

Service name:

COLOCATION SERVICES

1. Definitions



- 1.1. **'Data Centre'** – Telia's building, where the customer is provided with the hosting or use of the Equipment Cabinet or the use of the Equipment Location or the Equipment Shelf;
- 1.2. **'Installation Site'** – the floor space allocated to the customer in the Data Centre to host the Equipment Cabinet;
- 1.3. **'Equipment Cabinet'** – a cabinet for installing Equipment;
- 1.4. **'Equipment Shelf'** – a wall-mounted shelf for installing Equipment;
- 1.5. **'Equipment Location'** – a dedicated area in the Equipment Cabinet for the installation of equipment, whereby, depending on the solution used by the customer, equipment for several customers can be located in the Equipment Cabinet. The height of the Equipment Location is determined by 1 U (1 U = 44.45 mm);
- 1.6. **'Equipment'** – the customer's equipment to be installed in the Equipment Cabinet, Equipment Shelf or Equipment Location as part of the service;
- 1.7. **'Service Zone'** – floor surface in front of and/or behind the Equipment Cabinet for servicing and maintenance of the Equipment Cabinet;
- 1.8. **'Technical Equipment Class'** – the level of technical equipment of the Data Centre.

2. Service description



- 2.1. As part of the service, the customer is provided with the following according to their needs:
 - ✓ Use of a two-way access Telia-owned Equipment Cabinet in a Data Centre of Technical Equipment Class A (A1, A2, and A3), B or C;
 - ✓ Use of a one-way access Telia-owned Equipment Cabinet in a Data Centre of Technical Equipment Class B, C, D, M1 or M2;
 - ✓ Hosting of a two-way access customer's Equipment Cabinet in a Data Centre of Technical Equipment Class A (A1, A2, and A3), B or C at the Installation Site;
 - ✓ Hosting of a one-way access customer's Equipment Cabinet in a Data Centre of Technical Equipment Class B, C, D, M1 or M2 at the Installation Site;
 - ✓ Hosting of the Equipment Shelf in a Data Centre of Technical Equipment Class B, C, D, M1 or M2;
 - ✓ Installation of the Equipment in a two-way access Equipment Cabinet in a Data Centre with Technical Equipment Class A1, A3, B, C, D, M1 or M2;
 - ✓ Installation of the Equipment in a one-way access Equipment Cabinet in a Data Centre with Technical Equipment Class B, C, D, M1 or M2.
- 2.2. Telia will enable the customer to use the service and will provide the customer with the Installation Site, the Equipment Cabinet, the Equipment Shelf or the Equipment Location that is the subject of the service (hereinafter also the 'Subject of the Contract') as of the activation date stated in the Contract.

3. Technical specifications of the Data Centre



- 3.1. The technical characteristics of the Data Centres by the Technical Equipment Class are

set out in the Annex to these Terms of Service.

3.2. The general principles of technical equipment are the following:

- ✓ Telia will carry out the technical maintenance of the general electrical device of the Data Centre.
- ✓ The Installation Site will be provided with the power supply and fuse specified in the Contract.
- ✓ The grounding conductors will end with a grounding bar near the cabinet line.
- ✓ The communication cables are taken to an Equipment Cabinet and connected by Telia.
- ✓ The customer must provide the Equipment Cabinet with a power cable of at least 3 m length.
- ✓ All connections and technical maintenance inside the Equipment Cabinet will be carried out by the customer.

3.3. Depending on the location and technical equipment of the specific Data Centre, Telia will provide the following methods of power supply to use the service.

- ✓ Guaranteed power supply 230 V AC.
 - The guaranteed power supply consists of a two-way power supply from the electricity service provider's system and Telia's diesel generator, which will start in the event of an external power failure;
 - Voltage parameters in the electricity service provider's system: nominal voltage 230 V with tolerances of $\pm 10\%$ of nominal voltage and frequency 50 Hz with tolerances of ± 0.5 Hz or ± 1 Hz;
 - The duration of a single consecutive power cut will not exceed 5 min.
- ✓ Uninterruptible power supply through UPS 230 V AC.
 - Telia's uninterruptible power supply – UPS – has been added to the guaranteed power circuit;
 - The UPS ensures uninterruptible power supply in the event of a guaranteed power outage for up to 10 minutes (Telia's diesel generator starts within 5 minutes).
- ✓ DC power supply 48 V.
 - Telia's rectifier has been added to the guaranteed supply chain;
 - The rectifier's output voltage is 48 V, with a voltage swing of 43...57 V;
 - The batteries supplied with the rectifier ensure uninterruptible power supply in the event of a guaranteed power supply cut for up to 1 hour.

4. Client's obligations upon using the Service



4.1. When using the service, to keep the Data Centre and all areas used by the customer in good order and use them in a purposeful and well-maintained manner in accordance with the conditions;

4.2. to ensure that the Equipment Cabinet and the Equipment installed in the Equipment Cabinet are assembled, disassembled, and the Equipment is operated at the Installation Site in such a way that it does not cause interference to Telia's or third parties' equipment located in the Data Centre;

4.3. to connect the electrical wiring (power and grounding conductors) to the Equipment in the Equipment Cabinet only in accordance with the Contract, the Terms of Service, and applicable law;

4.4. to take the necessary measures to ensure the security of the Equipment (including, if necessary, locking the Equipment Cabinet);

4.5. to inform Telia in writing of the types, number, and current consumption of all Equipment to be installed in the Equipment Cabinet;

4.6. not to install additional air conditioning or similar climate control equipment in the Data

Centre;

4.7. to immediately notify Telia of any accident, fire, etc. in the Data Centre, taking immediate measures to remedy the consequences;

4.8. to comply with the access rules and internal rules of the Data Centre (if any);

4.9. to notify changes to the list of persons who have access rights to the customer's Equipment Cabinet and Equipment.

5. Construction, installation, and maintenance in the Data Centre



5.1. The installation, disassembly, service, and maintenance service of the cables and equipment outside the Equipment Cabinet in the Data Centre will be carried out by Telia or a person authorised by Telia.

5.2. The installation, disassembly, service, and maintenance service of the cables and the Equipment inside the Equipment Cabinet will be carried out by the customer, taking into account the Terms of Service.

5.3. Any installation, disassembly, service, and maintenance service required to connect the customer's Equipment to Telia's or third parties' communications network or equipment in the Data Centre will be carried out by Telia or a third person appointed by Telia.

5.4. If the customer requires the assistance of Telia's specialists to carry out work in the Data Centre, the customer will notify Telia of the planned work and their duration at least 3 working days in advance and, if necessary, submit a written request for a vehicle access permit. The work will be carried out for an additional fee in accordance with the Price List; if necessary, the time of execution of the work and other conditions will be agreed separately between the parties.

5.5. Telia notifies the customer at least 3 working days in advance of scheduled work to be carried out in the Data Centre, and of unscheduled (emergency) work as far as possible before the start of the work.

6. Conditions relating to the termination of the Contract



6.1. Upon the termination of the Contract, the customer will release the Subject of the Contract (i.e. the Equipment Cabinet, the Installation Site, the Service Zone or any other area in the Data Centre used by the customer under the Contract) within 3 working days of the termination of the Contract, handing them over to Telia in the same condition in which the customer received them, subject to normal wear and tear.

6.2. If the customer fails to release the Subject of the Contract within the term specified in the conditions, Telia has the right to dismantle the Equipment Cabinet and the Equipment. The costs of dismantling and storing the Equipment Cabinet and the Equipment will be borne by the customer, and these costs must be reimbursed before the Equipment Cabinet and the Equipment are handed over to the customer. The Equipment will be stored by Telia for 2 months from the termination of the Contract. If the customer fails to redeem their Equipment Cabinet and Equipment within the aforementioned period, Telia will not be obliged to store them and the customer will not be entitled to claim compensation for any resulting losses.

7. Liability for activities in the Data Centre



7.1. The customer is independently and fully liable for any damage caused to Telia or third parties by their actions or omissions.

7.2. The customer undertakes to indemnify Telia for any damage caused by the customer to Telia's or third parties' systems and equipment located in the Data Centre as a result of the customer's breach.

7.3. The customer undertakes to refrain from unauthorised installation of cables for the purpose of establishing connections to Telia's or third parties' communication networks or equipment, dismantling of cables for the purpose of closing the aforementioned connections, or any other service and maintenance work on cables necessary for the connection of Telia's or third parties'

communication networks or equipment.

- ✓ Telia will have the right to disconnect any tampered communication cables connecting the Equipment in the Equipment Cabinet to Telia's or any third party's communication network and/or equipment.
- ✓ In the event of a breach of this clause, the customer will be liable for any damages, including to third parties, arising from the disconnection by Telia.

7.4. Contractual penalties for non-compliance are set out in the Price List.

7.5. For other liability issues, the parties will be guided by the Rules of IT Services.

8. Service fee



8.1. The amount payable for the service depends on the volume of services used during the billing period. The service charges are described in the Price List.

8.2. Billing for services starts from the moment the customer has the possibility to use the service or from the date indicated in the Contract.

9. Applicable conditions



9.1. In addition to the Contract and these Terms of Service, the parties will be governed in their relations by Telia's General Terms and Conditions, Rules of IT Services, and Price List.

9.2. Access and movement within the Data Centre will be in accordance with the Data Centres' access rules.



Annex. Technical Description of the Data Centre

	Class A3	Class A2	Class A1	Class B	Class C	Class D	Class M2	Class M1	
Premises	The Data Centre is dust-free, protected from the effects of active environments					Premises are not specifically adapted to host the customer's equipment			
	Structures enclosing the rooms comply with fire resistance class EI60 (non-combustible building structures)					There is no common specification	Structures enclosing the rooms comply with fire resistance class EI60 (non-combustible building structures)		
	The Data Centre is located in a seismically inactive area								
	The Data Centre is windowless, with a height of h ≥ 3.5 m			The Data Centre is windowless, with a height of h ≥ 2.3 m			The Data Centre is windowless, with a height of h ≥ 2.5 m		
	Double floor (gap 600 mm), with a load-bearing capacity of at least 500 kg/m². The floor tiles are removable and the concrete floor underneath is dust-free.			Floor load-bearing capacity of at least 500 kg/m²					
Supply of electricity	Bilateral power supply 3 x 400/230 V AC 50 Hz from the electricity supply network;			Unilateral or bilateral power supply 3 × 230/400 V AC 50 Hz from the electricity supply network			Unilateral power supply 3 × 230/400 V AC 50 Hz from the electricity supply network		
	The generator provides 24 h power supply					Possibility to connect to a Telia towed generator or stationary generator		No back-up capacity	
	Surge protection at 400 V AC side;								
	Signals to the Control Centre: - disruption of the main power supply feeder - launching of the generator - generator diesel heating level - generator emergency signals - 48 V DC power supply malfunctions - UPS malfunctions the signals are stored as a *.log file for 12 months.			Signals to the Control Centre: - disruption of the main power supply feeder - launching of the generator - generator emergency signals - 48 V DC power supply malfunctions the signals are stored as a *.log file for 12 months.			Signals to the control centre: - disruption of the main power supply feeder - 48 V DC power supply malfunctions the signals are stored as a *.log file for 12 months.	Signals to the Control Centre: - disruption of the main power supply feeder - launching of the generator - generator diesel heating level - generator emergency signals - 48 V DC power supply malfunctions the signals are stored as a *.log file for 12 months.	Signals to the control centre: - disruption of the main power supply feeder - 48 V DC power supply malfunctions the signals are stored as a *.log file for 12 months.
	48 V DC power supply, batteries 2 × 1 h								
Additional equipment options:	Uninterruptible power supply 230 V AC via UPS – 10 min					Where possible, an uninterruptible	No uninterruptible power supply capacity		

			230 V AC power supply via UPS will be built	
Potential equalisation system	Potential equalisation system connected directly to the building's main grounding bar. The shielding of equipment and cables is connected to the potential equalisation system. Grounding resistance $\leq 1 \text{ W}$.	Potential equalisation system connected directly to the building's main grounding bar. The shielding of equipment and cables is connected to the potential equalisation system. Grounding resistance $\leq 4 \text{ W}$.	Potential equalisation system connected directly to the building's main grounding bar. The shielding of equipment and cables is connected to the potential equalisation system. Grounding resistance $\leq 10 \text{ W}$.	
Climate conditions and equipment	Cool air between the floors at $15\text{--}20 \text{ }^{\circ}\text{C}$	General room temperature $21 \pm 5 \text{ }^{\circ}\text{C}$		General room temperature $+10\text{...}+35 \text{ }^{\circ}\text{C}$
	Relative humidity $50 \pm 30\%$	Relative humidity $15\text{...}80\%$		
	The ventilation and air-conditioning system is general for the whole room		The ventilation system is general for the whole room	If the ventilation system is in place, it is general for the whole room
	Overpressure in the room caused by ventilation equipment 20 Pa		Overpressure in the room caused by ventilation equipment (if any) $20\text{--}50 \text{ Pa}$	
	Air conditioners are equipped with EU 5 class filters	Air conditioners are equipped with EU 5 class filters		With EU 4 or 5 class with filters, depending on the ventilation unit
	Signals to the control centre: <ul style="list-style-type: none"> - technical condition of the air conditioners: Level I (warning) and Level II (emergency) - pump emergency - coolant level - moisture leakage (sensors raised under the floor) - general room temperature ($23 \pm 3 \text{ }^{\circ}\text{C}$) The signals are stored as a *.log file for 12 months.	Signals to the control centre: <ul style="list-style-type: none"> - general room temperature $\geq 30 \text{ }^{\circ}\text{C}$ - malfunction of the air conditioning system; The signals are stored as a *.log file for 12 months.		Signals to the control centre: <ul style="list-style-type: none"> - general room temperature $\geq 35 \text{ }^{\circ}\text{C}$ - malfunction of the air conditioning system. The signals are stored as a *.log file for 12 months.

Lighting	General illumination level in equipment cabinet spaces – 500 lx 1 m from the floor		
	Emergency luminaires with batteries 1 h		No emergency luminaires with batteries as a rule
Fire safety	Fire protection signalling devices;		No fire protection signalling devices
	Automatic gas shut-off system	No automatic gas shut-off system	
	Primary fire-fighting equipment		No primary fire-fighting equipment
	Security system alerts sent directly to the control centre of the security company	Security system alerts sent directly to the control centre of Telia	No security system
Security system (integrated security and access system)	Security system with video cameras (outdoor and indoor)	Security system	No security system
	Locked security doors		Locked doors
	Customer locks their Equipment Cabinets themselves		
	24-hour manned security for the whole building	No manned security	
	Security system alerts sent directly to the control centre of the security company; video recordings are stored for at least 90 days.	Security system alerts sent directly to the control centre of Telia	Door opening alerts directly to the control centre of Telia

