

Imagination. Solutions.

NEC



ISDN Multimedia Communication Servers

Nitsuko
DXE

DXE 32/96/600

This is the future calling

Multimedia Communication Servers



The NEC Infrontia DXE series are more than just voice communication systems.

Today business communications is more than just voice. Face to face communication will always be important but talking is only one medium of communication. Now we also communicate with our customers via the web, email and video. Who today would invest in a computer system that could not connect to the web? So why buy a communication system that is only voice.

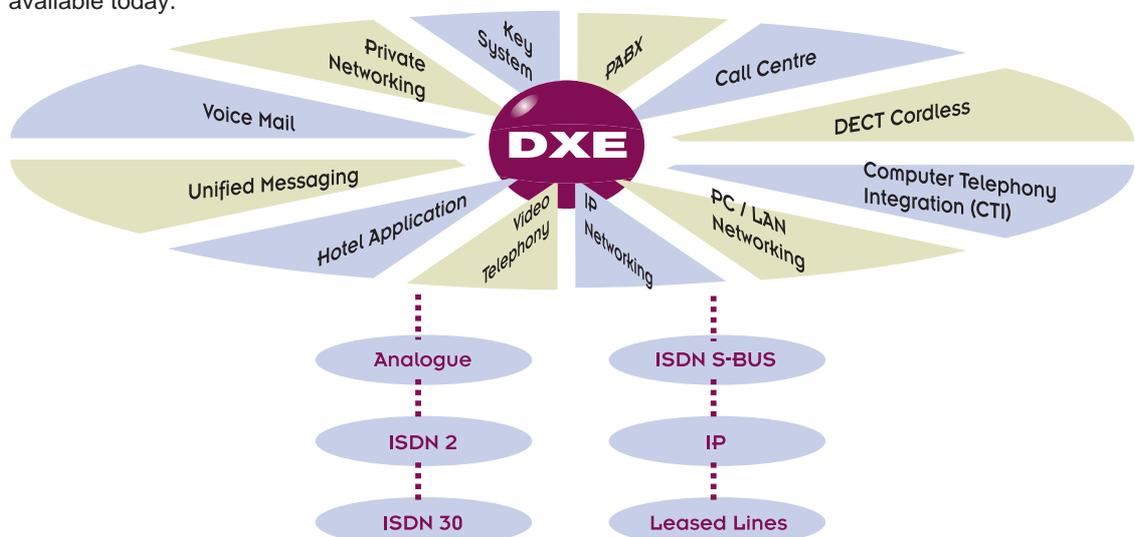
NEC believes our customers require the versatility of computers from their communication systems. This is why the DXE series are called Multimedia Communication Servers.

The DXE is your Multimedia Communication Server integrating via telephony and IP interfaces all your voice, PC's, LAN's, fax and voice mail communications onto a common ISDN, open standards based applications platform.

The security and flexibility of your investment today is assured. If for example IP telephony or web integration is not required immediately, then start off with the basic platform, and upgrade later as your needs evolve.

With our commitment to open standards such as EuroISDN and IP, interoperability of our systems is assured, giving you maximum flexibility in meeting both today's requirements, with the safeguard that future needs will also be taken care of.

Backed by the resources of a £28B global communication supplier, be assured that NEC Infrontia DXE systems will keep pace with today's rapidly changing communications jungle. Naturally any new features are backwards compatible future proofing your investment in the most flexible communications system available today.



Multimedia Communication Servers

With the rapid changes in communications technology PBX's are having to evolve to keep pace with today's business requirements.

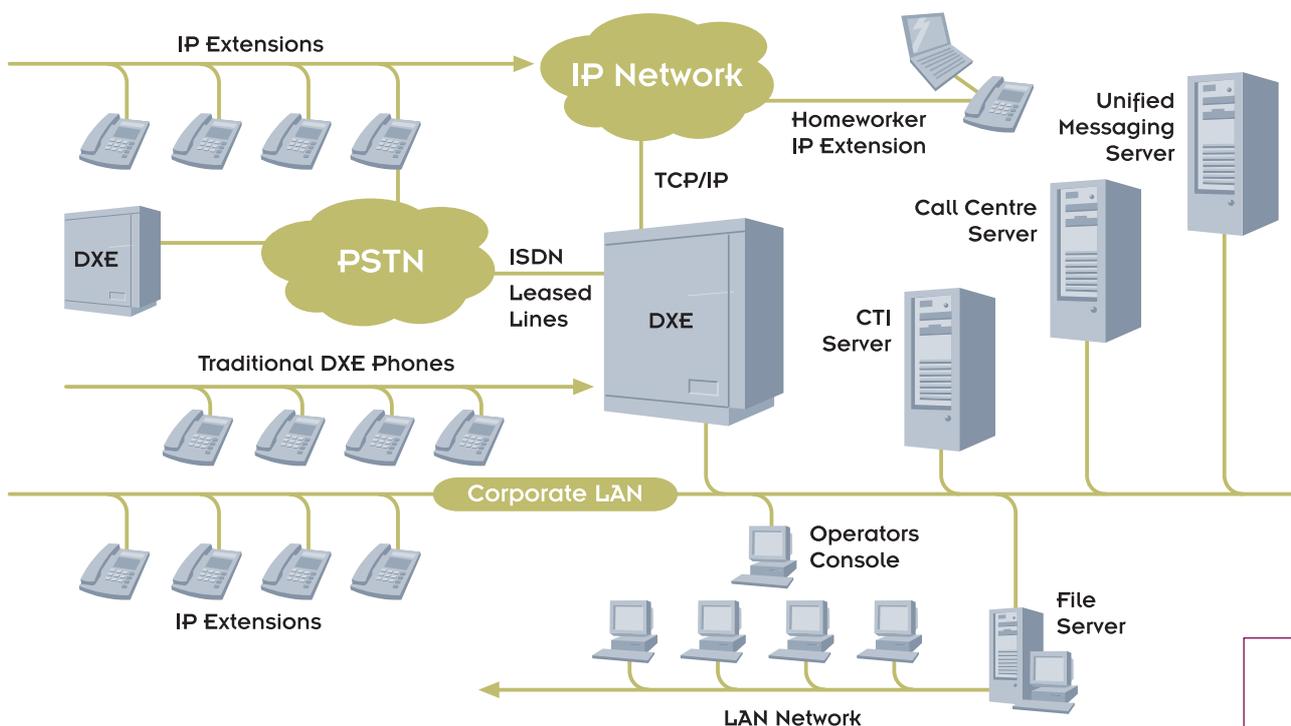
ISDN, Computer Telephony Integration (CTI) and now IP telephony are putting demands on PBX's that were unimaginable only 10 years ago. Today a major customer issue is will my new PBX be made obsolete by the next advance in communications technology?

The DXE 32, 96 and 600 communication servers are designed to keep pace with the evolving communications network. We call the DXE series Multimedia Communication Servers because they connect via Ethernet to your LAN. The DXE communication servers are the telephony resource for your business, integrating with your file server to databases such as MS Outlook, and using CTI, to allow screen popping and automated outbound dialling.

All our communication servers bridge the gap between traditional telephony using ISDN, and the evolving convergence with data taking place using IP. Voice over IP (VoIP) is supported on all our systems and where required IP phones can be used.

At NEC Infrontia we recognise the business benefits of IP telephony. This is why the DXE series support IP telephony functionality, but we are also conscious of the paramount need to ensure 100% telephony availability which may not always be the case on congested LAN networks. By integrating the best of IP telephony with the traditional features that users expect from a modern communication system we offer our customers the best of both worlds. The cost savings offered by IP telephony together with the features only available from traditional hybrid PBXs.

DXE Multimedia Communication Server Architecture

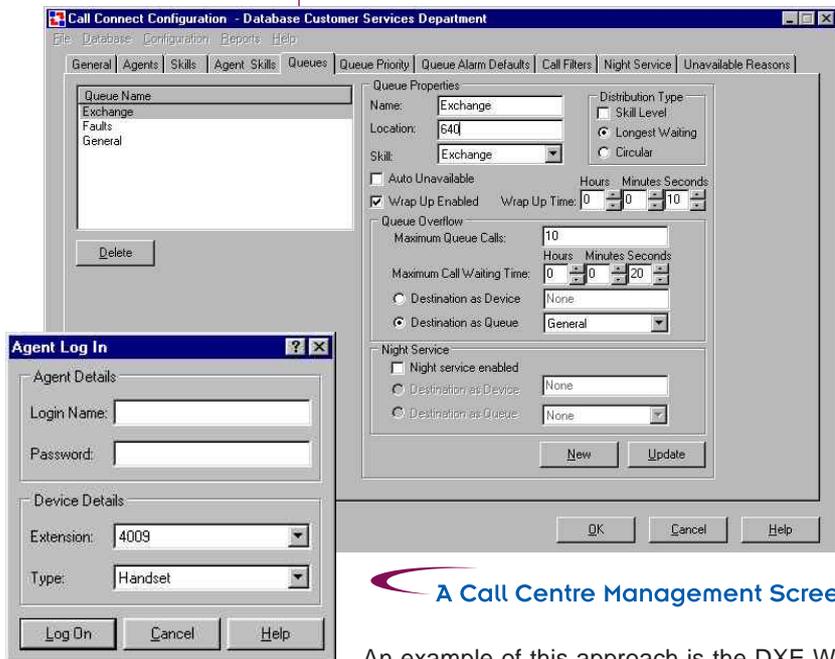


Computer Integration Capabilities

The integration of phone systems with computers has created a new generation of exciting and productivity enhancing business applications.

The DXE is in the forefront of these developments. The client server architecture of the DXE makes us possible to introduce to the small and medium users applications that only a few years ago either did not exist or were prohibitively expensive.

Typical examples include DXE Connect Call Centre, a Windows NT skills based routing call centre, or for businesses with mobile staff why not install DXE Hot Connect hot desking software to minimise office resources. Application modules extend the functionality of the DXE whilst minimising the need for a high upfront investment. This modular approach allows users to upgrade basic initial systems as and when their requirements change.



A Call Centre Management Screen

An example of this approach is the DXE Web Connect Call Centre application. Who today would purchase a call centre that could not process e-commerce transactions? DXE Web Connect does just that, allowing web calls and emails to route and queue in the call centre alongside traditional voice calls.



Call Centre Notification of a Web Call

A log in screen for Call Centre Agents or Hot Desking staff

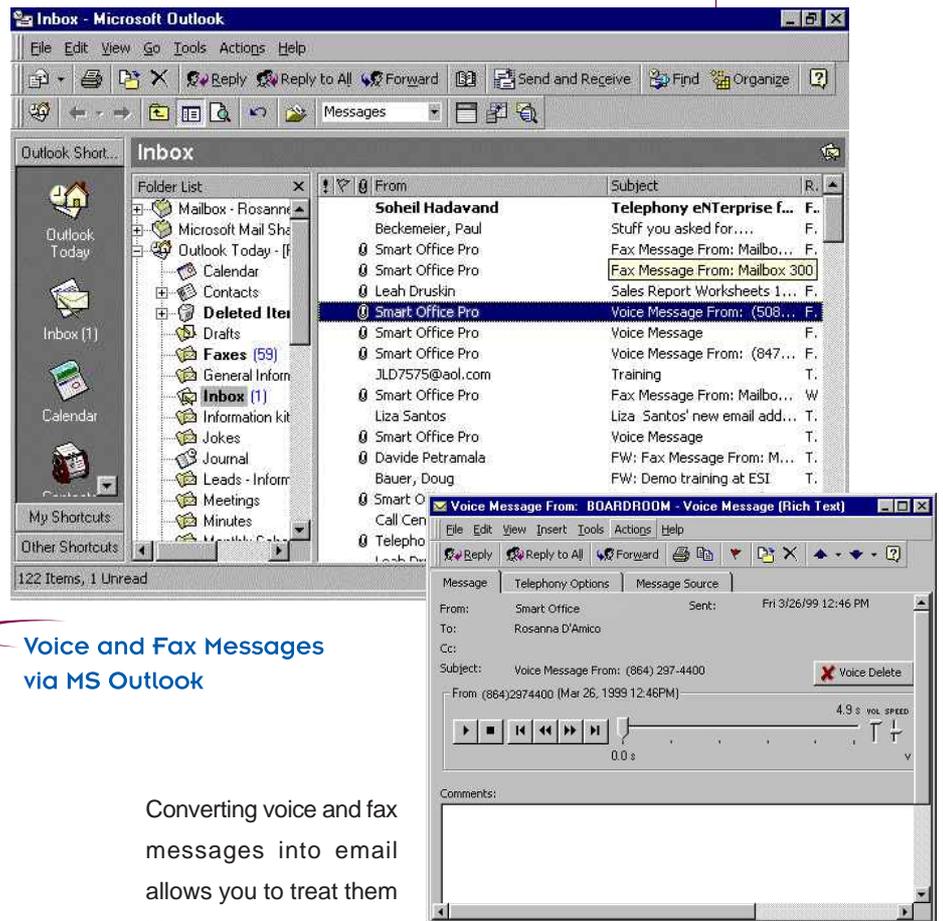
Business on the phone is real time. If a problem arises you want to know now! DXE InDepth is a real time call centre performance monitor giving you up to the minute notification of call handling performance.

| Agent Status - All Sales | | | | CIQ | Wait | Ave Wait | | | | | |
|-------------------------------|-------|----------|----------------|----------|-----------|--------------|----|-----|----|----|----|
| Agent Name | State | Time | Dialled Digits | | | | | | | | |
| Andrew Parker | INC | 00:02:04 | 01782345721 | 1 | 15 | 00:11 | | | | | |
| Dave Stringer | INC | 00:00:50 | 01608814500 | | | | | | | | |
| Dale Whitaker | INC | 00:00:34 | 01618511154 | | | | | | | | |
| Tracey Oldman | UNAV | 00:07:04 | | | | | | | | | |
| Allison Hatton | OUT | 00:01:23 | 90160844351 | | | | | | | | |
| Helen Youd | OUT | 00:00:35 | 901629643401 | | | | | | | | |
| Agent Status - All Non Sales | | | | Answered | Abandoned | Longest Wait | | | | | |
| Agent Name | State | Time | Dialled Digits | | | | | | | | |
| Beverly Corder | FREE | 00:00:00 | | 72 | 12 | 00:21 | | | | | |
| Phil Okell | INC | 00:00:34 | 01618511154 | | | | | | | | |
| Jane Yearsley | INC | 00:00:00 | | | | | | | | | |
| Jenny Harton | INC | 00:00:50 | | | | | | | | | |
| Alan Hobson | INC | 00:01:04 | 01608534977 | | | | | | | | |
| Gareth Wear | RGON | 00:00:13 | | | | | | | | | |
| Agent Statistics - All Agents | | | | | | | | | | | |
| Lock | AP | BKS | DW | BC | PO | JY | JH | AMH | GW | TO | AH |
| Calls Answered (Daily) | 8 | 7 | 10 | 9 | 8 | 7 | 8 | 11 | 5 | 0 | 0 |
| Calls Outgoing (Daily) | 8 | 13 | 8 | 10 | 7 | 0 | 0 | 0 | 0 | 11 | 4 |
| Calls Intercom (Daily) | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calls Ring On (Daily) | | | | | | | | | | | |

InDepth Call Centre Management Screen

DXE Smart Office takes voice mail and puts it on the LAN.

With DXE Smart Office unified messaging, voice mail messages are delivered to your MS Outlook inbox. Now you only need to look at one screen to see all your fax, voice and email messages.



Voice and Fax Messages via MS Outlook

Converting voice and fax messages into email allows you to treat them like any other email.

Forward them, append comments, send them anywhere in the world. When was the last time you broadcast a voice message via your traditional phone? Don't know how!

Process voice messages like any other email

Computer integration is just one example of why the DXE is your best choice for a future proofed communication system.

DXE Connect Suite of Call Centre Applications

Server Application

Agent Application

Call Connect

Call connect

Screenpop

Supervisor Application

Voice Connect

Hot Connect

Web Connect

Campaign Connect

System Phones

~ features that work for you!

An overwhelming range of features -but how do I use them? Our choice of 12 or 24 button phones gives you one button access to the features you use.

SOLVING YOUR PROBLEMS

Your telephone system must adapt to your requirements. We make sure the DXE keeps pace.

Our latest software includes:

2nd. Call Indication

How often are you on the phone and another call comes in? Is that second caller a major customer? You recognise the problem and so do we.



The DXE phone display shows you the DDI and name of who is waiting to get through. Problem solved!

Call Redirect

You're busy at your desk, you do not want to use the automatic Call Forward as that diverts everyone to maybe, your mailbox. In which case how do you answer only the calls that you want and put all other calls through to other staff?



The DXE allows you to selectively divert ringing calls without answering them. Look at the CLI /name of the caller then hit the Redirect Key/s.

Redial List

Want to call that busy number again? Wouldn't it be nice to have that Redial List feature that you have on your GSM phone, also on your office phone. The DXE has it. Up to 10 numbers can be stored.



24BTX Executive

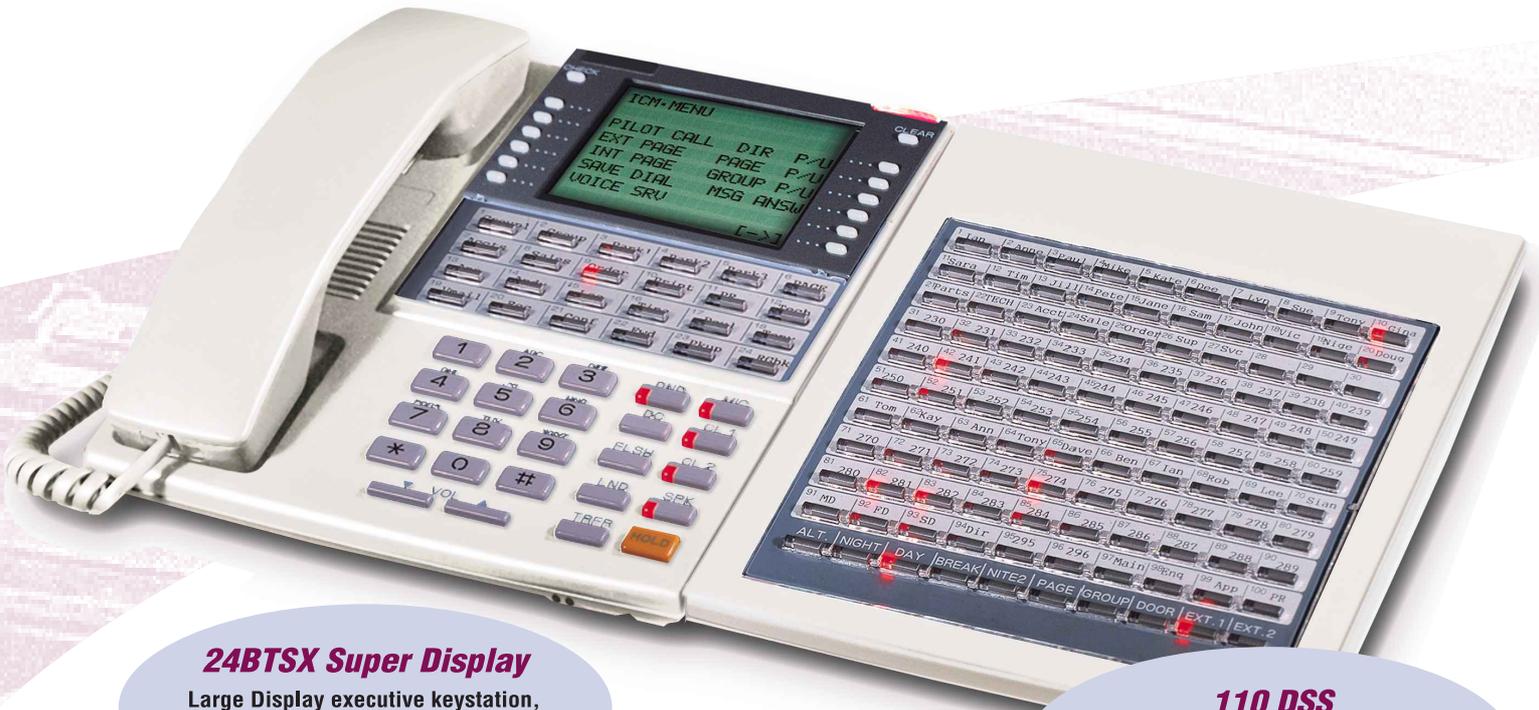
Small Display executive keystation, PC Compatible, Handsfree, Paging, Four Display Prompt Keys, 34 Soft Keys, Slot for Analogue Card.



12BTX Executive

Small Display executive keystation, Handsfree, Paging, 4 Display Prompt Keys, 22 Soft Keys.

One Touch Versatility



24BTSX Super Display

Large Display executive keystation, PC Compatible, Paging, Handsfree, Display Prompts, 34 Soft Keys, Slot for Analogue Card.

110 DSS

100 key operator position connects to any of the 24 key terminals. Can be extended up to 4 units.

How do I work this phone?
One touch access to class leading features that benefit you!



12BT Standard

Standard keystation, Handsfree, Paging, 22 Soft Keys.



Basic Station

Handsfree Answerback, Paging, Message Waiting Light. System features are accessed by using codes.



24 DLS

24 key operator position connects to any of the 24 key terminals and shows extension status.

Instant

Accessibility

DXE DECT digital cordless



Where missed calls can mean lost revenue, or at best frustrated customers, many businesses have found their main communication problem is locating internal staff.

Despite advances in technology the ability to contact staff who are on the premises, yet away from their desks - service personnel, shop floor supervisors, inventory controllers etc. has always caused problems,

DXE DECT solves these fundamental business problems. Just as cellular mobile phones finally solved the issue of locating staff off site, DXE DECT cordless

technology simplifies internal office communications.

DXE DECT

Based on the international standard for cordless office communications, DXE DECT integrates transparently with the DXE business communication systems.

A third generation DECT system, our stylish lightweight handsets incorporate a class leading set of features:

- 9 Hours Talktime
- 60 Hours Standby
- Headset Options
- GAP/CAP Compliant
- 5 Line Display
- Internal Vibrator

Maximum capacity of 496 Handsets and 64 Base Stations, DXE DECT meets the requirements of most cordless users.



Using an integral system card DXE DECT works on the principle of setting up a network of cordless transmitters, to ensure that staff on the move are always within range and are therefore always contactable. Roaming and handover make this process automatic and transparent to the user.

Operator Options



First impressions are important. Give the operator the right equipment to project the quality image of your Company that you want callers to remember.

The DXE operator console options provide efficient and fast call handling creating that right image for businesses that rely on a centralised operator as their first point of contact.

DSS Operator Position

For most call handling requirements a 24 key system phone with a DSS is an ideal operator position.

They are available as 24 and 100 key units and are used to access extensions, exchange lines, doorphones, paging zones. Headset working is optional.



DXE operator consoles connect to any keystation port.

DXE 96/600

Windows Operators Console*

PC based, the Windows operators console offers mouse point and click control of call handling. It includes:

- Integral Handset
- Busy Lamp Field Status
- Dial by Name directories (Internal and External Menus)
- Six Call Handling Keys
- Text Messaging
- Call Queue Status

Why not attach a name to the DDI, Exchange Line or the CLI to enable you to personalise your service?



The DXE WOC is fully integral and does not require a separate telephone.

*The LAN version is scheduled for release in September 2001.

Networking Solutions



Private Circuits

Based on Qsig, the European digital networking standard, the DXE brings powerful networking features to multi-site operations. Feature transparency allows many DXEs to act as one large, integrated system.

Sophisticated networking features such as ARS (Automatic Route Selection) and Transit Exchange working minimise the leased lines required and maximises the use of the private network so reducing PSTN charges.

Networking features include:

- Follow Me
- Call Forward
- Break-In /Break-Out
- Linked Numbering
- Transfer Recall
- Centralised Operator
- Camp-on
- Voice Announce
- Transit Working
- DDI Display
- Extension Name Display
- 4 Digit Numbering Plan

For businesses that do not require extensive networking features the DXE range also supports networking based on BT DC5 and AC15 analogue tie lines.

Advances in IP technology have increased the business benefits of integrating many sites to work as one cohesive communications network.

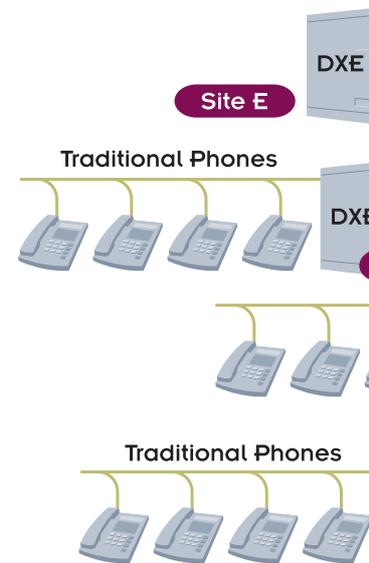
Whilst users with more traditional requirements can still take advantage of inter site networking based on telephony protocols, the opportunities presented by IP may present more flexibility in future proofing your voice and data communications network.

DXE IP solutions offer the capability to provide advanced telephony features over an IP network. DXE IP Service Packs offer tailored solutions to meet your individual requirements.

With so much investment in legacy PBX systems DXE IP solutions provide the bridge between the old and the evolving communication networks. DXE IP solutions provide the reliability and features of traditional phone systems, together with the business benefits of simplifying network infrastructure offered by IP.

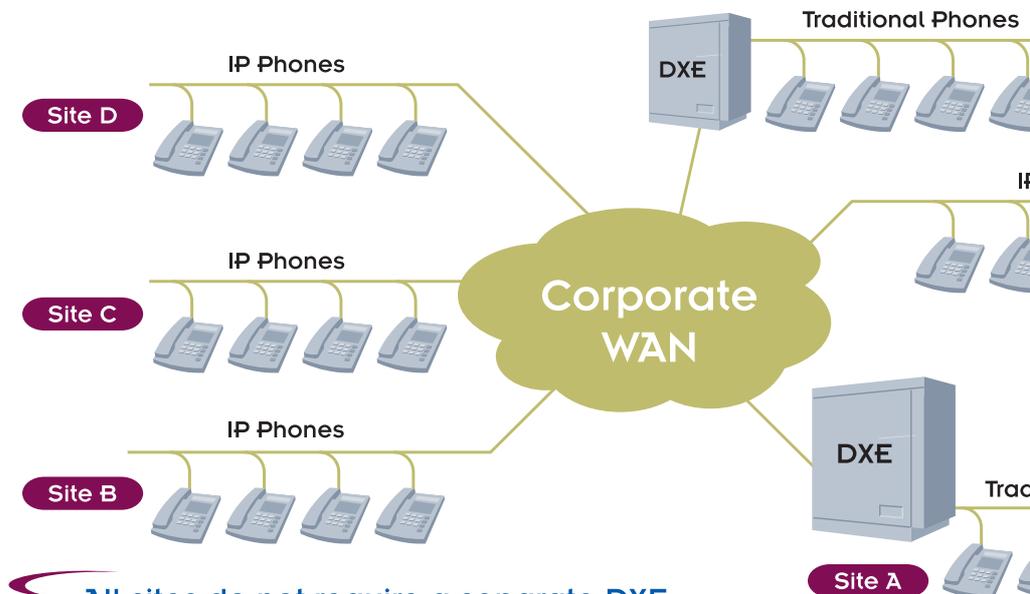
Traditional DXE

Traditional private networks today mainly use digital leased lines such as Kilostream and Megastream to connect the different sites. A PBX is typically



Interconnection via

DXE IP Private Networking



All sites do not require a separate DXE

Growth for the future

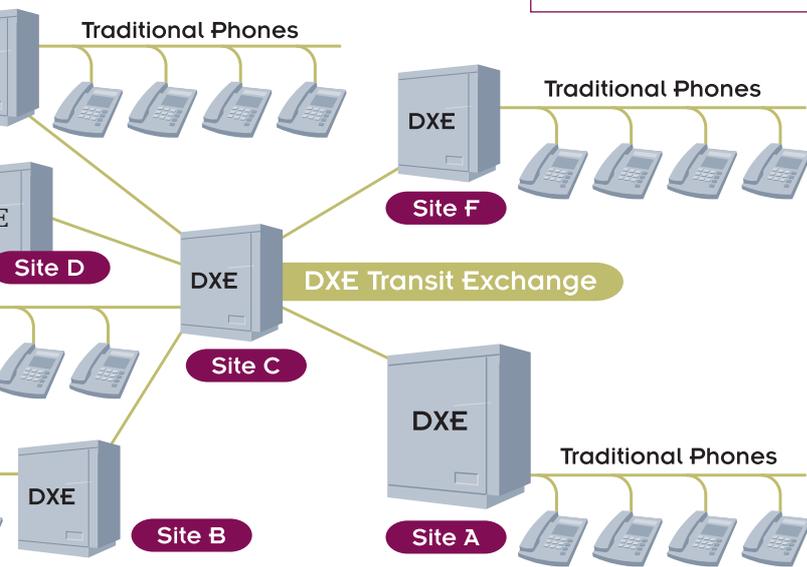
Using the latest VLSI technology DXE is a modular system that can be expanded as your business develops.

Today you need only purchase your specific needs safe in the knowledge that the DXE's modular design can be expanded as your own requirements increase.

NEC Infrontia's future-proofing approach is also reflected in its software packages. New software can be installed in earlier systems ensuring you gain maximum life and value from your initial investment.

Private Network

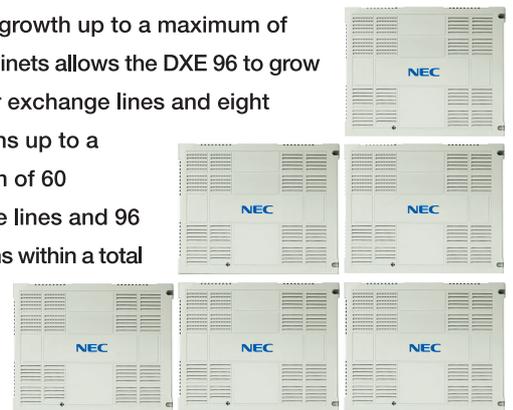
required at each site which makes it very expensive for sites requiring just a few phones. Although multiplexors may be used to allow voice and data to share the same link it is inflexible compared to networks based on IP.



DXE 32 Four exchange lines and eight extensions expanding to a maximum of 12 exchange lines and 24 extensions within a total capacity of 32 ports.



DXE 96 Modular growth up to a maximum of three cabinets allows the DXE 96 to grow from four exchange lines and eight extensions up to a maximum of 60 exchange lines and 96 extensions within a total capacity of 156 ports.



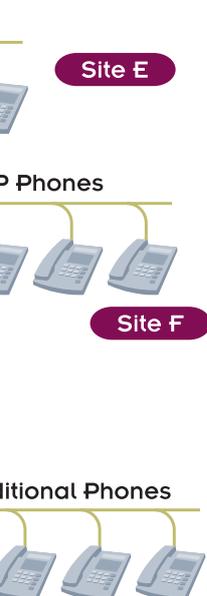
Use remote diagnostics and reconfiguration to safeguard your business.

DXE 600 A three cabinet expansion path allows the DXE 600 to grow from four exchange lines and 16 extensions to a maximum of 192 exchange lines and 480 extensions within a total capacity of 672 ports.



Hot pluggable cards minimise downtime and simplify upgrades.

AC15/DC5 or KiloStream/MegaStream Links



The evolution of IP telephony is creating opportunities to implement more flexible and ultimately lower cost private networks. The DXE IP networking architecture allows legacy PBXs to coexist alongside sites that do not have a PBX, with IP extensions connected to the LAN. This allows users to retain their existing investment in DXE systems and gain the cost benefits of sharing the LAN/WAN infrastructure with telephony.

DXE Technical Data

| | DXE 32 | DXE 96 | DXE 600 |
|-------------------------------------|-----------------|-----------------|-----------------|
| ISDN Primary Rate 'B' Channels | 30 | 30 | 192 |
| ISDN Basic Rate 'B' Channels | 16 | 52 | 192 |
| ISDN So 'B' Channels | 24 | 96 | 192 |
| Analogue Trunk Ports | 16 | 52 | 128 |
| Analogue Extension Ports | 16 | 64 | 480 |
| Digital Extension Ports | 24 | 72 | 480 |
| * DECT Extension Ports | 28 | 88 | 496 |
| Total Extension Ports | 28 | 96 | 480 |
| DC5 Ports | 6 | 6 | 64 |
| Maximum Number of Ports | 32 | 156 | 672 |
| Main Cabinet Size (w x h x d) in mm | 420 x 154 x 246 | 420 x 154 x 246 | 590 x 680 x 340 |
| Maximum Power Consumption | 150W | 450W | 780W |

*Available August 2001

NEC Fact File

A global force in business communications

NEC Infrontia is part of the global NEC Group, and is a merger of the NEC and Nitsuko CPE and point of sale businesses

NEC total sales are over £28B making us the 51st largest company in the World

NEC employs 150,000 staff worldwide

NEC is the World's third largest patent producer

NEC is unique in being in the top five suppliers of:

- Computers
- Semiconductors
- Communications

NEC is Japan's leading supplier of communication solutions

NEC is the third largest PBX supplier in the US

NEC manufactures semiconductors in the UK and Ireland

NEC

NEC Infrontia UK Limited

75 Swingbridge Road,
Loughborough,
Leics LE11 5JB,
United Kingdom.

Tel: 01509 643100

Fax: 01509 610206

Web: www.necinfrontia.co.uk

NEC Infrontia UK Ltd is a wholly owned subsidiary of the NEC Infrontia Corporation of Japan.

Designed and produced by Lawrence & Pierce, Nottingham 2001.

LIT-20



NEC Infrontia has its headquarters in Tokyo with its design laboratories located in Kawasaki, a major industrial centre bordering Tokyo and Yokohama. NEC Infrontia manufactures its products both in Japan and offshore in Thailand. All plants are ISO9000 approved.

This publication provides outline information only which (unless specifically agreed by NEC Infrontia in writing) may not be used, applied or reproduced for any purpose or form part of any order or contract or be regarded as a representation relating to the products or services concerned. NEC Infrontia reserves the right to alter without notice the specification, design, price or conditions of supply of any product or service.

CE 0682

All trademarks acknowledged.