response and repair times are calculated within the time frame determined by the agreed service-hour category.

An environment composed of two redundant connections is considered operational if traffic flows via the main connection or the back-up connection. The content and application of the service levels are described in more detail in the Elisa SLA service description.

Service level category	Service hour category	Response time	Repair time
P0V8h Basic Service Level	P0: weekdays: Mon–Fri 8 am–4 pm	target 8 hrs	target 24 hrs
P1V2h	P1: Mon–Fri 7 am – 6 pm	2 h	Not defined
P1K12h		1 h	12 h
P1K6h		30 min	6 h
P2V2h	P2: Mon–Fri 7 am–9 pm, Sat 8 am–6 pm	2 h	Not defined
P2K12h		1 h	12 h
P2K6h		30 min	6 h
P3V2h	P3: 24 hours/ 365 days	2 h	Not defined
P3K12h		1 h	12 h
P3K6h		30 min	6 h

Elisa IP Transit can be delivered using the same ports and/ or fibres as other services provided to the customer by Elisa. Several logical eBGP sessions can be agreed to be delivered side by side. Some of the sessions may end at AS 6667 and some at AS 719 at Elisa's end.

Support services

Elisa's Professional Services provide a tailored selection of services to support the delivery of the customer solution and to facilitate the use and implementation of the services. Elisa Professional Services are described in more detail in a separate service description. Customer-specific services are described in the offer and will be agreed upon in the delivery agreement.

Service delivery and delivery time

The customer informs Elisa of its AS number. Elisa and the customer mutually agree on the parameters of dynamic routing. Elisa provides the IP Transit Service via AS 6667.

Elisa and the customer perform the necessary physical installation work and logical specifications of the network as agreed. The normal delivery time of the service is 4 to 6 weeks if availability has been checked in advance. Also differing delivery times may be agreed.

User support

Elisa's technical support staff provides assistance in technical issues and service failures. The contact information, service hours, and support numbers for technical customer support are specified in the offer and will also be specified in the delivery agreement.

Small-scale router configuration changes can be ordered either through the Elisa Carrier Services Online order and delivery system or by contacting Elisa's contact person. The delivery time for configuration changes is approximately three working days, and they will be charged separately.

With regard to significant changes or transfer of connections, customers should contact their Elisa contact person and agree on the pricing and delivery time of the changes.

Pricing

The pricing of the service consists of a one-time charge and monthly charges. The one-time charge is invoiced after the service is installed by Elisa. For monthly charges, two alternative pricing models are available:

- Price model of fixed price and fixed capacity
- Price model of fixed part and variable part (95 percentile)

The price model which is chosen shall be stated in the Delivery Agreement between Elisa and Customer, together with the relevant parameters. The more detailed pricing of the service will be described in the offer and will be agreed upon in the Delivery Agreement. Unless otherwise agreed, Elisa's current price lists will apply.

Price model of fixed price and fixed capacity

In the price model of fixed price and fixed capacity, Elisa allocates to the Customer a fixed amount of Internet capacity (in terms of Mbit/s) and this capacity has a fixed monthly fee which is not dependent on the actual amount of data transferred. The capacity is symmetrical, meaning that the nominal capacity is available in both directions.

Price model of fixed part and variable part

In the price model of fixed part and variable part, each monthly charge has two components:

• The fixed monthly charge
• The variable monthly charge

The following parameters shall be stated in the Delivery Agreement between Elisa and the Customer:

• The fixed monthly charge for the service (in euros per month)
• The fixed internet capacity (speed, in megabits per second) which is included in the above mentioned fixed monthly charge.
• Unit price (in euros per month per Mbit/s) for the capacity which exceeds the fixed capacity.
• Maximum capacity, for example physical port speed (in Mbit/s). The Customer can technically send and receive data up to the maximum capacity.

The fixed monthly charge is invoiced by Elisa each month, no matter how much data the customer actually has sent or received. In addition to this, the variable part of the monthly charge shall be invoiced afterwards, if the Customer has used his right to use more capacity than what is included in the fixed monthly charge.

For the calculation of the variable monthly charge, the billable utilization of each month shall first be calculated by Elisa, by using the 95th percentile method with the following principles:

• Bandwidth is measured (or sampled) every 5 minutes, around the clock.
• Each 5 minutes interval shall be represented either by the inbound capacity or by the outbound capacity, whichever is higher.
• At the end of the month, the samples are sorted from highest to lowest, and the top 5% of data is thrown away.
• The highest of remaining samples is the billable utilization for the entire month.

If the billable utilization is higher than the agreed fixed capacity, each Mbit/s exceeding the fixed capacity shall be invoiced by using the agreed unit price.

Prerequisites, restrictions and other terms and conditions

The customer is responsible for ensuring that the condition of the internal network in each installation location allows for the installation of the Elisa IP Transit service. The pricing is subject to the following restrictions if no availability survey has been performed:

• Pricing of a service that extends to the customer's facilities requires that an access connection to the customer's premises exists and a new physical optical network need not be constructed.
• The pricing is only valid for regions with an access point to Elisa's backbone network.
• Elisa's network management does not extend to the customer's hardware, which is why fault repair will only be initiated at the customer's notification.

Elisa decides on the extent of its IP infrastructure and the current number of its peering partners. Elisa reserves the right to change the topology of its network and increase or decrease the number of its IP traffic points in its network.

Terms of agreement

Elisa's General Terms for Operator products will be applied to the agreement. Other terms and conditions associated with the service and its delivery shall be agreed upon in the delivery agreement between Elisa and the customer. Elisa shall deliver the service to the customer on the assumption that the customer (including companies within the same consolidated group) is the end user of the service, and the service is not to be sold and/or communicated to third parties unless otherwise agreed upon in the delivery agreement (or otherwise in writing). The descriptions of files and other information within the scope of the Personal Data Act are available at www.elisa.com.