

ROMTELECOM
carrier services



Service Description

Leased Lines



Romtelecom

Carrier Relations Corporate Group

Phone: +40 21 400 5001

Fax: +40 21 400 5009

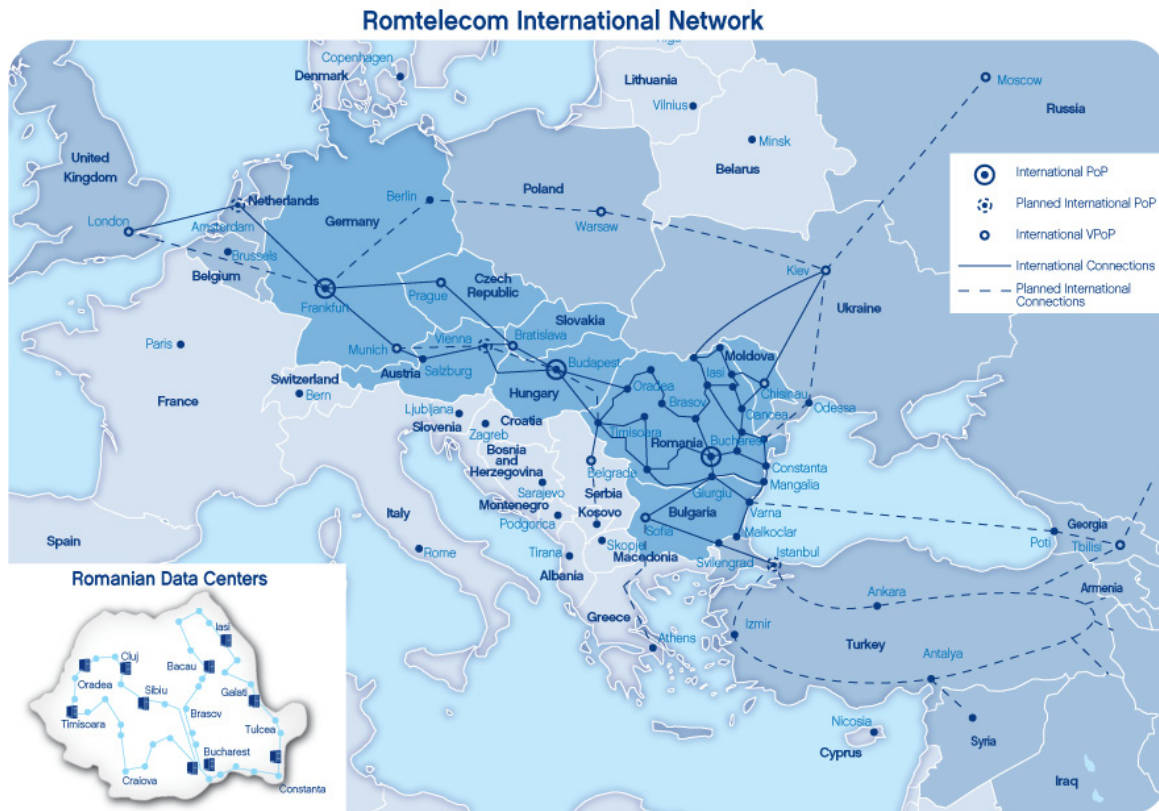
Email: carrierservices@romtelecom.ro

Web: www.romtelecom.ro/en/carrier-services

Address: Palatul Telefoanelor Building, 35-37 Victoriei St.
Bucharest, Romania

Romtelecom Carrier Services

Romtelecom Carrier Services is the division dedicated to telecom operators and wholesale customers in Romania and abroad, offering a complex portfolio of data, internet, infrastructure, voice transit and termination. Acting on the local and regional market, with an extensive network, interconnections, and strategic partnerships with renowned global operators, Romtelecom is a reliable partner in Central and Eastern Europe.



Leased Lines – service description

The Leased Lines service provides a permanent, transparent, dedicated point-to-point connectivity between two customer's points, using Romtelecom's transport network.

Benefits:

- **Reliability:** the Leased Lines service provides a reliable connection, for a fixed monthly fee, throughout the entire contract period;
- **High security:** as the Leased Lines service provides a dedicated line, exclusively designed for each customer, the service is the best choice for long-term connections, requiring a fast and efficient communication channel between two fixed locations;
- **Permanent accessibility:** the Leased Lines service offers a permanent connection for data delivering at maximum capacity;
- **Multiple options:** a large variety of services type is available depending on speed, volume and type of data delivered; with a high granularity level for transmission speeds, the service is suitable for all applications types;
- **Budget control:** the required budget for the Leased Lines service is easily predictable.



Basic functionalities

The Leased Lines service provides a secure and private communication between two end points. A leased line may be used on a continuous basis to transmit large amounts of data at the maximum rate allowed by the line.

The service assures a point-to-point connectivity with a permanent, dedicated, transparent and bidirectional channel, with a defined interface and bandwidth between the customer's end points.

Depending on the leased line end points location, two types of service instance are available:

- **National Leased Lines** – point-to-point connectivity between two locations, within Romania, on customer site;
- **International Leased Lines** – point-to-point connectivity between two locations, at least one located in Romania. The international service provisioning is based on the cooperative use of a shared infrastructure, where one part of the service is delivered by Romtelecom and the second one is delivered abroad through an interconnection agreement.

To transport leased line traffic, different technology can be used inside Romtelecom network: PDH/SDH/DWDM.

Depending on the transport and access technology, the following **bandwidths** are available:

Bandwidth [Mbps]	Transport Delivery Technology					Access Technology	
	Digital					Copper	FO
	NewBridge	PDH	SDH	SDHoDWDM	DWDM	HDSL	Transport over FO
0.256	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
0.512	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
34	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
155	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
622	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2,500	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10,000	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The **back-up solutions** available for Leased Lines services are:

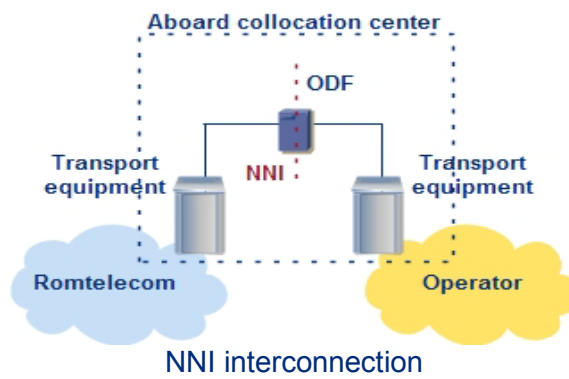
- Back-up in the access network – the second circuit for the customer;
- Port protection at entrance in the SDH/DWDM transport network;
- Path protection on transport technology.



Service components and technical architecture

The Leased Lines service provisioning involves the following components:

- ✓ **CPE:** including provisioning, configuration and management is not included in the basic offer, yet available upon request;
- ✓ **Interfaces;**
- ✓ **Access line:** a dedicated, permanent point-to-point physical connection, which connects the NTU/CPE from the leased line end-point to the Romtelecom network element, part of the transport network. Based on transfer rate and transport technology, the access line uses copper cable or fiber optic, as physical medium;
- ✓ **Transport network:** the DWDM, SDH and PDH technologies are used within the Romtelecom transport network, in order to provide the Leased Lines service. The media used for implementations is optical fibre
- ✓ **NNI (Network-to-Network Interface)** – only for international service: a physical interconnection between Romtelecom and partner operator's network realised in an abroad collocation centre.



The technical architecture depends on the service type:

