



# TAPIOLA CO-LOCATION CENTER

## – a secure home for your most important asset

Elisa's co-location center in Tapiola, established in 2001, offers you a safe place to store and exploit data. It is equipped with reliable, high-speed data connections. Physically, it is located close to the main highways and also has easy access from the airport.

Above all, Elisa's co-location center in Tapiola is a safe place for data. It is built inside solid rock and covered by Finnish forest. Only a limited number of experts have access to the co-location center premises.

In Tapiola, data is stored with sustainability in mind. All the waste heat that the co-location center produces is processed and utilised by nearby households.

### Tapiola co-location center

- 900 m<sup>2</sup> of space on two floors
- Customers' own racks or Elisa's racks, which can be stored in closed cold/warm aisles

### Security and access

- 24/7 security and video surveillance
- Electronic access control, limited access
- Centralized alarm system
- Authorized personnel only
- Underground parking and loading space with access control

### Power supply

- Two 20 kV connections to the power grid

- Multiple electricity transformers
- N+1 parallel redundancy in the power system

### Air conditioning and cooling

- Overpressured 10–20% in relation to the surrounding environment
- Temperature  $23 \pm 2$  °C. Our goal is to raise the room temperature higher in order to save energy. Alarm limits: temperature min. 18 °C, max. 27 °C.
- Closed water cooling system
- N+1 redundancy in the cooling system with Elisa's generator backup system

### Fire control

- Surface materials are fireproof
- Fully automated and monitored fire prevention system
- Underground facility is equipped with sprinklers and water damage prevention system in the co-location spaces
- Smoke venting system
- Alarms are transferred directly to the local fire department and Elisa

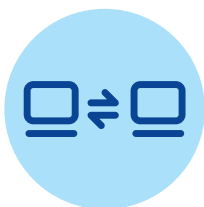
### Tapiola connections Indoor cabling

- All connections to other operators are via MMR (a meet-me room)
- Customers can connect their own cables to the co-location center via an ODF connection point

Elisa is a pioneer in telecommunications and digital services. We serve approximately 2.8 million consumer, corporate and public administration organisation customers, and have over 6.2 million subscriptions in our extensive network. Cooperation with Vodafone and Telenor, among others, enables globally competitive services. Our core markets are Finland and Estonia, and we also provide digital services for international markets. Elisa's shares are listed on the Nasdaq Helsinki. In 2018, our revenue was EUR 1.83 billion euros, and we employed 4.800 people. As a responsible Finnish market leader, our operations are guided by continuous improvement. [www.elisa.com/operators](http://www.elisa.com/operators)

# LET'S MEET IN TAPIOLA

ELISA NETWORK FOR YOUR NEEDS  
+ 75.000 km of backbone fiber in Finland and Estonia



**Ethernet and other capacity services**



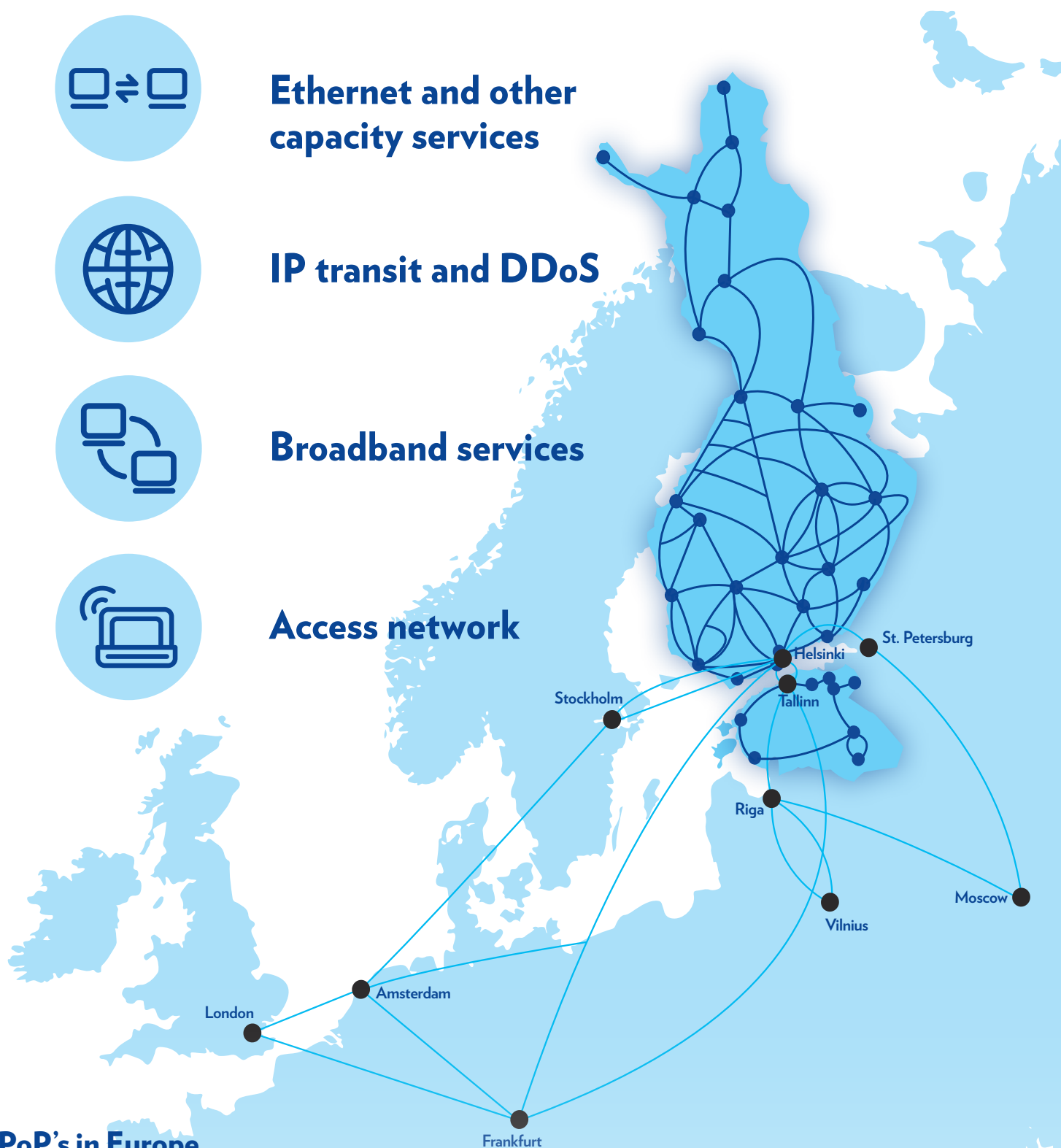
**IP transit and DDoS**



**Broadband services**



**Access network**



## PoP's in Europe

**EE** Tallinn Ädala, TV Tower **DE** Frankfurt, Interxion FRA4, Equinix FR5 **NL** Amsterdam, Nikhef, Teletcity Southeast AM5 **UK** London, Teletcity Docklands LD8 **SE** Stockholm, Teletcity Bromma, Interxion Kista  
**LT** Vilnius, Data Logistics Centre **LV** Riga, LVRTC **RU** St. Petersburg, Raduga-2, Moscow, M9