THE PURE IP
IPECS PLATFORM

IPECS CALL SERVERS

- Pure IP Telephony Platform
- Up to 600 Device Ports
- Safe & Secure communications
- Unified Communications Options
- Distributed, Modular Architecture
- Wide range of voice centric features
- Strong voice pedigree

iPECS REVOLUTION

LG-NORTEL

Why LG-Nortel?

"When it comes down to it, success – in business or in your life – is about communication. And effective communication is impossible without effective connectivity."

That's where LG-Nortel comes in. We are a connectivity company, dedicated to improving the way people and businesses communicate. We do this by taking the complexity out of communications, increasing individual productivity and making communications more effective. By eliminating obstacles that prevent people getting the information they need, we help them connect with the people and experiences they desire.

Our mission to remove the complexity from communications underpins the IPECS platform. Your communication solution shouldn't complicate your business. It should be simple to use and easily grow as your business grows, without complex 'migration paths' or other buzz words for complicated, often outdated, systems. Using the IPECS you will find intuitive features, simple to use applications and powerful connectivity - your business will benefit as a result and users will easily understand how to work together in your new connected business.

Why IP telephony?

The phrase IP telephony is often misunderstood, misquoted and poorly explained. This is mainly due to the different ways organisations market IP telephony and how users have been introduced to the technology. IP telephony, or VoIP, is often mistakenly applied only to the Internet (World Wide Web). Services (such as Skype) have popularised this type of service and many home users now make calls to distant family and friends this way, mainly to reduce their call costs. VoIP telephony is really a method of communications which uses IP Networks to transmit your voice. Within a business environment VoIP means that all communications are carried over an IP data network, and does not necessarily use IP Networks such as the Internet to make external calls. You can integrate 'Internet' service type VoIP (of the type home users refer to) - but this is called a SIP line (Session Initiation Protocol) and is supported as standard on the IPECS platform. This use of VoIP and SIP can be referred to as 'end-to-end' IP. IPECS IP Telephony can make use of both VoIP and 'end-to-end' IP by using your existing Network to deliver voice calls to your desk, and can use VoIP to route calls over the Internet.

This 'Pure IP' system (which does not switch between old TDM technology and IP) allows for; reduced call costs, reduced infrastructure costs, and multimedia video communications. By using a single infrastructure to deliver all your Voice and Data needs you can consolidate costs, improve efficiencies and increase productivity. The IPECS Platform includes integrated Analogue or ISDN lines for 'traditional ' external line connections,as well as SIP trunks, allowing you to benefit from all types of connectivity. 'Traditional' telephone systems rely on dedicate cabling, complex connection boxes and are often difficult to expand as your business grows. Moving offices can be a complex and highly costly exercise, not to mention the difficulties should you have to implement a Disaster Recovery plan.

IPECS CALL SERVERS

The IPECS Platform delivers all the functionality of a traditional PBX and more with features to simplify your business operations and improve productivity. The uncompromising design assures you of the highest reliability and convenience for your organisations communications.

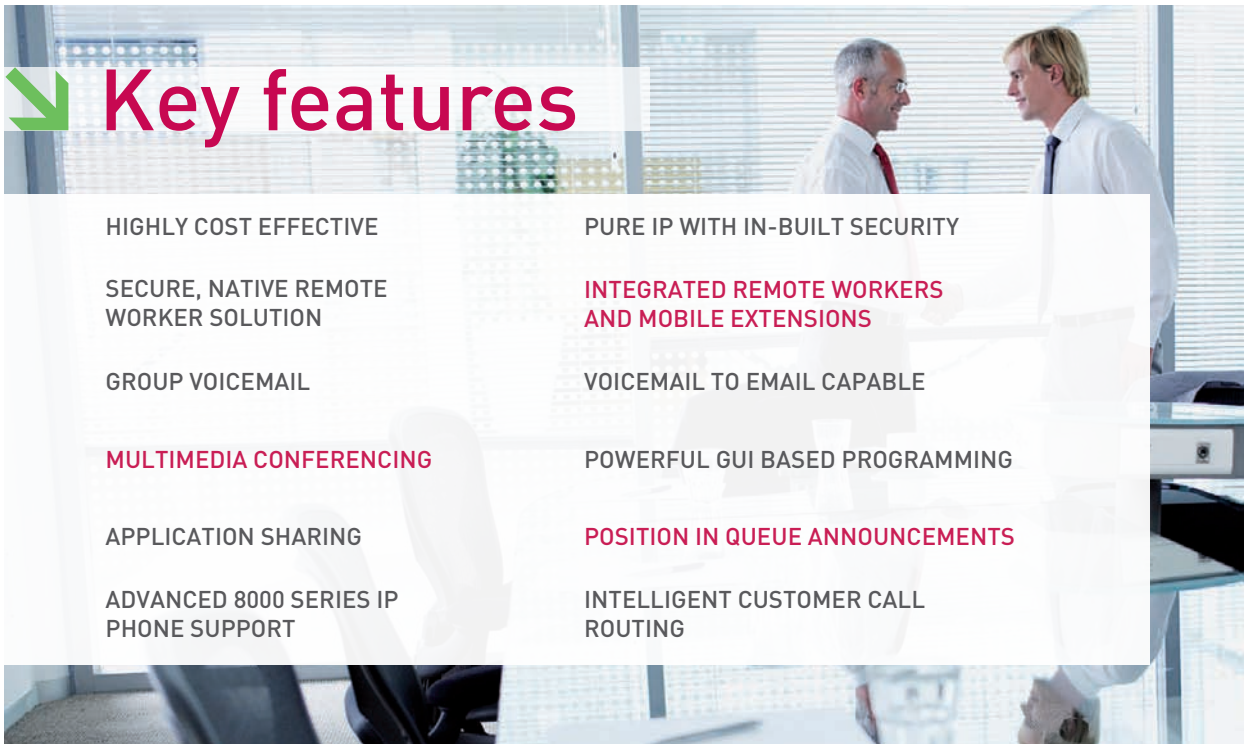
At the heart of the IPECS Platform is the Call Server, known as an Multi Function Interface Module (MFIM for short) . This highly reliable, purpose built Call Server controls and maintains communications between end-points and shared network resources.

This Call Server can be expanded by connecting additional modular IPECS Gateways, which easily connect to the Call Server over any IP network. These Gateways interface to an array of network resources from analogue telephone circuits to advanced external VoIP connections. This simple modular structure yields flexible configurations and installations to meet your needs now and in the future.

Practical, scalable and easy-to-use and configure, the IPECS Platform will dramatically improve the way your people communicate, work and collaborate. Choosing the IPECS from LG-Nortel ensures your business can benefit from the latest technology in a cost effective and efficient manner.

As your business grows and changes the modular architecture lets you expand and change your solution by adding new modules to your network.

- SINGLE INFRASTRUCTURE FOR VOICE AND DATA
- OPEN INTEGRATION PLATFORM (AIM)
- CAPACITIES OF 1 TO 600 PORTS
- COMPUTER - TELEPHONY INTEGRATION (TAPI)
- LEGACY LG DIGITAL PHONE SUPPORT
- MOBILE WORKFORCE SOLUTION



Key features

HIGHLY COST EFFECTIVE

PURE IP WITH IN-BUILT SECURITY

SECURE, NATIVE REMOTE WORKER SOLUTION

INTEGRATED REMOTE WORKERS AND MOBILE EXTENSIONS

GROUP VOICEMAIL

VOICEMAIL TO EMAIL CAPABLE

MULTIMEDIA CONFERENCING

POWERFUL GUI BASED PROGRAMMING

APPLICATION SHARING

POSITION IN QUEUE ANNOUNCEMENTS

ADVANCED 8000 SERIES IP PHONE SUPPORT

INTELLIGENT CUSTOMER CALL ROUTING

* Not all features available on all models.

The IPECS Call Servers support the latest generation of IP Phones, WiFi phones and PC/PDA based softphones and industry standard SLT and SIP phones. Legacy LG-Nortel phones are also supported, providing for cost effective IP migration paths.

IPECS includes a wide variety of desk-top, mobile and software phones to ensure that you stay connected. The LIP 8000 series includes three phone models and three types of DSS Consoles to provide a solution tailored to the needs of each user. Users quickly learn to use the desk-top phones thanks to one button operations and user friendly features such as the navigation and soft-menu keys. The speakerphone (Professional & Executive Models only) lets users converse handsfree, assured of the highest quality through advanced VoIP technology. The LIP-8000 terminals can connect anywhere there is a LAN connection and support the IEEE 802.11af Power-over-Ethernet standard so a separate power connection is not always required.

IPECS also supports the WIT-300HE WiFi phone, a fully featured mobile phone like handset designed for road warriors and home workers who require a flexible connection into the office. The WIT-300HE connects to your broadband via a WiFi access point and uses TCP / IP Networks (such as the Internet) to make calls. All calls to other extensions, mobile workers and branch offices are handled centrally by the IPECS at no cost to either user.

If you are migrating from a legacy LG-Nortel system (DU or peloid) the addition of a Gateway to the IPECS allows you to connect LAD, LIP and SLT telephones to your new Call Server - saving you money on upgrading to new phones.

You can further increase your savings by reducing the total number of phones you require by plutonism the way users interact with the IPECS. Frequently businesses have users that work at home or on the road for a high proportion of their time and you can offer these users the use of 'Hot desk' stations which are shared by a number of users, or software-based phones installed on their Smart Phone or Windows based PDA.

8000 Series

LIP-8024D Phone

Executive IP phone with 24 Flexible buttons, multi-line display and Dual LAN port

LIP-8012D Phone

Professional IP phone provides the perfect combination of features and performance with Dual LAN port

LIP-8004D Phone

Standard IP Phone addresses the needs of low call volume users without lacking key features

LIP-12LSS Console

The perfect companion to the Executive Phone, the 12 Key LCD DSS console provides clear access to frequent features

LIP-12DSS Console

A great addition to the Professional an Executive phones, the 12 Key paper DSS console allows easy call transfer and simple at-a-glance station status.

LIP-48DSS Console

For site attendants and the busy professional the 48 Key LED DSS console allows for lightning fast call transfer and at-a-glance station status.

* For single point per desk installs

WiFi Phone

The WIT 300HE WiFi VoIP Phone from offers the latest technology combined with modern design, allowing you to connect to the IPECS Platform over specified Wireless Access Points. The WIT-300HE is not a DECT replacement but rather an additional IP Hardphone suitable for use within the home as an extension from the office or in the office as a single roaming handset.

Connecting to wireless networks is easy - all you need to do is select the network and enter the network key. The handset will then connect to the IPECS Platform over the Network.

This enables the wireless IP handset to act as an extension from the system, meaning that all calls from the handset are billed to the office, and calls between the remote user, the office and other remote users are free.

Legacy, SLT & SIP

The IPECS Platform supports a range of Legacy LG-Nortel Digital telephones (LDP and LKD Ranges) to ensure that you can maximise your cost savings if you are upgrading from an existing LG System. These telephones are connected to the IPECS Platorm via a DTIM Gateway.

SLT Telephones (Single Line Telephones or 'home' type phones) can also be used on the IPECS-50, which comes with two SLT ports for telephone or FAX connection. You can increase the number of available SLT ports on the IPECS 100-600 by the addition of a SLTM Gateway on the Network (4, 8 or 32 port versions available).

SIP (Session Initiation Protocol) telephones are the standard IP telephones and provide the same level of functionality as SLT phones, but do not require the addition of a Gateway.

Phontage

Phontage is a multi-media communication tool using a PC, PDA or Symbian Smartphone based application to link the operation of an on-screen multi-button telephone with other communications related PC applications. All the features of the IP multi-button desk phone are available to the user and can even be linked to the users desk phone so both will ring when a call comes to the extension.

In addition to the features found on a deskphone Phontage also includes a host of additional features such as a phonebook database with links to the user's PIM (Personal Information Manager) such as Microsoft Outlook, providing pop-up windows for incoming caller identification.

Phontage is offered at two levels of functionality allowing the user to choose between the standard feature set and a more advanced 'Deluxe' version which extends the standard features for power-users.

> STANDARD EDITION

- > Remote extension from system
- > Multi-language support
- > Incoming Call Pop-up window
- > Hotkey Support
- > Database Import/Export
- > Smart Tray Icon & Menu
- > Quick Call Menu
- > Simple Dial-pad pop-up
- > Display Mode (Clock, Calendar)
- > Phone Book

> DELUXE EDITION

- > All the standard features plus,
- > Video Calling
- > Application sharing
- > Voice Mail Backup and Management
- > Internal Instant Messaging
- > 48 Flexible Buttons
- > Smart Recent Call List
- > Three party video conferencing when using MCIM Module

> PDA / SYMBIAN EDITION

- > Remote extension from system
- > Access System features
- > Phonebook Integration
- > Calendar Integration
- > Local and Remote modes
- > Link to your desk phone
- > Auto-start

ADDITIONAL GATEWAYS AND MODULES

LOOP START GATEWAY / CO LINE MODULE (LGCM)
Allows the use of Analogue lines on the IPECS, adds to the in-built lines of the MFIM-50A or adds Analogue lines to an MFIM-50B.

BASIC RATE INTERFACE MODULE (BRIM)
Allows the use of ISDN2 lines on the IPECS, adds to the in-built lines of the MFIM-50B or adds ISDN2 to an MFIM-50A.

PRIMARY RATE INTERFACE MODULE (PRIM)
Allows the use of ISDN30 lines on the Call Server.

VOICE OVER IP INTERFACE MODULE (VOIM)
Adds to the capacity of IP Channels on the Call Server. These can be used for SIP Trunks, Remote workers or Networking.

VOICE MESSAGING INTERFACE MODULE (VMIM)
Adds to the capacity of the integrated Voicemail on the Call Server with 8 Additional channels of Voicemail or Auto Attendant and 9 Hours recording time.

MULTI-PARTY CONFERENCE INTERFACE MODULE (MCIM)
Required for Conference rooms and Video conferencing.

SINGLE LINE TELEPHONE INTERFACE MODULE (SLTM)
Adds to the capacity of SLT ports on the Call Server. These are used for POTS / SLT telephones and FAX Machines.

DIGITAL TELEPHONE INTERFACE MODULE (DTIM)
Allows the connection of LKD and LDP telephones to the IPECS, not required for LIP-7000 / 8000 Series IP phones.

WIRELESS TELEPHONE INTERFACE MODULE (WTIM)
Adds the capability to use LG-Nortel DECT Handsets on the IPECS Platform by connecting DECT Base Stations.

HIGHLIGHTED COST REDUCTION FEATURES

ON-DEMAND CONFERENCING AND PRIVATE CONFERENCE ROOMS

Invite your co-workers and customers to join in a Virtual Conference Room using the IPECS' unique conference room architecture. The IPECS offers easy on-demand Video or Audio conferencing facilities available at the touch of a button, and acts in the same way as professional, costly conferencing services. Users can invite colleagues to join a Virtual conference room by notifying the parties of the room number and password. Private conferencing rooms can improve productivity and minimise travel by connecting groups of people together in a virtual space.

MOBILE EXTENSION

Mobility is a key driver for investing in new communications solutions. Business professionals no longer need to be tied to a desk or have multiple telephone numbers. Mobile extension capability allows mobile users to have a single telephone number which they use both in and out of the office. Moblie extension works by linking your direct dial number (DDI) to your mobile phone through the IPECS system. When a call is made to a user both the desk phone and the mobile phone will ring. Call transfer, hold and off-net calling are all possible using short key codes.

HOT DESKING EXPLAINED

Hot desking, sometimes known as location independent working, allows you to maximise your capital investment as users do not have their own desks but can 'desk-share' any available space when required. IPECS Hot desking intelligently routes calls to the right person, no matter where they sit. Hot desking gives greatest benefit in a company where of staff are out of the office most of the time. In this case, users have no real need for a permanent space, and thus overheads and ongoing management costs can be reduced through implementing a hot desking solution. When one considers that the cost of providing office space can, typically, be anything up to £7,000 per annum per employee it is clear that the savings achieved can be substantial.

IPECS NETWORKING
TRULY DISTRIBUTED, TRULY UNIQUE

Whether your need is to connect remote home office users or multiple branch offices, IPECS networking delivers a simple and secure solution. For the basic remote home office, simply install an IP Phone phone on a local internet connection for transparent access to the IPECS Call Server. For the more advanced remote user with fax and local line access needs, add a Remote Gateway. Interconnect multiple small offices over your WAN in a Centralised Control Network and achieve transparent communications under control of a single central Call Server.

In larger environments you can use the Distributed Control Networking and link up to 70 IPECS Call Servers over your existing Network. A unified numbering plan simplifies calling or transferring calls between sites. Attendant services can be distributed at each site or centralised at a single location. The powerful IPECS protocol provides a central attendant with status indications for any phones that are part of the networked environment.

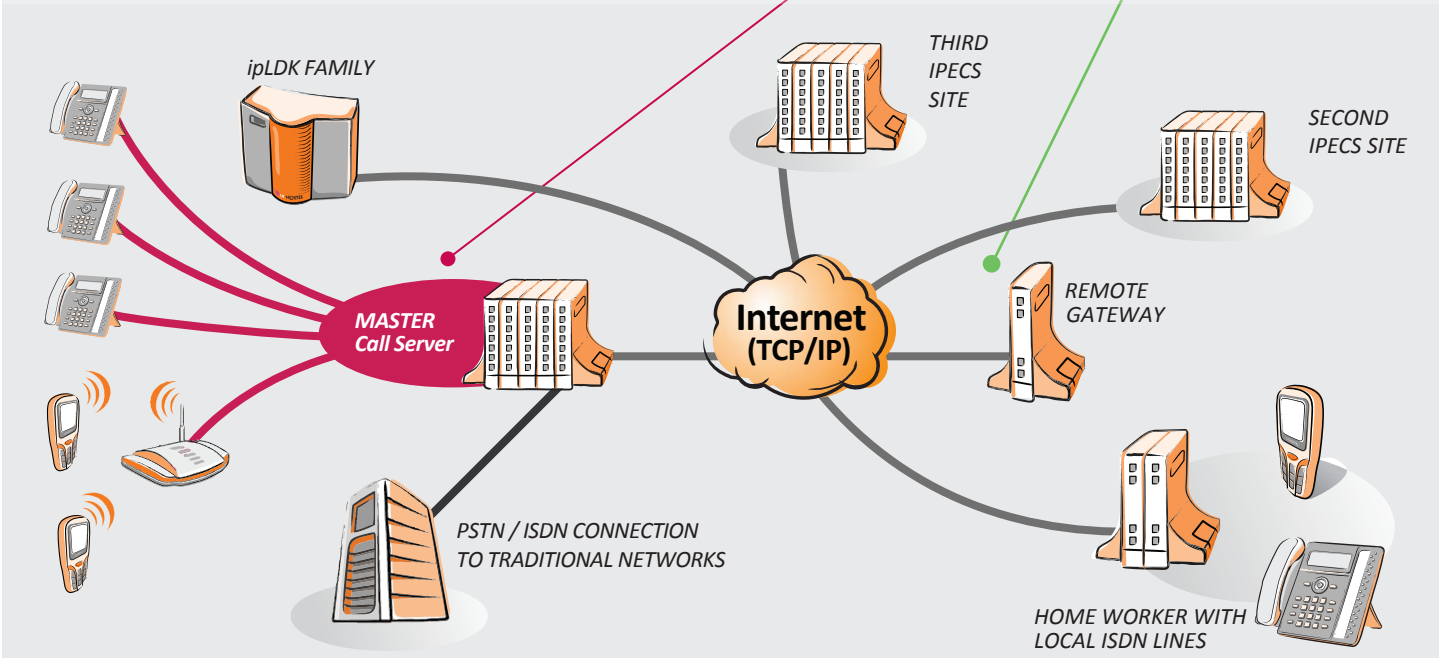
The IPECS Call Servers easily inter-operates with other LG-Nortel systems, including ipLDK, where advanced IPECS networking capabilities are supported. Security and Quality of Service (QoS) should be a major concern in any networked environment. IPECS implements IPSec and SRTP, a well known security standard for the internet, to encrypt data in the IP packets using advanced encryption techniques and tunneling to hide the real packet destination.

The IPECS Platform is an SMB focused pure IP telephony platform. Its truly distributed architecture, rich set of easy to use features and broad range of applications makes the IPECS the obvious solution for your business.

THE MASTER IPECS ACTS AS A CENTRAL CALL SERVER

REMOTE GATEWAYS HAVE LOCAL INTELLIGENCE BUT WORK AS A SINGLE SYSTEM

AN IPECS NETWORK WITH SINGLE NUMBERING PLAN



Voicemail and Messaging

The IPECS Call Servers include an integrated Voicemail system* providing space for system announcements and user voice messages. The integrated Voicemail can be linked to another module, the VMIM, which expands its capabilieis to offer increased recording space. Messages can be forwarded to other users and can include a preamble, callers number and time and date. Voicemails can be manually downloaded and played on your computer or automatically sent to your email or mobile phone.

The Automated Attendant allows you to have a welcome message when a customer calls giving the option for the customer to choose the right department for their call, this is especially important in companies with dedicated teams to handle customer enquiries. The IPECS Call Server can also intelligently monitor any queuing calls and can give callers information on their place in the queue - a proven way to decrease customer frustration. The system can also play customised on-hold messages to callers, often used as an additional way of marketing to your customers or providing additional information.

*The IPECS 600 does not include Voicemail as standard, a VMIM Module is required.

LG-Nortel IPECS Specifications

CALL SERVERS

MFIM50A/B for 20+ users in a single box solution. Built in trunk, Voicemail, VoIP and SLT Interface
MFIM100 for 50+ users. Built in Voicemail and VoIP
MFIM300 for 200+ users. Built in Voicemail and VoIP
MFIM600 for up to 500 users. A dedicated call server

POWERFUL SYSTEM FUNCTIONS

Built in ACD · Hot desking · Individual call routing · Automatic call recording
Caller ID Based routing · Multi language Auto Attendant · Email notification of Voicemail
DECT and WiFI Mobility · Position in Queue Announcements · PC Softphone
3rd Party Application Interfaces · Hospitality & Office Software · Redundancy and Survivability

	MFIM50B	MFIM50A	MFIM100	MFIM300	MFIM600
Max Channel No.	50	50	100	300	600
Max Trunk Channel	42	42	42	200	400
Max Station Channel	50	50	70	300	600
Built in Trunk	2BRI + 2BRI*	4 CO	-	-	-
Built in SLT	2	2	-	-	-
Built in VoIP ch.	4(8**)	4(8**)	6	6	-
Built in VM ch.	6	6	6	6	-
VM recording time	270min.	270min.	210min.	210min.	-
PFTU	-	1 port	4 ports	4 ports	4 ports
BGM	1 Int. + 1 ext.	1 Int. + 1 ext.	1 Int. + 2 Ext.	1 Int. + 2 Ext.	1 Int. + 2 Ext.
Local Survivability	Yes	Yes	Yes	Yes	Yes
System Redundancy	No	No	Yes	Yes	Yes
System Gateways	PRIM,BRIM2/4,LGCM4/8,VOIM8/24,SLTM4/8/32, DTIM8,WTIM4/8,POE8, MCIM,VMIM,RSGM				
System Housing	MCKTE, 1URIMB, PSU, WBRKTE, WHLD, DHLD & DHE				
System Terminals	LIP-8000 & 7000, LDP-7000 & LKD, GDC-400B & GDC-400H, WIT-300HE				
Applications	Phontage, NMS, Ez Attendant, IP Networking, 3rd party interfaces(TAPI, SMDR, ACD, AIM)				
IP Security & QoS	IPSec, SRTP, 802.1p/Q, IP TOS, Diffserv pre-tagging, TLS 1.0, SSL 3.0				
VoIP Interface	H.323 v4, SIP(Trunk/Extension), RTP/RTCP, STUN, G.711/G.723/G.729, T.38				
Application protocol	HTTP, FTP,TFTP,DHCP,PPPoE,SNMP				

*License code required for channel activation **Available channels using G.711

PHONTAGE SYSTEM REQUIREMENTS
Pentium IV 1GHz
256MB RAM
200MB Free Hard Disk Space
Windows VISTA / XP / 2003 / 2000
Full duplex sound card
TCP / IP Connectivity
Webcam for two-way video conferencing
Optimised for 1024 x 768

MCIM (Multi Party Conference Interface Module)
9 conference rooms
32 parties per conference
Password protected conference rooms
Conference room two-way recording
Ad-Hoc 3-party conference
DDI to conference room
Group calling
Transfer to conference room facility

DECT TERMAINAL CAPACITIES
IPECS 50 A/B - 50
IPECS 100 - 72
IPECS 300 - 255
IPECS 600 - 255

HARDWARE MOUNTING OPTIONS
Book-End Mount
Module Wall Mount
19" Rack Mount for single Module
Stand Alone (Free Mount)
Rack / Wall Mount Cabinet

LG-NORTEL UK AUTHORISED PARTNER

LG-NORTEL