

# Telecommunications Department

Telephony – Network Technology – Services



---

**LEUNA**

THE SITE FOR  
SUSTAINABLE CHEMISTRY

1. Telecommunication	3
1.1. Telephone Services	3
1.1.1. Telecommunication Connections	3
1.1.2. Telecommunication Services	4
1.1.3. TETRA Radio System	4
1.1.4. Technical Parameters of Telecommunication Systems	5
1.2. Leasing Telecommunication and IT Equipment	7
1.3. Network Technology	7
1.3.1. Internet	7
1.3.2. Transmission Paths	8
1.3.3. Further Services	8
1.3.4. Server Housing/Rack Space	8
1.3.5. Web and Domain Services	8
1.3.6. Parameters Internet Connections/Data Lines/Transmission Paths	9
1.4. Further Services	11
1.5. Contact Persons	12

## 1. Telecommunication

The Telecommunications division offers services for telecommunications and Internet, transmission paths, rental equipment, and services.

You therefore receive all telecommunications services from a single source. With personal advice and support, we develop individually tailored communication solutions and support you in your projects. The wide range of products is complemented by a comprehensive range of services, including a service hotline.

### Registration with Federal Network Agency and RIPE NCC

Federal Network Agency (BNA)  
§ 6 TKG (since 2000)

- operator of a public telecommunications network
- provider of publicly available telecommunications services

RIPE NCC

Registration as LIR (Local Internet Registry) at the RIPE NCC (RIPE NETWORK COORDINATION CENTRE)

- availability of public IP addresses (version 4 and 6)

### 1.1. Telephone Services

#### 1.1.1. Telecommunication Connections

At the Leuna Chemical Complex, a variety of telecommunication connections and services are available to you based on modern telecommunication system technology:

- connection types and features:
  - analog, Up0 (digital), ISDN, cordless, DECT, PBX, VoIP, WLAN
  - executive-secretary, collective call groups, etc.
- high-availability telephone connections on the central telecommunication system
- free calls within the telecommunications network of InfraLeuna and to the German fixed network
- calls to German mobile networks can be booked monthly as a flat rate per customer,
- maintenance and services for telecommunications equipment and services with defined response times
- high flexibility in changing quantities and types
- billing display according to cost centers possible
- separation of business and private calls in the outside line with anonymous display of private calls in the itemized bill
- provision of a location phone book (web based via InfraLeuna website and telecommunication service UC).

### 1.1.2. Telecommunication Services

The following telecommunication services and benefits are available to you:

- Unified Messaging (UM):
  - voice and fax server services
  - Email, call, fax, or SMS centrally in just one box
  - remote retrieval via telephone or web client, automatic notification of incoming mail, e.g., as SMS or Email to mobile devices or visually and acoustically at the end device
- Unified Communication (UC):
  - management of own connection
  - caller list, dialing via UC or Outlook, phone books (also company-owned), team function, mobile client function (integration of mobile devices)
- Digital Alarm and Conference Server (DAKS):
  - easy start of broadcast calls with predefined announcement texts
  - rapid alerting or just informing large groups of subscribers, e.g., mobilization of on-call staff
- personal emergency call:
  - alerting based on mobile device technology TETRA or Cordless for rescue in case of emergency
  - product provision with site security/fire brigade.

### 1.1.3. TETRA Radio System

The TETRA radio system includes:

- digital radio at the chemical site and beyond
- group and selective call
- transfer function to the telecommunication system possible
- terminals suitable for product “personal emergency call” (GPS positioning).

### 1.1.4. Technical Parameters of Telecommunication Systems

- administration of telephone number budget (0 34 61) 43-xxxx only valid for the Leuna Chemical Complex (number porting not possible)
- administration of telephone number budget (0 34 61) 519-xxxx
- porting of number ranges to InfraLeuna possible on request
- use of telephone number ranges possible on request
- use of modern telecommunications terminal equipment

#### Telecommunication-interfaces:

connection designation	interface	log	channel	remark
analog connection	a/b	analog	1	
digital system connection	UP <sub>0</sub>	digital system-specific	2	
primary multiplex port (PMx)	S <sub>2</sub> M	ISDN	30	
telecommunication IP - connection	Eth	IP	1	
telecommunication IP - connection network	Eth	IP	n x IP	
cordless connection (DECT)	UP <sub>(DECT)</sub>		4, 8, 12	connections according to DECT standard and system-specific
WLAN-telecommunication-connection	Eth	IP	1	
TETRA connection	UP <sub>(TETRA)</sub>		1	digital professional radio TETRA <sup>1)</sup>
TETRA SDS connection	UP <sub>(SDS)</sub>		1	TETRA Short Data Service <sup>2)</sup>

1) TETRA connection (radio interface) in the InfraLeuna network, use of call number range (0 34 61) 43-xxxx possible, there is largely comprehensive indoor and outdoor radio coverage on the site of the Leuna Chemical Complex, however, the reception area extends beyond the site of the chemical complex.

2) TETRA connection for exclusive use for SDS transmission (SDS = Short Data Service), the voice channel cannot be used with this connection.



**Telecommunication-Services:**

<b>Service</b>	<b>port</b>	<b>usage/software</b>	<b>included services</b>
Unified Messaging (UM)	443 *1	Web Frontend	Voice-, Fax-, Mailbox, SMS
Unified Communication (UC)	443 *1 8443 *2 4709 *3	Web Frontend, desktop client, Outlook integration, fusion client	voice box, call journal, contact data, conference tool, team function, mobile client
Digital Alarm and Conference Server (DAKS)		-	alarming or information by telephone in parallel to several participants
emergency call		TETRA or cordless telecommu- nications terminal with position switching	alerting and rescue of a person, alerting via telecommunication terminal, rescue of persons by InfraLeuna fire depart- ment

\*1 standard

\*2 for web conference and mobile client

\*3 for fusion client

## 1.2. Leasing Telecommunication and IT Equipment

We offer you the following equipment and services:

- reliable telecommunication terminals for analog, Up0 (digital), DECT, cordless, WLAN, IP telecommunication connections
- accessories for telecommunication terminals
- cordless, corded
- reliable multifunctional devices
- headset, conference technology, etc.
- additional connections, e.g., alarm light or horn
- professional installation and set-up of devices
- qualified service: fast troubleshooting with provision of replacement devices in the event of damage or malfunction
- flexible rental with comprehensive and fast service
- Instruction in the use of new appliances
- advice on equipment selection and new procurement
- disposal of discarded appliances.

## 1.3. Network Technology

A modern and highly available IP campus network with geo-redundant site switching is available for the provision of Internet and data services.

Depending on customer requirements, specific connections and solutions can be provided in addition to the standard products. In addition to the high-performance communication cable network based on copper and fiber optics, IP connections via IP directional radio can also be used for the initial or redundant connection.

### 1.3.1. Internet

We offer the following Internet services:

- provision of asymmetric/symmetric Internet connections in various bandwidths
- connection via cable network (copper or fiber optic)
- connection via IP radio link
- Internet and IP redundancy connection possible
- public IP number or IP number ranges IPv4 or IPv6 available
- DNS, mail, web service
- domain provisioning
- VPN services: deployment and management of secured Virtual Private Networks
- firewall provisioning and management
- broadband connection to the Internet, redundant routing
- redundant setup of the IP backbone chemical site
- own domain and mail servers with redundant setup.

### **1.3.2. Transmission Paths**

The following transmission services are possible:

- provision of IP transmission paths:
  - various bandwidths (2.3 Mbit/s - 10 Gbit/s)
  - provision of IP services via cable network (copper or fiber optics)
  - provision of IP services via IP radio relay technology
  - provision of IP services via WLAN - techniques with roaming function
- provision of copper twin wire for direct connection e.g., BMA (fire alarm system).

### **1.3.3. Further Services**

The following services are available to you:

- provision of serving, switch, firewall, WLAN technologies
- project implementation according to customer requirements
- operator and service support according to SLA.

### **1.3.4. Server Housing/Rack Space**

The portfolio includes the following services:

- provision of rack space for serving and backup techniques
- two data centers available for server and backup techniques (geo-redundancy)
- qualified security techniques (EMA, BMA, smoke detection)
- redundant power and IP supply
- defined access organization.

### **1.3.5. Web and Domain Services**

The web and domain services include:

- mail server services with virus and SPAM filtering:
  - administration of own mailboxes
  - forwarding to the company's own mail system
- web service: provision of web servers for your online presence - broadband Internet connection of web servers for fast setup of your homepage
- variable web space for professional hosting
- access statistics about usage of your homepage
- setup and administration of your desired domain.

### 1.3.6. Parameters Internet Connections/Data Lines/Transmission Paths

#### Internet connections:

Internet connections can be provided via a fixed connection (copper or fiber optic cable) or via IP directional radio.

item		interface protocol
Internet connection ASym 2.3 Mbit/s to 300 Mbit/s	*1	Ethernet/IP RJ45
Internet connection Sym 2.3 Mbit/s to 1 Gbit/s, higher on request	*1	Ethernet/IP RJ45
Internet connection radio A 20 Mbit/s to 190 Mbit/s	*1 *3	Ethernet/IP RJ45
Internet connection wireless S 25 Mbit/s to 100 Mbit/s	*1 *3	Ethernet/IP RJ45
WLAN user account	*1 *2	WLAN
WLAN voucher account	*1 *2	WLAN
Internet connection Sym Housing	*1	Ethernet/IP RJ45

ASym and radio A - asymmetric (up- and download different bandwidth)

Sym and radio S - symmetrical (up- and download same bandwidth)

- \*1 IP address public 1 piece or further IP address blocks (8 - 256) on request.  
Supplementary service descriptions can be found in the valid product descriptions and price lists.  
Deployment based on the available technical infrastructure.
- \*2 Requires InfraLeuna IP access point.
- \*3 Requires line of sight to chimney building 4710, approval by InfraLeuna required.



**Active transmission paths:**

Active transmission paths are provided based on available technical infrastructure (IP data or other protocols).

IP transmission paths:

item		interface protocol
OB path IP 2.3 Mbit/s to 1 Gbit/s, higher on request	*1	Ethernet/IP RJ45 or fiber optic (SC)

\*1 Provision applies in the transmission network of InfraLeuna, further services on request.

**Passive transmission paths:**

Transmission paths based on available copper communication cables:

item		interface protocol
2-wire copper cable		LSA/RJ45
4-wire copper cable		LSA/RJ45

## 1.4. Further Services

We offer the following general services:

- free service hotline, service acceptance by qualified employees
- service level agreement (SLA) possible
- services, project planning, installations, commissioning and maintenance for all telecommunication and Internet products
- consulting and planning services
- inventory and needs analysis
- creation of specific reports on contract, product, and billing data
- fast troubleshooting service remotely or on site
- short response and access times.

We offer the following services in relation to telecommunication technology:

- provision of telecommunication connections and telecommunication terminal equipment technologies
- configuration of telecommunication systems
- equipment for conference rooms
- service support for customer-owned telecommunication equipment.

Internet and network technologies:

- provision of:
  - Internet connections
  - data connections (cable or wireless)
  - switch, firewall and WLAN technology
- server housing in qualified data centers
- supply and configuration of firewalls/VPN transmission links, WLAN, and network technologies
- telecommunication/Internet concept creation
- IP networks for individual requirements.

The following additional services are available for wiring:

- wiring of all types (communication, data wiring according to standard Cat 3 to Cat 7 and LWL)
- certified measurement of data wiring
- project planning of wiring services
- planning and coordination of cable routing copper and glass (LWL)
- documentation of customer-owned house and cable networks.

## 1.5. Contact Persons

If you have any questions, please do not hesitate to contact us:

### **Mark Muschick**

Division Manager Telecommunication/Organization

Phone: +49 3461 43-3570

Email: [m.muschick@infraleuna.de](mailto:m.muschick@infraleuna.de)

### **André Wasserzier**

Department Manager Telecommunication

Phone: +49 3461 43-2050

Email: [a.wasserzier@infraleuna.de](mailto:a.wasserzier@infraleuna.de)

### **Service Hotline Telecommunication**

Phone: +49 3461 43-1011

Email: [telekommunikation@infraleuna.de](mailto:telekommunikation@infraleuna.de)