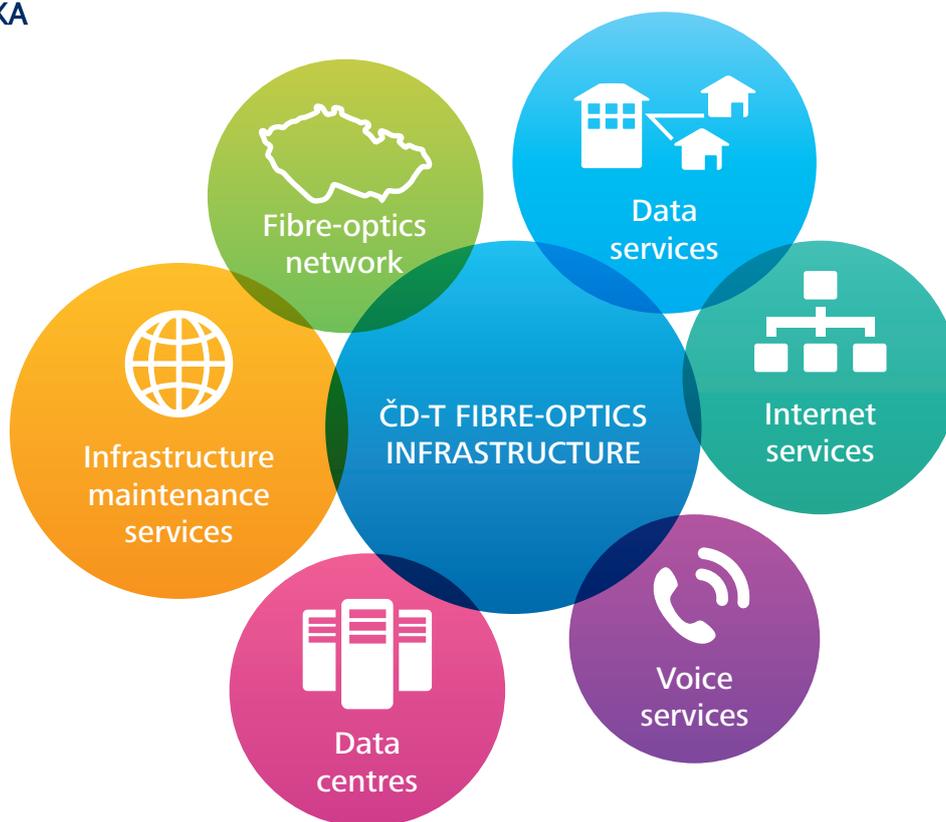# ČD-TELEMATIKA

A RELIABLE PARTNER FOR ICT

Company Profile

ČD - Telematika provides Internet, data and voice services. It also carries out construction projects and operates and services various components of telecommunication infrastructures, including complex ICT projects. The company portfolio also includes additional services with added value including contact centre services, system integration, data diagnostics and analysis or cyber security. ČD - Telematika utilises geographically independent data centres equipped with high level security systems and also provides 24/7/365 customer support services.

The company owns the second largest fibre-optics infrastructure in the Czech Republic – 3,500 km long – on which it operates metropolitan networks in 26 cities, 500 access points as well as 25 specialized servicing workstations.

The biggest assets of ČD - Telematika are its exceptionally qualified employees and know-how. The company holds several quality certificates such as ISO and AQAP 2110, and NBÚ certification and it is also a member of various professional associations such as the CZ.NIC, the NIX.CZ, and others. The company has joined the FENIX project with the intention to provide safe Internet in the Czech Republic.

Since 1994, the company has become an important supplier of wholesale telecommunication services on the Czech ICT market. Services with guaranteed SLA have already been positively verified by civil service customers, private corporations, national operators and local providers of Internet connectivity services.

ČD-TELEMATIKA

Fibre-optics network

Data services

ČD-T FIBRE-OPTICS INFRASTRUCTURE

Infrastructure maintenance services

Internet services

Data centres

Voice services

Offered Services

ČD - Telematika (ČD-T) offers connection options through its own extensive fibre-optics infrastructure. DWDM, SDH and IP (IP MPLS, L2) technologies operated within this infrastructure allow the company to offer a wide variety of high-quality telecommunication services. Thanks to the unique know-how, the company not only leases fibre-optics infrastructure but also designs, constructs, operates and services them.

ČD-T offers high-quality and reliable Internet connection with option of the Internet connectivity security incident monitoring with own Anti-DDoS solution and direct connection to the national peering NIX.CZ node.

Thanks to the ČD-T voice service, local Internet and ICT service providers may extend their portfolio by land lines without a need to invest in expensive technology. They can also offer a free information line service to their clients. ČD-T connects branch switchboards of corporate customers to the public telephone network.

Three geographically independent data centres of ČD - Telematika meet high safety criteria – the latest is built in TIER III standard. They use state-of-the-art technologies, naturally including connection to fibre-optics network from several independent directions. Continuous operation is monitored by highly trained and experienced specialists.

Thanks to our highly experienced employees and know-how, ČD-T offers a wide spectrum of services from design services, construction of telecommunication infrastructures to implementation and operation including maintenance services and outsourced auxiliary services. With high expertise, ČD-T secures not only transfer, voice and data networks but also cable, power supply, security or monitoring systems. Offered services also include planning and evaluation of servicing and maintenance.

ČD - Telematika has its own customer centre which receives requests from end-users and operation centre. Thanks to highly skilled operation and servicing employees and support for its own IT systems, ČD-T is able to cover the entire spectrum of requirements from owners of telecommunication infrastructures.

SELECTED REFERENCES:

AŽD Praha s.r.o.	ČD - Informační Systémy, a.s.	Česke Radiokomunikace a.s.	KABELOVÁ TELEVIZE CZ s.r.o.
CESNET, zájmové sdružení právnických osob	ČD Cargo, a.s.	Internet Mall, a.s.	Ministerstvo dopravy ČR
	České dráhy, a.s.	ISP Alliance a.s.	Ministerstvo vnitra ČR

Internet of things

Cyber security

Control systems

SERVICES WITH ADDED VALUE

Project management

Data diagnostics and analysis

ETCS and GSM-R

System integration

Synergy of Knowledge and Experience

The internal project management of ČD - Telematika is based on PRINCE2® methodology, which allows to deliver solutions that fully respect customer requirements and technological capabilities while taking into account the required quality and budget.

Control systems made by ČD-T can be used to control security, fire and traffic systems such as fire ventilation, adjustable traffic signs, measuring instruments, camera systems, EPS, EZS, including connection of all these components into one unit and connection to dispatch stations. Affiliation-based services include projects focusing on engineering/utility networks, development of user software applications for traffic serviceability or monitoring and operation centres.
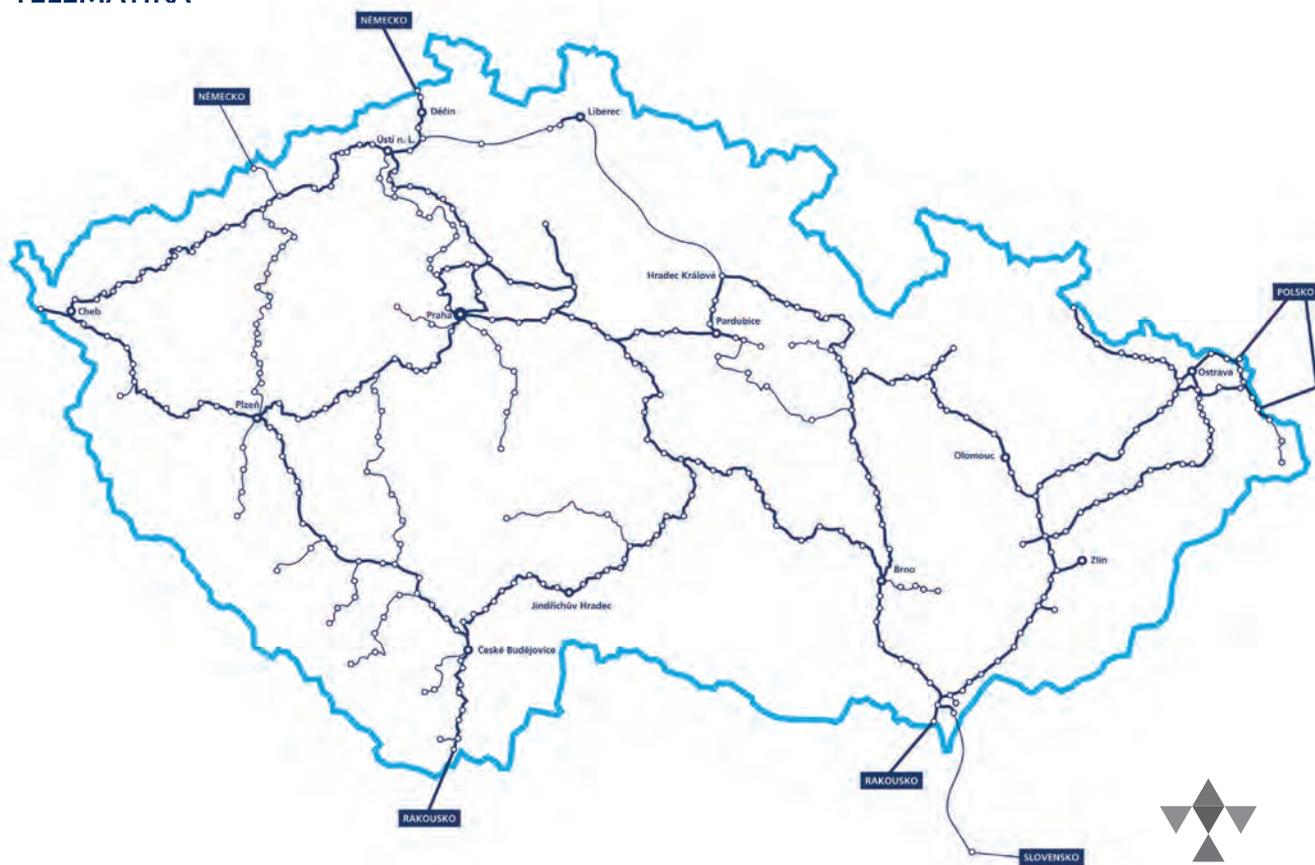
Unique know-how allows ČD-T to offer sophisticated solutions designed to measure the quality of routes which connect railway cars with sophisticated sensory technology (photometry, laser technology). On-line data processing allows instant identification of possible defects on the given transport route, followed by a rectification request based on priority and severity of the defect. This allows customers to plan preventive maintenance at the most defect-prone areas, thus avoiding possible exclusions and associated extra costs.

ČD - Telematika provides extensive services in the area of information security, from initial investigation all the way to implementation of complex security systems in line with the given control systems and legislation related to cyber security or protection of classified information. Based on customer needs ČD - Telematika provides extensive security services in terms of physical, communication and information protection requirements.

ČD - Telematika participates in innovative solutions related to the Internet of Things (IoT). It helps cities and municipalities to optimise parking places or to lower level of traffic load.

ČD-T is able to supply and operate specialized SW solutions dealing with transportation telematics, logistics data repositories, and extensions of monitoring and surveillance systems for ICT infrastructure. System integration services include complex delivery of ICT infrastructure for transit systems (railways, roads), including hosting services primarily offered to the civil service.

ETCS and GSM-R projects are established with support of the extensive servicing background. Delivery of stationary vehicle and mobile communication systems (security systems, radio stations, Simplex, GSM-R) realizes from solution design and implementation to warranty and post-warranty service in 24/7 format and SLA guaranteed.

Národní agentura pro komunikační a informační technologie, s.p.
Plzeňsky kraj

RETE internet, s.r.o.
RIO Media a.s.
Ředitelství silnic a dálnic ČR

Správa železnic, státní organizace
Statutory city of Brno
T-Mobile Czech Republic a.s.

TTC MARCONI, s.r.o.
Vodafone Czech Republic a.s.
WEDOS Internet, a.s.

ČD-TELEMATIKA

| Fibre-optics network | Access point | Metropolitan network |

FENIX
connecting trusted networks

OUR OWN PATH TO CONNECTION

ČD - Telematika owns the second largest fibre-optics network in the Czech Republic

Fibre-optics infrastructure in the Czech Republic is 3,500 km long and has transfer capacity of up to 80 x 10 Gbps. To provide Ethernet and Internet services ČD-T operates IP network with circular topology which guarantees high level of services availability. Back-bone points are connected by capacity of 2 x 20 Gbit/s. IP network is connected into NIX by two independent lines, each with capacity of 100 Gbit/s; for foreign connections it has capacity of 4 x 20 Gbit/s. IP network fully supports services with IPv6 protocol and is used, among other things, for transferring IPTV signal.

Customer support centre and supervision services are available 24 hours a day, 7 days a week. Customers may find service stations at 25 locations in Czech Republic. Services are guaranteed under SLA terms.

ČD - Telematika has met the demanding technical safety parameters necessary to join the FENIX project, which originated on the grounds of the NIX.CZ association. Members of FENIX, major providers of connection and content, are preparing for extreme situations in the effort to guarantee secure Internet traffic in case of cyber-attacks.

www.cdt.cz ČD - Telematika a.s. | Pod Táborem 369/8a | 190 00 Prague 9 | cdt@cdt.cz