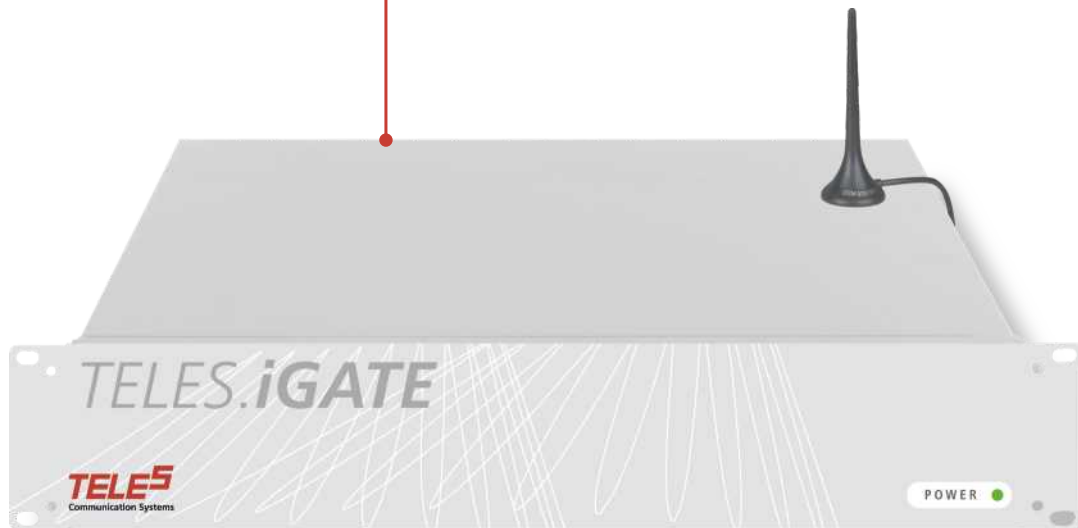


TELES.iGATE

Mobile gateway for 3G (UMTS),
GSM, and CDMA



Converts fixed-to-mobile into
mobile-to-mobile



TELES.iGATE



- Integrated gateway for 3G (UMTS), GSM, and CDMA
- Integrated VoIP gateway
- PSTN support (PRI, BRI – DSS1, SS7)
- Built-in SIM-card server support
- Powerful Least Cost Routing
- Seamless integration into existing telecom infrastructures
- Easy installation and management

TELES.iGATE

TELES.iGATE is a combined Mobile, PSTN, and VoIP gateway solution for carrier networks* and for corporate customers wanting to connect their PBX to MOBILE and VoIP services. This full-featured gateway can be added to ISDN and IP environments in a cost-effective and convenient manner. *TELES.iGATE* converts fixed-to-mobile into mobile-to-mobile calls, thereby terminating calls to mobile networks at lower rates than possible via fixed-net interconnection.

TELES.iGATE provides extremely flexible least cost routing combined with other superior call-routing and rerouting capabilities. Routing strategies are based on numerous criteria like called party, CLIP/CLIR, time-of-day, time quota, service quality, and SIM-card profile. With *TELES.iGATE*, fixed-net service providers and corporate users can easily connect to mobile networks.

TELES.iGATE comes with common PSTN and VoIP signaling protocols like H.323 and SIP, international SS7-ISUP Q.767, DSS1, and Q.SIG, making it very compatible with and easy to connect to a wide range of network components.

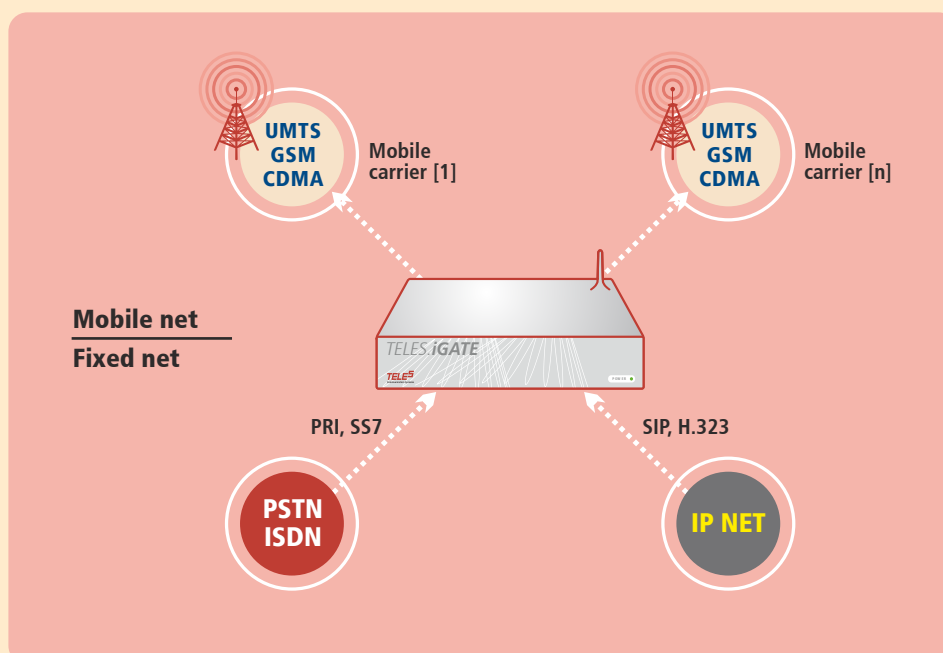
TELES.iGATE includes a VoIP gateway with up to 60 VoIP channels, 32 mobile channels, 2 E1 interfaces, and a LAN connection. Connections to different local or remote VoIP and mobile networks and switching between each single incoming to any outgoing channel independent of the network type prove *TELES.iGATE* to be extremely versatile.

For least cost routing *TELES.iGATE* is connected to the mobile network and installed directly between your PBX and the public telephone network. There is no need for expensive port extensions and the PBX's configuration can remain untouched.

TELES' versatile handling of routing files covers all known least cost routing applications. On top of the basic call scenarios, *TELES.iGATE* provides a wide range of special inter-network applications, such as e-mail-to-SMS conversion, call-back functionality, two-stage dialing and more.

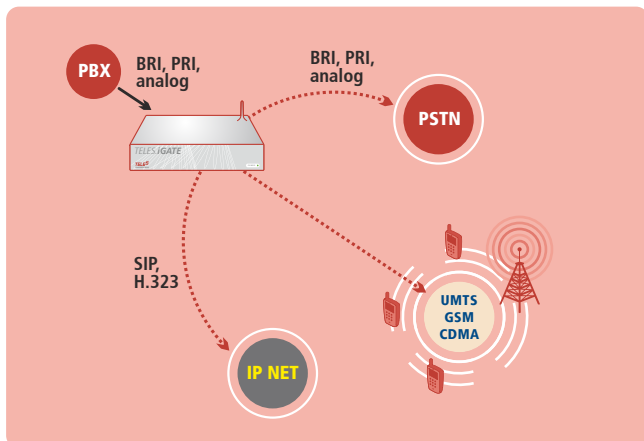
For VoIP telephony, features like silence suppression, echo cancellation and comfort noise generation guarantee excellent quality. Various voice codecs allow effective speech compression to reduce the necessary bandwidth. Our RTP multiplexing technology, which can be activated if *TELES* hardware is implemented on both ends of the IP connection, can further reduce bandwidth consumption. Intelligent traffic management ensures that highly profitable trunks provide optimal capacity utilization.

TELES.iGATE can be configured and controlled over a user-friendly interface from a local or remote PC, which reduces costs for maintenance and training. Its modular setup makes it extremely easy to install and deploy. For larger networks, the *TELES.vGATE* SIM-card server is a centralized storage for SIM cards that can be remotely administered, thereby assuring that no SIM cards remain at unattended sites.

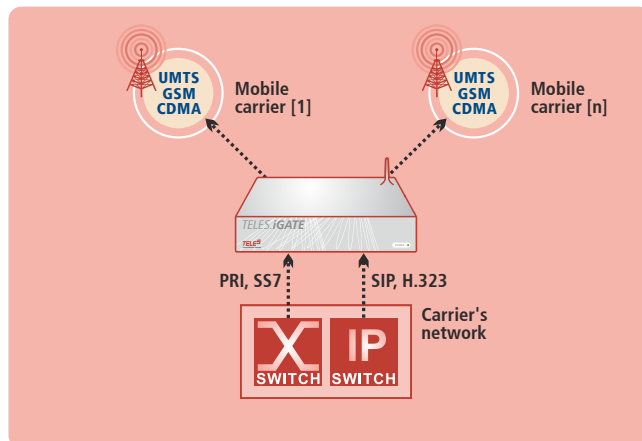


***TELES.iGATE* converts fixed-to-mobile into mobile-to-mobile calls, thereby terminating calls to mobile networks at lower rates than possible via fixed-net interconnection.**

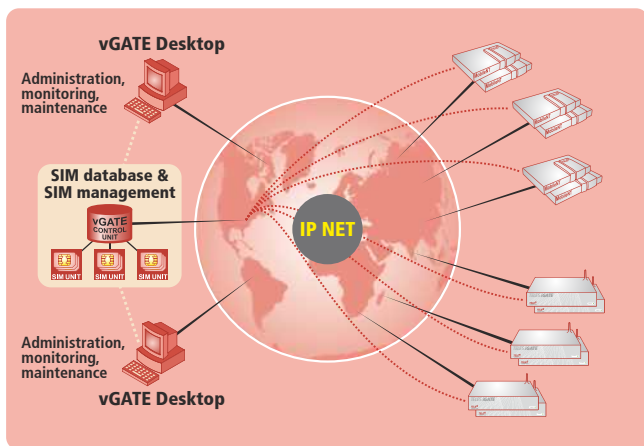
* *TELES* can not give any advice or guarantee for the legitimacy of usage, as some cases of *TELES.iGATE* deployment may not comply with national law.



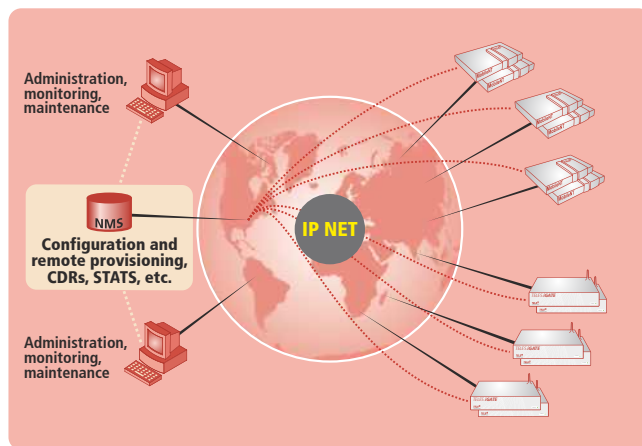
TELES.iGATE in its typical application scenario for corporate customers.



TELES.iGATE in its typical application scenario for carrier networks*.

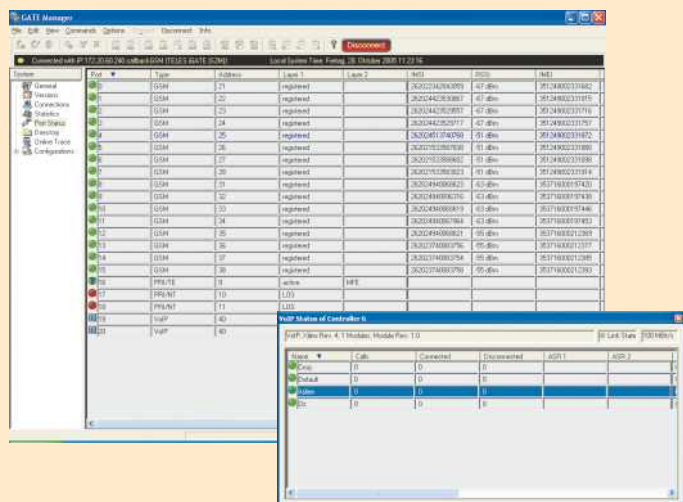


TELES.iGATE in combination with the **TELES.vGATE** SIM-card server



Full control for distributed mobile networks with **TELES'** network management system (NMS)

TELES.GATE Manager's port-status view provides detailed information about all GSM, ISDN, and VoIP ports.



- Converts fixed-to-mobile calls into cheaper mobile-to-mobile calls
- Billing method remains unchanged
- No interconnection agreements necessary
- 1 to [n] SIMs per channel: taking advantage of different SIM contracts
- Real life traffic simulation
- SMS to e-mail (and vice versa)
- Call Back Server functionality
- Fixed network backup via mobile
- Last mile connection via mobile
- Quick basic telephony provisioning
- Centralized SIM-card management

* TELES can not give any advice or guarantee for the legitimacy of usage, as some cases of **TELES.iGATE** deployment may not comply with national law.

Technical Specifications

- 4–32 3G(UMTS)/GSM/CDMA channels in one 19" 2U/4U housing
- 6 SIM cards per channel (24 SIMs freely assignable per 4 3G(UMTS)/GSM module)
- 1 or 2 antennas per 32 channels
- Built-in SIM-card server support
- Fully digital voice path
- Individual timers for each SIM / each call
- CDR generation (online & offline)
- Number portability support
- Powerful LCR
- Integrated remote test-call functions (no local handset required)
- In-band to out-band signaling conversion
- Stand-by channels
- Two ethernet ports for redundancy or separation of signaling and voice and maintenance

Expansion levels

- Modular expansion in steps of 4 x 3G(UMTS)/GSM/CDMA channels
- Up to 32 x 3G(UMTS)/GSM/CDMA channels, 2 x PRI, 8 x BRI
- 1 or 6 SIMs per channel with SIM4 or SIM24 carrier
- Unlimited SIMs per channel with TELES.vGATE SIM-card server

Interfaces and supported protocols

- PRI: DSS1(Q.931, national variants), SS7-ISUP optional (Q.767), QSIG-BC, E1/T1, TE/NT, CRC4/Double Frame
- BRI: DSS1(Q.931, national variants), QSIG-BC, TE/NT, Point-to-Point, Point-to-Multipoint
- 3G: Multiple Band (850/900/1800/1900/2100 MHz) 3G (UMTS), GSM, HSDPA, GPRS, EDGE
- GSM: Dual Band (900/1800 or 850/1900 MHz), SMS, GPRS
- CDMA (CDMA 2000): Dual Band (800/1900 MHz), R-UIM, carrier-specific variants
- 2 x Ethernet 10/100 Base-T
- VoIP: H.323/SIP, G.711, G.726, G.728, G.729, GSM, Fax T.38

Special features

- Alert tone detection:
 - ~ Generation of ALERT/CALL PROGRESS (user free)
- Announcement recognition and programmable options:
 - ~ Generation of PROGRESS/CALL PROGRESS, in-band (default)
 - ~ Generation of RELEASE with configurable cause value
 - ~ Generation of CONNECT (when call is accepted)
- Busy-signal recognition:
 - ~ Generation of DISCONNECT/RELEASE

Network management system

- Network management system (TELES.NMS) for a virtually unlimited number of systems
- Automatic network surveillance
- Automation of recurring tasks
- Conditional operator notification (SMS, E-mail)

TELES.vGATE SIM-card server

- All SIM cards are stored and operated in one central TELES SIM-card server
- The SIM-card server provides the necessary SIM data to the remote TELES.iGATE mobile gateways via an IP connection
- TELES.iGATE mobile gateways receive the SIM-card data without locally installed SIM cards
- Up to 600 SIM cards per 19" 4U TELES.vGATE SIM unit; up to 10 SIM units possible, corresponding to 6000 SIM cards



GERMANY / INTERNATIONAL

Dovestraße 2–4
10587 Berlin
Phone +49 30 399 28-066
Fax +49 30 399 28-051
E-mail sales@teles.com

ITALY

Via Magnaghi 6/14
16129 Genua
Phone +39 010 55 07-91
Fax +39 010 55 07-999
E-mail sales.italy@teles.com

SPAIN

Príncipe de Vergara 112, Oficina 1-D
28002 Madrid
Phone +34 91 411 93 10
Fax +34 91 563 99 20
E-mail sales.spain@teles.com

LATIN AMERICA

Azucenas N° 420
Santa Cruz, Bolivia
Phone +591 3312 25-65
Fax +591 3312 25-51
E-mail sales.bolivia@teles.com

FRANCE

"Le Monge", 22 place des Vosges
92400 Courbevoie, La Défense 5
Phone +33 1 46 67 46 10
Fax +33 1 46 67 46 11
E-mail sales.france@teles.com

INDIA

3008, 12th B Main, Hal 2nd Stage
Indiranagar, 560008 Bangalore
Phone +91 80 51 26 10-14
Fax +91 80 51 26 10-04
E-mail sales.india@teles.com

TURKEY

Büyükdere Cad. Harman Sok. No:4 Kat:2
Levent, Istanbul
Phone +90 212 325 86-66
Fax +90 212 325 86-36
E-mail sales.turkey@teles.com

Your TELES representative: