



# Tallinn DC-1 Private Suite

Available and connected!

## Summary

If you are required to abide by strict regulations and standards, then you know that high-end security and privacy go hand in hand. A private suite is completely separated from the environments of other customers. A Private Suite inside a top-class data center is ideal for the deployment of a private cloud with higher security requirements or for organisations that must comply with tight corporate norms and standards.

Co-locate your computing, storage and networking assets in GDC's Private Suites and increase your IT security and efficiency while removing the need to build, staff, and manage in-house server rooms or data centers.

### Reasons why companies have chosen our colocation:

- Resilience and uptime obtained with best-in-class technology, guaranteeing business continuity
- A peace of mind ensured by multiple security layers; IT equipment is well protected
- A variety of connectivity providers offering a freedom of choice
- An ecosystem of partners in the same facility for cooperation projects
- Certification against the highest standards in Europe (EN 50600)

With us, your data runs only on sustainable energy. We aim for a level of energy efficiency 25% higher than the industry average and reuse the excess heat generated by the servers. Our facility is certified against the highest EU standard.

### Key facts

- Floor space in the data center: 14,500 m<sup>2</sup>
- Power supply: up to 250 kW per Private Suite (custom solutions possible)
- Availability class: 3 (uptime 99.982%)

### Key operating principles

- Reliable. Currently, 100% uptime.
- Sustainable. 100% renewable energy.
- Efficient. Using the best people and AI to optimise operations and processes.
- Customer-focused. Our goal is to offer the customer long-term value and a solid relationship.

## Table of Contents

Private Suites	4
Compliance	4
Security	5
Connectivity	6
Power Features	7
Cooling	8
Core Operating Principles	9
Sustainability	10
Location	11
Ownership	12

# Private Suites

Our Private Suites provide you with a stable and efficient platform on which to build your personalised data center deployment provisioned to your space, power, security, and cooling requirements – both for now and for the future. Consider it a data center inside a data center for only you to access.

For the deployment of a private cloud with higher security demands or for enterprises obliged to adhere to tight regulations and standards linked to their business, a data center secluded from the general co-location area is perfect.

- Completed Private Suites have a floor area of 178 m<sup>2</sup>, of which 116 m<sup>2</sup> is ready for stacking; possibility for custom solutions
- The height of the room is 4.8 m with a raised floor (0.8 m)
- 42U Standard Rack (600×1,200×2,200 mm) or 42U Premium Rack (800×1,200×2,200 mm)
- Customisable racks, up to 52 (the option to bring your own device) and/or a custom floor plan
- Carrier- and operator-neutral routing to the customer's dedicated connection point
- Two Meet-Me-Rooms on the floor
- Renewable energy
- Dual-feed redundant power supply (UPSs, generators)
- Smart managed PDUs – 16 A (default) or 32 A (optional)
- Standard Transfer Switch (optional)
- Hot aisle containment
- Raised floor
- AI cooling optimisation
- Round-the-clock armed security
- Multi-layer security control with an anti-passback system
- CCTV surveillance, analytics, and forensics
- EMP protection upon request
- Oxygen reduction-based fire prevention system
- Loading area and warehouses for storage
- 24/7 services of the Network Operations Center
- Remote Hands services
- Additional services upon request

# Compliance

**Our systems and processes are certified against international standards:**

- EN 50600 – the highest standard for data centers in the EU  
It is a comprehensive standard that looks at the data center as a whole, including security, reliability, and environmental performance, and we are the only company in the Baltics and Finland that has it.
- ISO 27001 Information security management
- ISO 9001 Quality management systems





# Security

Your assets are guarded 24/7 by multi-layer perimeter defence solutions, such as 2D security fencing, security microphone cable, intelligent surveillance cameras equipped with motion sensors, thermal imaging, and forensics for fast analytics. The gate access solutions and road barriers of GDC are managed around the clock by security personnel.

Even if someone would manage to slip past the outer perimeter, they are stopped by additional security measures, such as access-controlled doors (all doors are equipped with card readers and electronic locks) and mantraps with multi-factor authentication, as well as various monitoring systems.

For security reasons, the infrastructure management (power, cooling, etc.) is only possible on site and not over the public Internet. The aim is to make it impossible to enter the systems from outside to prevent any malicious acts.

## Fire protection

First and foremost, we focus on fire prevention and fire detection.

- Oxygen reduction-based fire prevention system in data rooms. Less oxygen means no fire.
- All rooms are built out of non-combustible materials and as separate fire-protection zones.
- Fire-resistant doors, walls, firestop cables and pipeline penetrations (fire resistance up to 90 minutes).
- All data rooms are equipped with VESDA aspirating smoke detectors. This solution means continuous air sampling providing the earliest possible warning of an impending fire hazard.
- In selected technical rooms, a gas-based fire suppression system is used.
- Only CO2 hand-held fire extinguishers are used inside the facility (which are not harmful for IT equipment)

Greenery Data Centers has three Protection Class areas: PC1, PC2, and PC3 (highest-security area).

PC1 – Territory of the facility, administrative areas, and stairways

PC2 – Support and tech rooms, loading areas, power distribution areas

PC3 – Data rooms and vital tech rooms

The security systems were successfully audited by the German certification body TÜV Informationstechnik GmbH in 2022 as part of the EN 50600 certification process.

Greenery Data Centers' security solution was chosen as best in an annual competition arranged by the Estonian Security Association in 2023.



# Connectivity

We understand that you want to be free to choose your suppliers and providers – that is why our data center is cloud- and carrier-neutral. Our ecosystem of connectivity providers is constantly expanding. Should you choose an organisation we are not yet partnered with, we will gladly help to set them up.

- Carrier- and operator-neutral
- Fibre optics approach the facility by 8 and enter by 4 different routes, offering redundancy
- Selection of ISPs
- Various cloud service providers
- Option to rent dark fibre or wavelengths
- Any location in the data center can be connected to any other location

## Internet and L2 providers:

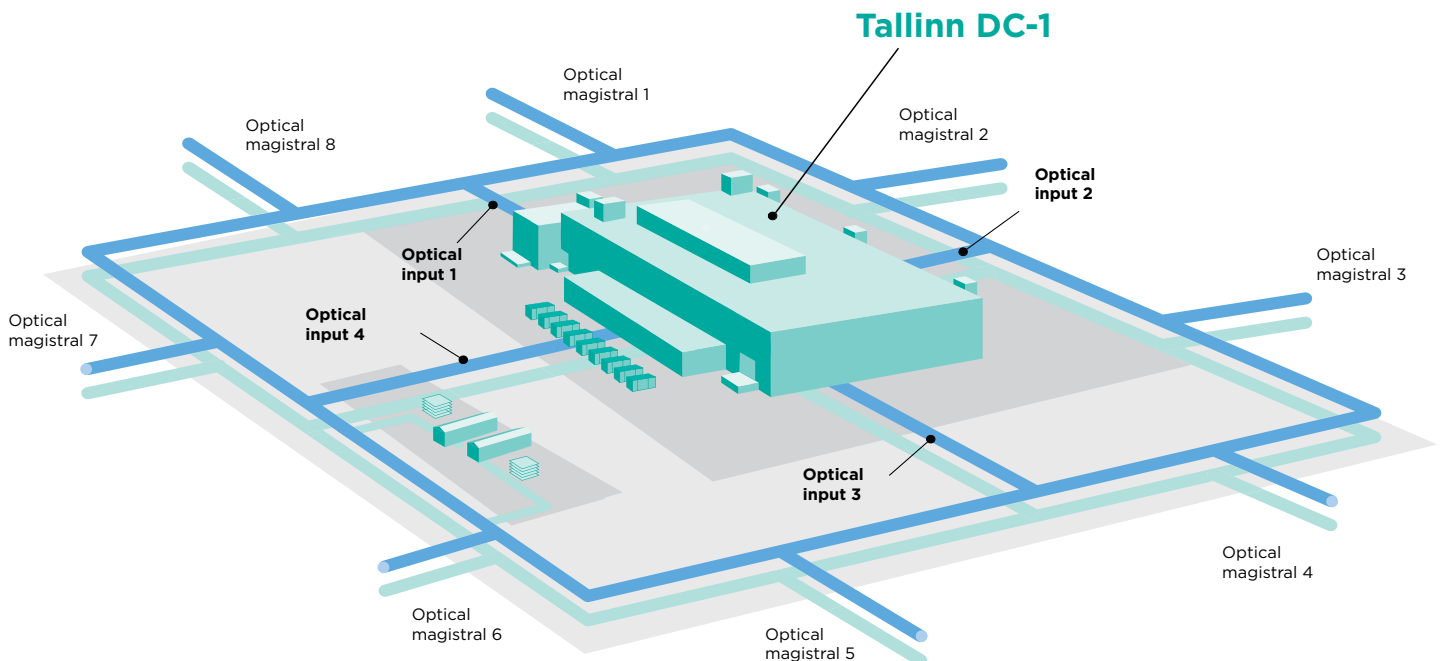
- Tele2 Eesti AS
- Telia Eesti AS
- Elisa Eesti AS
- CITIC Telecom CPC Estonia OÜ
- RETN Baltic AS
- Riigi Infosüsteemi Amet
- Astrec Data OÜ
- Cogent Communications Estonia OÜ

## Wavelength providers:

- Tele2 Eesti AS
- Elisa Eesti AS
- RETN Baltic AS
- CITIC Telecom CPC Estonia OÜ
- Lumen Technologies Estonia OÜ
- SIA Tet
- BITÉ Group
- Riigi Infosüsteemi Amet

## Dark fiber providers:

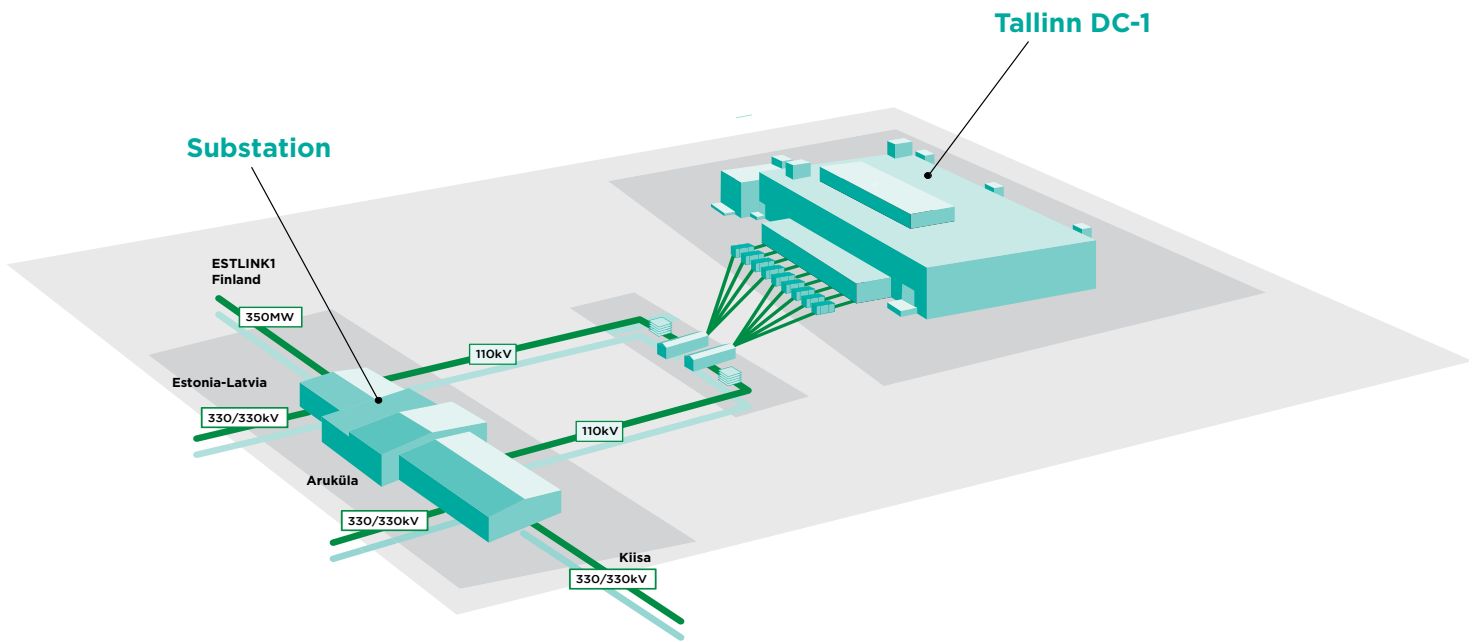
- GDC
- Tele2 Eesti AS
- Telia Eesti AS
- Eesti Lairiba Arenduse SA
- Elisa Eesti AS
- Riigi Infosüsteemi Amet



# Power Features

The power is supplied to the data center through several inputs, which are duplicated by uninterruptible power supplies (UPSs) and backup power generators. Every Private Suite has redundant electrical rooms to ensure power.

- Dual electrical power feed connection (2 × 110 kV AC) from Elering's (TSO) Harku substation (which has 2 × 330 kV AC connections, 6 × 110 kV AC connections, and an ESTLINK-1 DC connection with Finland)
- SIEMENS end-to-end electrical infrastructure and management system
- 2 × 110/20 kV; 31.5 MW; 50 Hz; SIEMENS transformers
- 6 × 20 kV distribution SIEMENS dry transformers
- Up to 6 × 0.4 kV generator - SDMO 1650 kVA
- 2 × 100,000-liter fuel tanks with redundant fuel lines
- Generator capacity and on-site fuel supplies designed to be sufficient for the building to be independently operational for 72 hours at full workload. Refilling starts within 24 hours
- Redundant and modular UPS (A + B feeds) in separate electrical rooms
- Dual overhead busbar distribution system throughout the facility and into data rooms



# Cooling

Cooling plays an important role in shrinking your carbon footprint while allowing more computing power. We are using free air cooling approximately 95% of the year. Free air cooling means that we utilise the cold Nordic air outside to cool the servers (while also reusing the waste heat). The Siemens AI helps us to estimate the need for cooling in the different areas of server rooms and adjust the cool air flows, maximising the energy efficiency.

## Facility:

- Maximum utilisation of free air cooling
- N+1 redundancy in cooling systems
- Cooling systems operate with a low GWP (Global Warming Potential) refrigerant
- Temperature and humidity conditions according to the ASHRAE guidelines for data centers
- Independent cooling modules with chillers, dry coolers, and reserve chilled water tanks
- Redundant coolant water pipeline system which is concurrently maintainable
- Cooling systems have a redundant power supply backed up by UPSs and generators

## Private Suites:

- Siemens AI cooling optimisation (WSCO)
- Cold and hot aisle separation
- All CAH (Custom Air Handler) units are located outside the Private Suite in a separate room
- Cold aisle temperature and pressure controls
- 3×CRAH dedicated units configured N+1 for each Private Suite
- Raised floor





# Core Operating Principles

## We are:

- Reliable. Multiple layers of security and infrastructure redundancy. Currently, 100% uptime.
- Efficient. Target energy efficiency 25% better than the industry average. Tested operational processes.
- Sustainable. Renewable energy, excellent power usage efficiency, and reuse of excess heat.
- Customer-focused. Our goal is to offer the customer long-term value and a solid relationship.





## Sustainability

We keep your data green by using the most advanced technological solutions to achieve a power usage effectiveness (PUE) of < 1.2 (25% better than the industry average). Our facilities are powered by sustainable electricity from renewable energy sources, and we reuse our excess heat. While some data centers will evaporate water to transfer heat away from servers, we use closed water circuits, which means that 100% of the water can be reused. So, our water usage efficiency is 1.0.

With us, your data has the smallest possible ecological footprint while utilising the benefits of secure large-scale data management.

- Top-class PUE
- AI-optimised cooling to preserve energy
- 100% renewable energy
- Free air cooling approx. 95% of the time
- Reuse of excess heat
- Waste management and recycling





## Location

Estonia consistently ranks as a world leader in human capital, digital capability, and ease of doing business. This creates a competitive environment which allows solutions and services to be researched, developed and delivered globally.

#1	#1	98%
globally in tax competitiveness	in number of unicorns per capita	of companies established online

GDC is less than 15 km from Tallinn City center (the capital of Estonia), in a geographically safe location and away from possibly dangerous traffic or production facilities.

- Northern Europe, Estonia — cool Nordic climate
- Very reliable power supply (Estonia is capable of producing its own electricity)
- Low environmental risks
- The data center is situated 43.5 metres above sea level
- Easily accessible for vehicles, and trucks



## Ownership

The majority of the shares of GDC belong to the Three Seas Initiative Investment Fund which is an investment vehicle to finance key infrastructure projects in the Three Seas region (12 countries located between the Baltic, Black, and Adriatic seas – Estonia, Latvia, Lithuania, Poland, the Czech Republic, Slovakia, Hungary, Slovenia, Austria, Croatia, Romania and Bulgaria). The main objective of the Three Seas Fund is to invest in transport, energy and digital infrastructure on the north-south axis in the Three Seas countries. The Fund is cornerstoned by the Three Seas countries' national development finance institutions.

The Three Seas Initiative is designed to facilitate cooperation in the development of energy, transport, and digital infrastructure. The objectives of the initiative are to boost economic growth and the wellbeing of people, to increase Europe's competitiveness, and to achieve energy security, and climate goals by making smart investments.

To meet the objectives, the Three Seas Initiative Investment Fund (3SIIF) was established in 2019. As an international venture, the Three Seas Fund was created under Luxembourg law, which is a renowned fund domicile for international investors. One of the investors in the fund is, among others, the Estonian state.

**Read more:**  
[3siif.eu](https://3siif.eu)

## Three Seas region



Tallinn





## Reference

„All previous solutions had severe limitations. In some ways, a modern, highly reliable data center may be compared to insurance. If you have built up your business on a strong IT foundation, you will be able to cope with the unexpected and sleep better for it.“

### **Andrus Tamm**

Head of Product Development and Technology at SEB



## Available and Connected

With us, you benefit from the highest standards of security, availability, and connectivity while leaving the smallest possible ecological footprint.

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