

ROMTELECOM
carrier services



Service Description

IP Transit



Romtelecom

Carrier Relations Corporate Group

Phone: +40 21 400 5001

Fax: +40 21 400 5009

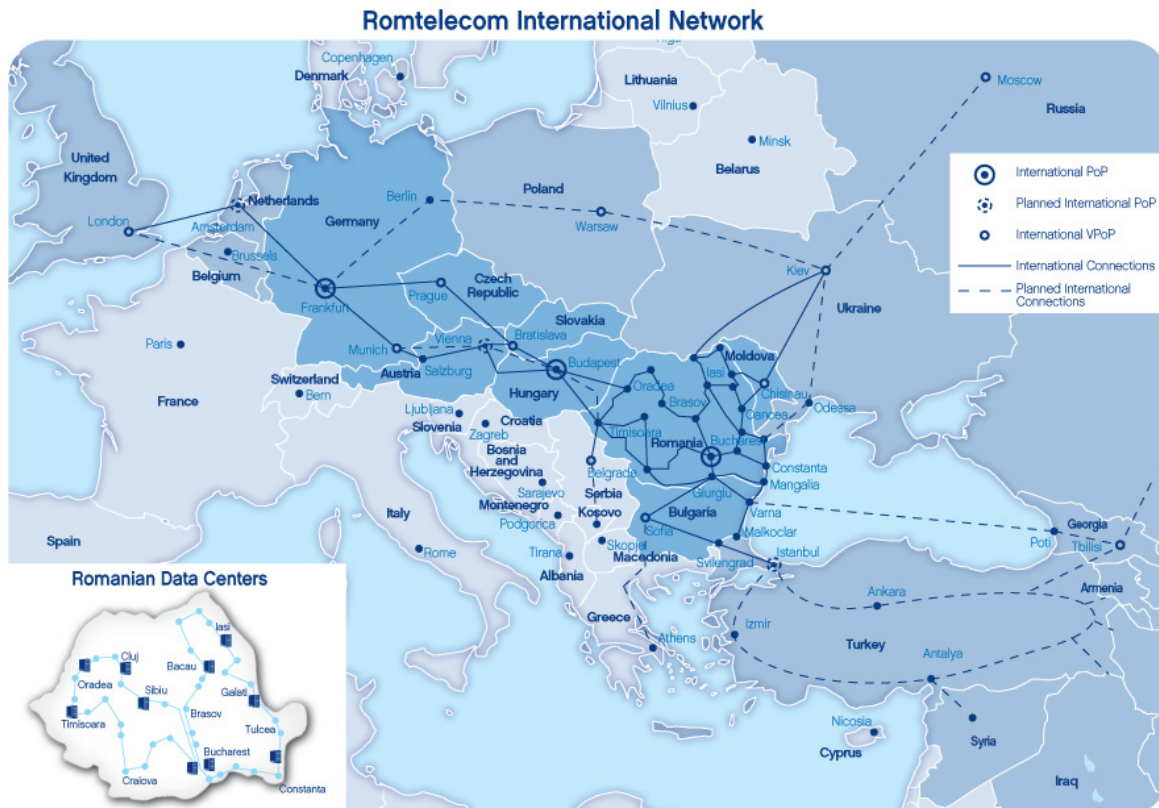
Email: carrierservices@romtelecom.ro

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.



IP Transit – service description

The IP Transit service provides dedicated access to Romtelecom IP network and other national, regional, or global IP networks. The service is generally available through a BGP session between Romtelecom and ISP/OLO's routers. It is also possible to use the static routing for small ISPs' networks that do not scale often.

The service can be provided at a Romtelecom PoP/eXchange node, into a Telehouse or at OLO/ISP's main PoP/eXchange node.

The IP Transit family includes the following services:

- IP Transit
- IP Transit Backup
- IP Transit Burstable



Benefits:

- Best routes to Internet;
- Cost savings by bundling IP services on the same port;
- Scalable, efficient and flexible solutions of IP traffic management;
- Private connections using optical fiber in customer location or in colocation centers;
- Flexible bandwidth;
- Billing by usage

IP Transit features

- Connectivity through dedicated port, over dedicated FO access or interconnect link, using the Ethernet/SDH access technology;
- Available bandwidths: between 5 Mbps and 10 Gbps;
- Access via Romtelecom IP network to other IP networks, with the following options:
 - ✓ **IP Transit National:** access to Romanian IP networks, including Romtelecom IP network, Romtelecom's peers and downstream customers within Romania;
 - ✓ **IP Transit Regional:** access to Regional IP networks, including Romtelecom IP network, Romtelecom's peers and downstream customers within region;
 - ✓ **IP Transit Global:** access to global Internet network;
- Two options for the service level:
 - ✓ Standard SLA - by default;
 - ✓ Premium SLA;
- Routing features:
 - ✓ Routing protocol
 - By default, BGPv4;
 - Static routing will apply when customers require an IP Address range from Romtelecom's pool, as part of the service.
 - ✓ Routing information – options, at choice:
 - Default route;
 - National Routing Table (NRT), Regional Routing Table (RRT), Full Internet Routing Table (FIRT) transfer;
- IP Addressing
- Traffic monitoring through a secured web-site.

The IP Transit service will be charged according to bandwidth, service level and routing features, regardless of the traffic downloaded or uploaded.

IP Transit Backup features

The IP Transit Backup service provides dedicated access to Romtelecom IP network and other national, regional, global IP networks. The service is ideal for customers that are looking to cost effectively secure the IP Transit service against the failures of the main transport route.

The IP Transit Backup service has a time-based usage fee.

Available bandwidths:

- 100 Mbps
- 1 Gbps

IP Transit Burstable features

The IP Transit Burstable service provides dedicated access to Romtelecom IP network and other national, regional, global IP networks. The service is ideal for customers that need a cost effective solution to Internet access.



The IP Transit Burstable service has a flat fee for the committed bandwidth, and a volume-based usage fee component. The 95% rule will apply.

Available bandwidths:

Port	Minimum CIR	Max traffic value
1 Gbps	200 Mbps	1 Gbps
10 Gbps	2 Gbps	10 Gbps

Service components and technical architecture

The IP Transit service provisioning involves the following components:

- ✓ CPE: including provisioning, configuration and management is not included in the basic offer, yet available upon request;
- ✓ The Ethernet/SDH access line/physical link between the closest Romtelecom PoP and the customer's router;
- ✓ A /30 IP subnet for service configuration;
- ✓ Optionally, up to /24 subnets as part of the service;
- ✓ Optionally, a private ASN provided by Romtelecom, in case the customer does not have a public ASN;
- ✓ The BGP session/ static routing configuration and maintenance;
- ✓ QoS – traffic prioritization according to IP Transit service level.

The IP Transit services are generally, but not restricted, based on the establishment of a BGP session between a Romtelecom router, and a customer router. The points of hand-over/location options are:

- ✓ Customer PoP
- ✓ Intermediate mainframe
- ✓ Romtelecom PoP
- ✓ Neutral Telehouse

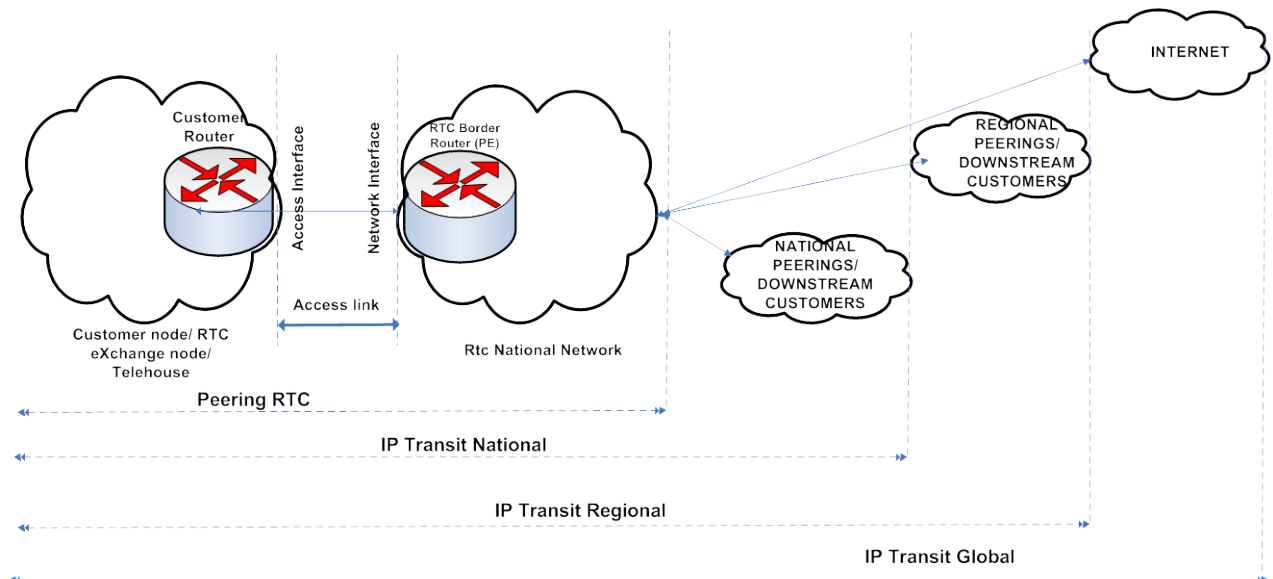


Figure 1: Technical architecture

