

# ČDT-PRONÁJEM VLÁKEN SERVICE DESCRIPTION



## of ČD - Telematika a.s.

Company ID: 614 59 445, registered office at Pernerova 2819/2a, Praha 3

Incorporated in the Commercial Register kept by the Municipal Court in Prague, Section B, File 8938

### 1. Opening provisions

- 1.1. This Service Description ČDT-PRONÁJEM VLÁKEN defines technical, operating and organisational details for the provision of the service ČDT-PRONÁJEM VLÁKEN (hereinafter, the "Service"), which allows provision of unlit optical fibres for use in electronic communications networks.
- 1.2. Pursuant to Act no. 127/2005 Coll., as amended, the Service ČDT-PRONÁJEM VLÁKEN consists in rental of electronic communications equipment.
- 1.3. The provider of the Service is ČD - Telematika a.s., with its registered office at Pernerova 2819/2a, 130 00 Praha 3, IČ 614 59 445, registered in the Commercial Register maintained by the Municipal Court in Prague, Section B, entry 8938 (hereinafter, the "Provider"), which organises provision of services to third parties ("Participants") in accordance with legal regulations in force.
- 1.4. This Service Description complements and expands on the provisions of the General Terms and Conditions for Provision of Services issued by the Provider (hereinafter, the "GTC") and any interpretation of this Service Description and terms that it uses have to be based on the provisions of the GTC.

### 2. Subject matter of the Service

- 2.1. Based on the Contract and to its extent, the Provider provides the Participant with unlit single-mode optical fibres in the Provider's networks terminated in optical connectors in an optical distribution frame.
- 2.2. The fibres are designed for use in electronic communications networks.
- 2.3. The Service is provided 24 hours a day, 7 days a week and 365 days a year, with the exception of the Scheduled Maintenance Time and the periods of Authorised Service Provision Interruption.
- 2.4. The Participant is authorised to use the fibres for communication purposes (information transmission) in a way that does not disturb other Participant's service and damage the Provider's technical equipment.
- 2.5. The Provider grants its approval to connection of fibres provided with the Participant's other fibres.

### 3. Technical and operating parameters of the Service

- 3.1. Data on each service, notably the location of end points, number and length of fibres and service quality class, are shown in the respective Technical Specification.
- 3.2. The fibres are single-mode (SM) and conform to recommendations of ITU-T G.652.
- 3.3. Geometrical properties:

Mode field diameter range at 1310 nm	µm	8.8– 9.6
Cladding diameter	µm	125 ± 1
Primary protection diameter	µm	245 +4/-5
Mode field non-circularity	%	≤ 6
Non-circularity of cladding	%	≤ 1
Core/cladding non-concentricity	µm	≤ 0.5
Cladding/protection non-concentricity	µm	≤ 15

- 3.4. Optical properties

Cut-off wavelength of fibre in installed cable	nm	$\lambda_{cc} < 1280$
Attenuation +- maximum between 1285 - 1330 nm	dB/km	0.38
Attenuation +- maximum at 1550 nm	dB/km	0.20
Chromatic dispersion between 1285 – 1330 nm	ps/nm.km	≤ 3.5
Chromatic dispersion at 1550 nm	ps/nm.km	≤ 18
Polarization mode dispersion	ps/ $\sqrt{\text{km}}$	≤ 0.2

- 3.5. The optical cables contain 36 or 72 fibres, depending on the cable line design.

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- 3.6. Each fibre is terminated in a separate optical connector in an optical distribution frame (ODF).
- 3.7. The interface for Service handover is the optical connector E2000/APC located inside an optical distribution frame (ODF).
- 3.8. The handover report includes:
  - 3.8.1. measurement report demonstrating continuity of each fibre and actual fibre attenuation as a result of direct measurement;
  - 3.8.2. measurement report demonstrating continuity of each fibre, fibre attenuation determined by OTDR and readings of other optical parameters measured.
- 3.9. Connection to fibres in an optical distribution frame is only possible using an optical patch cord (jumper) with an E2000/APC connector. Connection methods that would lead to damage or degradation of connectors, cables, distribution frames or fibres are prohibited.
- 3.10. An integral component of the Service is periodic performance of visual inspections of cable lines, optical distribution frames and connecting patch cords according to the Provider's schedules.
- 3.11. An integral component of the Service is periodic (at least once a year) fibre continuity and fibre optical parameter measurement by the Provider.
- 3.12. An optional component of the Service is the ability to use reserve fibres in the event of a service failure until resumption on original fibres after the failure.

#### **4. Guaranteed Service parameters**

- 4.1. The basic contractual parameters of the Service are:
  - service availability and integrity;
  - procedures in the event of service unavailability.
- 4.2. The Service is provided in SLA quality classes.

#### **5. Other arrangements**

- 5.1. The Provider is required to set up and provide the service for the Participant under the agreed terms providing that the Participant's Point is properly prepared for location, installation and configuration of Electronic Communications Equipment according to contractual documents and their annexes, including having all necessary administrative or other required permits, and the Participant pledges to provide the Provider with all necessary cooperation to that end.
- 5.2. In the case of change to the Service parameters based on a request of either Party, the Parties shall sign a new Technical Specification corresponding to the requirement for change to the Service parameters.
- 5.3. The procedure for resumption of Service provision or start of Service provision after a change to its parameters is the same as that for initial Service setup.
- 5.4. Based on the Provider's communicated instructions and requirements, the Participant pledges to provide, at its own expense, the Provider will all necessary cooperation for setting up the Service, performance of trial operation and its proper provision in accordance with contractual documents, including resumption of provision following an interruption or parameter change.
- 5.5. The Service provision shall end on the day of termination of the Technical Specification. In the event of termination of the Technical Specification by notice, the Service provision shall end on the expiry of the notice period.
- 5.6. The Participant pledges to make sure that the Service and the Electronic Communications Equipment are used in accordance with legal regulations of the Czech Republic and not used for purposes in contradiction with law or good manners or otherwise misused.
- 5.7. The Participant is liable for indemnification for any costs, damages or other claims that may be raised or made against the Provider by a third party in connection with the Participant's use of the Service in contravention of the Contract or the GTC.
- 5.8. The Provider is authorised to halt the Service provision if the Participant violates any provision of the Framework Agreement and fails to make remedies within the period set by the Provider in spite of the Provider's written notification. In the event of such a halting of Service provision, the Participant is required to pay the Provider a contractual penalty corresponding to the amount of Service price that the Participant would be required to pay the Provider if the Service provision were not halted.



## 6. Common and final provisions

- 6.1. This Service Description and the Provider's and Participant's rights and obligations arising herefrom are governed by the legal system of the Czech Republic.
- 6.2. Should any provision(s) of the Framework Agreement, Service Description or GTC be regarded as unlawful, invalid or unenforceable, such unlawfulness, invalidity or unenforceability shall not concern the other provisions, which shall be construed as if such unlawful, invalid or unenforceable did not exist. The Parties agree that any unlawful, invalid or unenforceable provisions will be replaced with lawful, valid and enforceable provisions that are the closest to the meaning and purpose of this Service Description.
- 6.3. The Service Description enters into force and effect on the date of the Technical Specification.