

# GTS New Data Center

## Short Presentation

### 1. Electrical power

GTS DataCenter is placed in an industrial facility with more than 2 power lines, from independent power stations. Within the complex there are several transformer stations, for redundancy.

GTS' own generator is placed next to the building in an elevated area and has higher nominal power than necessary for 100% DataCenter load.

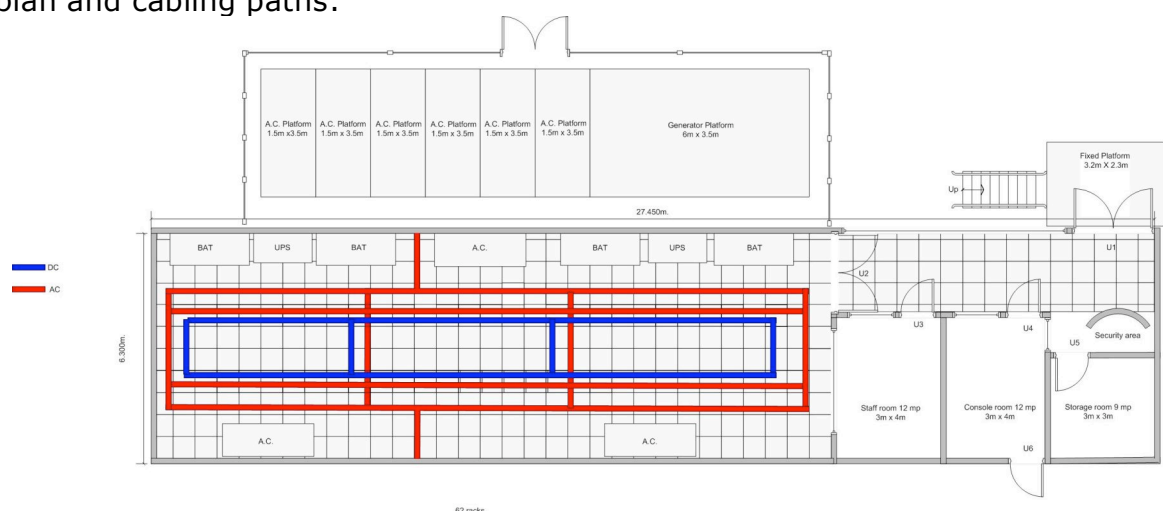
The power cabling inside is done through the raised floor, with separate circuits per sections.

UPS running time is 15min, with 100% DataCenter load. Generator start time is 1 minute. There is fuel provisioned for 48h of continuous generator running.

#### Summary:

- **Installed power: 500 kVA**
- **Generator power: 550 kVA**
- **UPS power: 600 kVA (2 units of 300kVA each).**
- **Available voltages: both 220V and 48V**
- **Circuit breakers: 25, 16 A**

Floor plan and cabling paths:



# Data Center Presentation



## 2. Co-location Area

The access to GTS DataCenter is distinct from the rest of the building and controlled by own security. The authorised customers can use the console room to perform maintenance and all the necessary operations to their server. Within the server area, access is restricted to GTS staff only. The building has its own security team and also on site there are GTS' security agents (provided by a specialised third party subcontractor). Electronic Access control is implemented on site. The DataCenter has 10 camera used for surveillance and also the building's security team monitors a wide array of motion detection sensors at DataCenter's level.

The climate control (temperature and humidity) is done through dedicated air conditioning equipments, with exterior units placed right outside the building in a dedicated elevated area. There are 3 independent AC systems to minimize failure risk.

Fire detection is based on both heat and smoke detectors that are monitored 24x7 by both GTS team on site and building's management team. The fire suppression is automated and INERGEN based, to not harm any equipment in case of deployment.

# Data Center Presentation



## Summary:

- **HVAC:** 3 x 90 kW
- **Fire detection:** heat and smoke sensors, monitored 24/7
- **Fire suppression:** INERGEN
- **Climate control:** own, independent

## 3. Connectivity

The network access to Data Center is provided by two independent fibre optics connections to two GTS POPs. GTS network topology ensures connectivity to RoNIX (Romanian National Exchange) network in at least two points.

GTS could also facilitate access to Data Center through radio or copper if its clients request that.

# Data Center Presentation

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The DataCenter's and customer's connectivity is monitored 24/7 by NOC. Also NOC and DataCenter engineers can perform certain actions at customer's request (equipment inspection, system restart, removable media insertion/removal).

In terms of collocation services, our offer includes rental per rack unit (xU) starting from 1U and also per rack.

Among available technical platforms there are present:

- Dark fibre
- Layer 2 switching equipment
- Ethernet ports: 10/100/1000 Mbps
- 1Gbps FO modules
- GBIC 1000 Base LX/LH interfaces



# Data Center Presentation

## Summary:

- **Data access:** Fibre optics, two independent paths, from two different GTS POPs from the metropolitan ring.
- **Connectivity – IP:** Connected to the GTS Telecom’s IP backbone
- **Connectivity – MPLS:** Connected to the GTS Telecom’s MPLS backbone through redundant links
- **Connectivity – SDH:** Connected to GTS SDH backbone
- **Connectivity – PDH:** Connected to GTS SDH backbone
- **Fibre Infrastructure:** Multiple fibre ducting into data center

## 4. Location



GTS Telecom DataCenter is located in the Electromagnetica building.

Address: 266-268 Calea Rahovei, 5<sup>th</sup> District, Bucharest