

**IN
THIS
ISSUE:**

- 1CONNECT—Network Services from Unisys
6 Questions from the U.S.A.
7Snippets

Unisys Launches CONNECT New Network Services

At the end of April 1990, Unisys announced CONNECT in Western Europe. Unisys describes CONNECT as a new and comprehensive range of network products and services, designed to cover every type of specialist network service the user could require. The CONNECT product is based on Novell Netware™, a software platform which will be sold by Unisys in the LAN market.

Prior to the launch, network services had been embedded in the Environmental Services operation of Unisys' Customer Services division. As part of Environmental Services, Unisys claims that its network service activities had been successful to the point of contributing about 50% of the total revenues of

Environmental Services. As a result of this success, Unisys decided to establish network services as a separate business unit within Customer Services—hence CONNECT.

CONNECT provides bridging between the network products of all major manufacturers and heralds a move by Unisys into the provision of full network services. Exhibit A provides a

"CONNECT—Total Solution Network Service"

The major strategy and product of CONNECT is the provision of open systems cabling based on the concept of twisted pairs. The key to CONNECT lies in an alignment between Environmental Services, intelligent buildings, cabling and networks within Unisys.

model of the CONNECT concept.

Unisys claims that CONNECT provides single solution service to satisfy user needs ranging from planning to installation, including ongoing support, monitoring and upgrading;

Continued on next page

INPUT provides planning information, analysis, and recommendations to managers and executives in the information processing industries. Through market research, technology forecasting, and competitive analysis, INPUT supports client management in making informed decisions.

Continuous-information advisory services, proprietary research/consulting, merger/acquisition assistance, and multiclient studies are provided to users and vendors of information systems and services (software, processing services, turnkey systems, systems integration, professional services, communications, and systems/software maintenance and support).

Many of INPUT's professional staff members have more than 20 years' experience in their areas of specialisation. Most have held senior management positions in operations, marketing, or planning. This expertise enables INPUT to supply practical solutions to complex business problems.

Formed as a privately held corporation in 1974, INPUT has become a leading international research and consulting firm. Clients include more than 100 of the world's largest and most technically advanced companies.

North America

Headquarters

1280 Villa Street
Mountain View, CA 94041-1194
(415) 961-3300
Telex 171407 Fax (415) 961-3966

New York

959 Route 46 East, Suite 201
Parsippany, NJ 07054
(201) 299-6999
Telex 134630 Fax (201) 263-8341

Washington, D.C.

1953 Gallows Road, Suite 560
Vienna, VA 22182
(703) 847-6870 Fax (703) 847-6872

International

London

Piccadilly House
33/37 Regent Street
London SW1Y 4NF, England
(071) 493-9335 Fax (071) 629-0179

Paris

52, boulevard de Sébastopol
75003 Paris, France
(33-1) 42 77 42 77 Fax (33-1) 42 77 85 82

Tokyo

Saida Building
4-6, Kanda Sakuma-cho
Chiyoda-ku, Tokyo 101, Japan
(03) 864-0531 Fax (03) 864-4114



Exhibit A

Unisys CONNECT

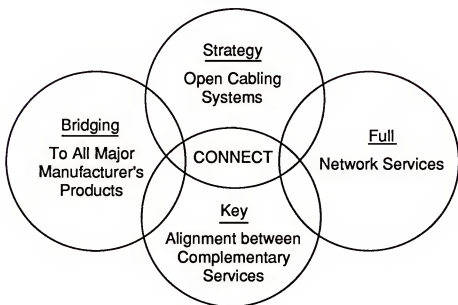
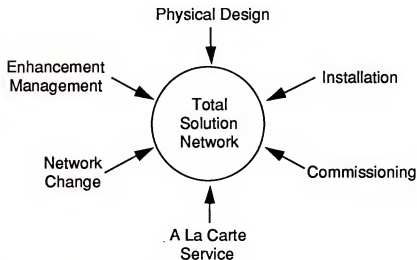


Exhibit B

Unisys CONNECT—Six Key Services



CONNECT provides everything from single products to high-level management and integrated turnkey solutions.

CONNECT is intended to complement the specialist consultancy skills of the Unisys Professional Services Division and Complex Systems Organisation. The services available are illustrated in Exhibit B and are summarised in the following descriptions:

1. Physical Design

This service is intended to assist the user in achieving optimum design of the network by providing consultants to work alongside the user. The concept is to assist the user in the paper



planning stage to arrive at a preferred solution which takes into account the latest technology, structure and location of buildings, optimisation of links between computers and future user business plans. Exhibit C lists the services and technologies involved in the physical design phase.

In addition, Unisys works with the user on a consultancy basis to design information systems that support the user's business needs and objectives. The aim is to provide a complete network blueprint for the necessary cabling and building work, which can then be carried out by the Unisys Network Installation Service.

2. Network Installation

Unisys provides full expertise on site for complete project management and quality control at every stage of installation. Unisys consultants analyse the correct methods of trunking, taking into account the structure of different parts of the user's building. In the case of a WAN installation, Unisys provides expertise at each site, to effect smooth and coordinated installation across the whole network. This includes monitoring for environmental protection and cosmetically acceptable installation. Exhibit D lists the services and technologies involved at the installation phase.

Exhibit C

Physical Design Stage

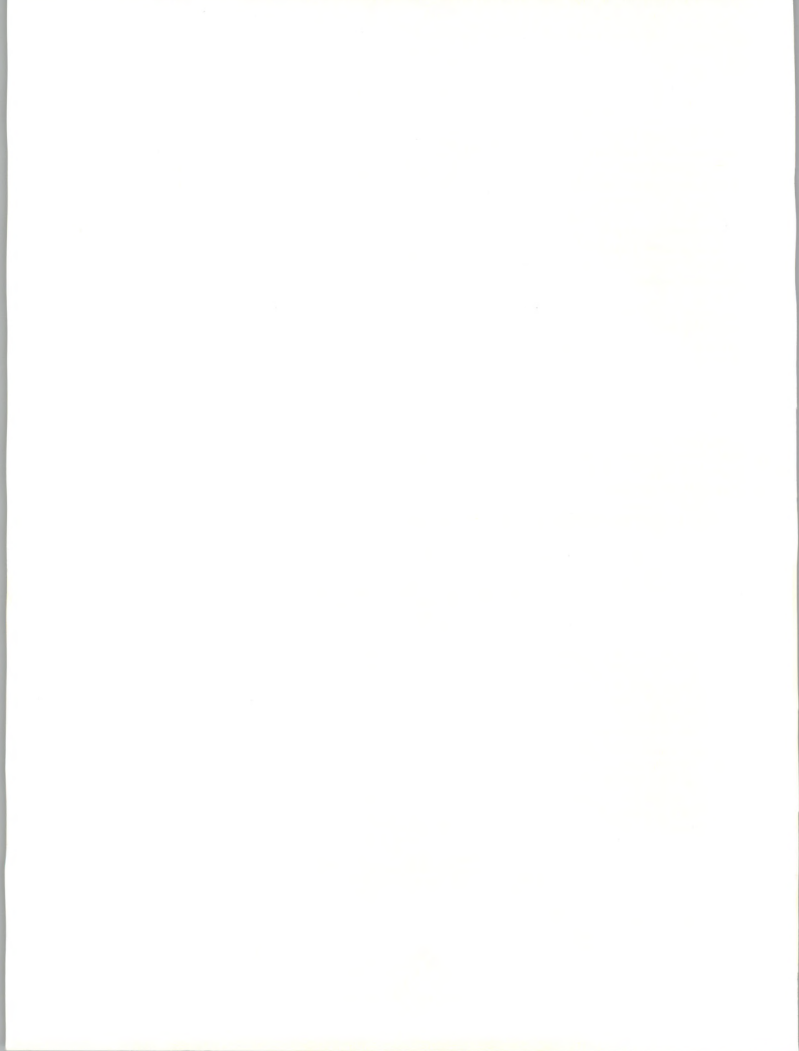
- LAN/WAN/broadband
- Data/voice PABX/ISDN/FDDI
- Consultancy
 - Advise on topology
 - Connection methodology
 - Tariffs
 - Procurement management

Exhibit D

Installation Phase

- Unisys open cabling system
- LAN/WAN/broadband
- ISDN/PABX/FDDI
- Project management

Continued on next page



CONNECT...from page 3**3. Network Commissioning**

At the commissioning phase, Unisys will accept full responsibility for project management, while the user

the work they do stage by stage, testing for faults and overseeing each aspect of the total commissioning phase. This includes the handling of any problems in interfacing with the PTT. The services and technologies involved in the commissioning phase are listed in Exhibit E.

Exhibit E**Commissioning Phase**

- Project management
- Testing units
- Stage proving products
- Certified network engineers
- User training

retains management control. Unisys consultants will monitor and test each step of the commissioning, and all experienced Unisys network engineers are fully trained and certified by Novell™ to work with the Netware™ product. Unisys will deal with the subcontractors on behalf of the user, checking and guaranteeing

4. A La Carte Network Service

As part of the strategy to provide total solution networks, Unisys offers A La Carte Network Services, which it describes as a complete solution for network maintenance and support. A La Carte is designed so that one simple contract can be used to cover the whole system by providing a complete menu of network services. From this menu, the user can select the exact level of support required to suit the needs of the user's business. The type of service available under A La Carte ranges from telephone support to full on-site support, tailored to match the criticality of the user's system.

5. Network Change

The concept of the Network Change service is to ensure sufficient flexibility of the network, so as to keep pace with the changing needs of the user's business and organisation. Unisys personnel will oversee and organise any changes or



expansion required by the network. This service ranges from one project to constant reviews, and from specific redesign to full forward planning. Unisys claims that this service can protect the user from the high cost of uncontrolled proliferation of cabling and equipment by keeping the network under review to ensure optimum efficiency. The services and technologies involved in this service are listed in Exhibit F.

6. Network Enhanced Management

The objective of these services, available as part of the Unisys total network solution concept, is to enable optimisation of the network and maximisation of the user's computer resources. In the application of these services, Unisys claims that the user can improve the cost-effectiveness of the network through: usage monitoring, identification of areas of system redundancy, and checking the uncontrolled proliferation of duplicated resources. The elements of these services can be summarised as follows:

- **Network Audit:** regular analysis and review to check the costs of redundancy or proliferation.
- **Network Optimisation:** measuring and monitoring to identify and improve underperformance or sections under strain.

Exhibit F

Network Change

- Moving people
- Moving locations
- Additional people
- Additional locations
- Cable management
- Unisys open cabling system
- Network integration

- **Network Streamlining:** cutting costs by removing unnecessary equipment or inefficient cabling.
- **Network Integration:** developing links with other systems.
- **Network Software Management:** keeping the user's software up to date and in step with other software in the user's organisation.
- **Network Security:** protecting the user's network from physical damage or unauthorised use through cabling or PTT lines.
- **Network Expansion:** major review to meet new capacity requirements. ■



The following are some of the questions posed to the U.S. hotline over the last month. The questions and their answers may be of general interest to all INPUT Customer Service clients.

Questions from the USA



Question: Does DEC offer disaster recovery services? If so, what do they cover?

Answer: DEC offers three components to their disaster recovery services. These components are:

Restart: this service provides access to a "hot site" within hours of disaster notification. The site is fully equipped with equipment to resume processing and personnel to assist up to 24 hours per day, seven days per week. Periodic testing of the recovery of critical applications is also available with technical staff to assist.

Recover-All: this supplement to the DEC Field Service agreement guarantees the restoration of computer

operations after damages caused by environmental or accidental occurrences. This component takes over where the on-site Field Service agreement leaves off, after mechanical and component failures.

Recovery Planning Services: this set of services offers a comprehensive planning methodology designed to help companies develop a disaster recovery contingency plan. Consultants with recovery planning experience assist the company in planning for the event of the computer facility being inoperative for an extended period of time.

Question: Can a customer purchase DEC Direct Access Advisory Services if they have only DEC personal computers installed, or must it be a multivendor environment?

Answer: The DEC Direct Access Advisory Service does not apply to installations of only personal computers. It does not matter if the installation is DEC only, or multivendor.

Question: Is the Surety program the only program Unisys has that covers software?

Answer: Software Excel Basic does not cover minicomputer software. Coverage is available under the program "System Extra," which is similar to Excel Basic, but not as comprehensive.

■



Snippets

- ❖ It was recently announced that TRW, Inc. has placed its Customer Service Division, headquartered in Fairfield, NJ up for sale. This move is a result of the company's strengthening focus on its main lines of business. TRW is still actively involved in the provision of customer service support and is continuing to increase its business.
 - ❖ Granada Computer Services International Ltd. has recently acquired a New Jersey company, Essex Computer Service Inc., a specialist in Data General machines. Granada now has 16 sites in the U.S.
 - ❖ In contrast to the recent spate of mergers and acquisitions, Advance Technology Maintenance has preferred to remain small and stable. ATM has no immediate plans for expansion, preferring instead to direct its efforts towards the changes in the marketplace. ATM has around 100 employees and a turnover of about \$11 million. Its size does not mean that it cannot take on corporate clients, however; one of its clients is British Petroleum.
- ATM has also recently been signed up by NEC as its approved maintenance supplier.
- ❖ ICL is now in a position to offer disaster recovery services for ICL mainframe users. There are already around 8 companies offering ICL disaster recovery services, such as Sherwood Computers and NMW Computers, but ICL claims to be able to offer the full range of services from consultancy to restart services. ICL is offering two portfolios: contingency management and recovery management. There are plans to extend the service to cover its UNIX machines by the end of the year.
 - ❖ Tesco Foodstores Ltd, a British supermarket chain, has upgraded its computer to an Amdahl 5990-1400 mainframe. This is to provide additional computing facility and to handle its disaster recovery programme. The machine handles warehousing applications, financial programming and on-line stock control.
 - ❖ MBS has acquired the Exchange Telegraph Company Ltd., which has contracted annual maintenance revenues of \$9.5 million. MBS is also merging its engineering operation with that of Extel Information Technology. This will lead to job losses and closure of six Extel and MBS locations. Nearly all the service engineers will be retained, however.
 - ❖ Synapse Computer Services plc has won a contract to convert Reuters European Data Centre from DOS/VSE to MVS. The contract is worth \$480,000 and is due to be completed by September this year.
 - ❖ AT&T Istel Computer Systems is a new company formed to market UNIX systems, workstations and servers. It will sell through direct and indirect channels.
 - ❖ Olivetti's Customer Support Group has been awarded a further independent maintenance contract from Barclay's Bank, worth \$4.7 million. The total value of Barclay's account with Olivetti is now around \$27 million a year. This new contract includes responsibility for over 2,000 cash dispensers, installation of more workstations, and provision of a team to address network faults.
 - ❖ Getronic Service, a Dutch independent maintenance company, has a five-year agreement to take on the repairs of the Mita Europe.
 - ❖ Sorbus has beaten IBM to win a contract to maintain Sun Alliances's IBM equipment.



INPUT®

- REPORT -

PRODUCTION QC SCHEDULE

Program: CE-CSPProgram Year: 1990Report: SERVICE UPDATE - JUNEProject Code: CE-EQSRAuthor: Ken Carter EE# 539

QC Performed By: _____

	Date Sent	Initial	Date Rcvd	Initial	
RESEARCH	1. Author's MSWord Draft to QC				
	2. QC'd Draft to Author				
	3. Revised Draft to QC (If Required)	25/5			
	4. QC'd Revised Draft to Author	25/5			
GRAPHICS/PRODUCTION	5. Final MSWord Draft to Report Production	25/5	5/29	AS	
	<input type="checkbox"/> Printed Written Draft	<div style="border: 1px solid black; padding: 5px; background-color: yellow;"> Corrections Need checked ✓ R 13 June </div>			
	<input type="checkbox"/> MSWord Disk				
	<input type="checkbox"/> Exhibits				
	<input type="checkbox"/> Abstract				
	<input type="checkbox"/> Transmittal Letter				
	<input type="checkbox"/> Thank-You Package Transmittal Letter				
	<input type="checkbox"/> Interview Respondent Name/Address List				
	<input type="checkbox"/> Press Release Draft				
	<input type="checkbox"/> INPUT/OUTPUT Article Draft				
	<input type="checkbox"/> Questionnaire Blank				
	<input type="checkbox"/> Brochure (to sell report)				
	<input type="checkbox"/> Reverse Side of Form Completed				
	6. First Draft to Proofreader	5/29	AS	30 May	AS
	7. First MAC MSWord Draft to Author				
8. First Draft to Production					
9. Second Draft to Proofreader					
11. Second Draft to Production					
12. Final Page Maker Draft to Proofreader					
13. Final Draft to Author	6/6	hk	6/12	AS	
14. Final Report to Printer					
15. Report to UK <input type="checkbox"/> Client <input type="checkbox"/>					
16. Thank-You Package Shipped					

Dist: ORIG: Report Draft/Orig. File COPY: Fulfill./Shipping

ADM400/01
5/89

UNISYS LAUNCH CONNECT

NEW NETWORK SERVICES

At the end of April 1990 Unisys launched CONNECT in Western Europe. Unisys describe CONNECT as introducing a new and comprehensive range of network products and services, designed to cover every type of specialist network service the user could require. The CONNECT product is based on Novell Netware TM as a software platform which will be sold by Unisys.

Prior to the launch, network services had been embedded in the Environmental Services operations of Unisys' Customer Services division. As part of Environmental services Unisys claim that their network service activities had been successful to the point of contributing about 50% of the total revenues of Environmental Services. As a result of this success, Unisys decided to establish network services as a separate business unit within Customer Services, hence CONNECT.

The major strategy and product of CONNECT relates to the provision of open systems cabling based on the concept of twisted pairs. The key to CONNECT lies in an alignment between Environmental services, intelligent buildings, cabling and networks within Unisys.

Additionally CONNECT provides bridging between the network products of all major manufacturers and heralds a move by Unisys into the provision of full network services. Exhibit ? provides a model of the CONNECT concept.

" CONNECT - TOTAL SOLUTION NETWORK SERVICE "

Unisys claim that CONNECT provides a single solution service to satisfy user needs ranging from planning to installation including ongoing support, monitoring and upgrading; CONNECT provides everything from single product to high level management and integrated turnkey solutions.

CONNECT is intended to compliment the specialist consultancy skills of the Unisys Professional Services Division and Complex Systems Organisation. The services available are illustrated in Exhibit? These services are summarised by the following descriptions.



1. PHYSICAL DESIGN

This service is intended to assist the user in achieving optimum design of the network by providing consultants to work alongside the user. The concept is to assist the user in the paper planning stage to arrive at a preferred solution which takes account of the latest technology, structure and location of buildings, optimisation of links between computers and future user business plans. A list of the services and technologies involved and the physical design phase are listed in Exhibit ?.

In addition Unisys; can work with the user on a consultancy basis to plan how, Information systems can be designed to support the users business needs and objectives. The aim is to provide a complete networking blueprint for the necessary cabling and building work which can be carried out by the Unisys Network Installation Service.

2. NETWORK INSTALLATION

Unisys will provide full expertise on site, for complete project management and quality control at every stage of installation. Unisys consultants can analyse the correct methods of trunking taking into account the structure of different parts of the user's building. In the case of a WAN being installed, Unisys can provide expertise at each site to effect a smooth and co-ordinated installation across the whole network. This includes monitoring for environmental protection and cosmetically acceptable installation. Exhibit ? lists the services and technologies involved at the installation phase.

the 1990s, the number of people with a mental health problem has increased by 50% (Mental Health Foundation 1999). The prevalence of mental health problems in the UK is estimated to be 10% (Mental Health Foundation 1999).

There is a growing awareness of the need to address the needs of people with mental health problems in the workplace. The Department of Health (1999) has published a strategy for mental health care in the UK, which states that 'the government is committed to ensuring that people with mental health problems are able to live and work in the community'. The strategy also states that 'the government is committed to ensuring that people with mental health problems are able to participate in the life of the community and to contribute to the economy'.

The strategy also states that 'the government is committed to ensuring that people with mental health problems are able to live and work in the community'. The strategy also states that 'the government is committed to ensuring that people with mental health problems are able to participate in the life of the community and to contribute to the economy'. The strategy also states that 'the government is committed to ensuring that people with mental health problems are able to live and work in the community'.

The strategy also states that 'the government is committed to ensuring that people with mental health problems are able to live and work in the community'. The strategy also states that 'the government is committed to ensuring that people with mental health problems are able to participate in the life of the community and to contribute to the economy'. The strategy also states that 'the government is committed to ensuring that people with mental health problems are able to live and work in the community'.

The strategy also states that 'the government is committed to ensuring that people with mental health problems are able to live and work in the community'. The strategy also states that 'the government is committed to ensuring that people with mental health problems are able to participate in the life of the community and to contribute to the economy'. The strategy also states that 'the government is committed to ensuring that people with mental health problems are able to live and work in the community'.

The strategy also states that 'the government is committed to ensuring that people with mental health problems are able to live and work in the community'. The strategy also states that 'the government is committed to ensuring that people with mental health problems are able to participate in the life of the community and to contribute to the economy'. The strategy also states that 'the government is committed to ensuring that people with mental health problems are able to live and work in the community'.

The strategy also states that 'the government is committed to ensuring that people with mental health problems are able to live and work in the community'. The strategy also states that 'the government is committed to ensuring that people with mental health problems are able to participate in the life of the community and to contribute to the economy'. The strategy also states that 'the government is committed to ensuring that people with mental health problems are able to live and work in the community'.

3. NETWORK COMMISSIONING

At the commissioning phase Unisys will accept full responsibility for the project management, while the user retains management control. Unisys Consultants will monitor and test each step of the commissioning, and all experienced Unisys Network Engineers are fully trained by Novell TM and certified by them to work with the Netware TM product. Unisys will deal with the sub-contractors on behalf of the user, checking and guaranteeing the work they do stage by stage, testing for faults and overseeing each aspect of the total commissioning phase. This includes the handling of any problems in interfacing with the PTT. The services and technologies involved in the commissioning phase are listed in Exhibit ?

4. A LA CARTE NETWORK SERVICE

As part of the strategy to provide total solution networks Unisys offer A La Carte Network Services which they describe as a complete solution to network maintenance and support. A La Carte is designed so that one simple contract can be used to cover the whole system by providing a complete menu of network services. From this menu the user can select the exact level of support required to suit the needs of the user's business. The type of service available under A La Carte ranges from telephone to full on site support tailored to match the criticality of the users system.

5. NETWORK CHANGE

The concept of the Network Change service is to ensure provision of the flexibility needed to adapt the network to keep pace with the changing needs of the user's business and organisation. Unisys personnel will oversee and organise any changes or expansion required by the network. This service ranges from one of projects to constant reviews and from specific redesign to full forward planning. Unisys claim that this service can protect the user from the high cost of uncontrolled proliferation of cabling and equipment by keeping the network under review to ensure optimum efficiency. The services and technologies involved in this service are listed in Exhibit ?.

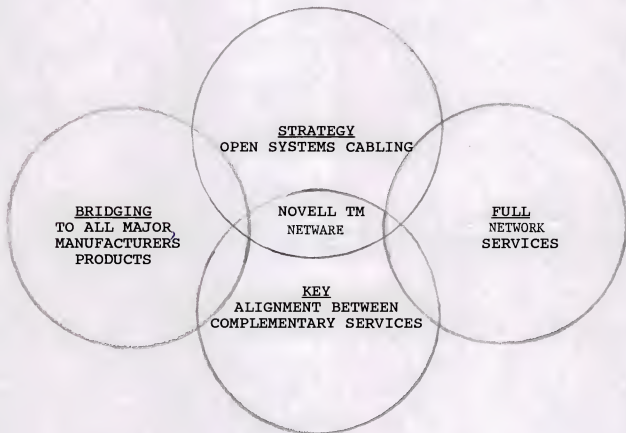
6. NETWORK ENHANCED MANAGEMENT

The objective of this service, available as part of the Unisys total network solution concept, is to provide a service to the user that enables optimisation of the network and maximisation of the user's computer resources. In the application of this service, Unisys claim that the user can improve the cost effectiveness of the network through: usage monitoring, identification of areas of system redundancy and checking the uncontrolled proliferation of duplicated resources. The elements of this service can be summarised as follows:-

- o Network Audit: regular analysis and review to check the costs of redundancy or proliferation.
- o Network Optimisation: measuring and monitoring to identify and improve underperformance or sections under strain.
- o Network Streamlining: cutting costs by rationalising unnecessary equipment or inefficient cabling
- o Network Integration: developing links with other systems.
- o Network Software Management: keeping the user's software up to date and in step with other software in the user's organisation.
- o Network Security: protecting the user's network from physical damage or unauthorised use through cabling or PTT lines.
- o Network Expansion: major review to meet new capacity requirements.

EXHIBIT

UNISYS CONNECT

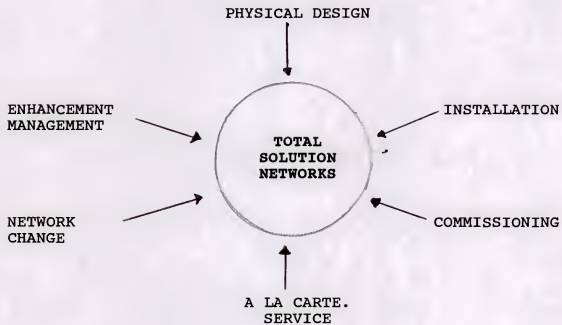


1000000

1000000

EXHIBIT

UNISYS CONNECT - SIX KEY SERVICES



the 1990s, the number of people in the UK who are aged 65 and over has increased by 1.5 million (1990–2000) and is projected to increase by a further 1.5 million by 2020 (Office for National Statistics 2001). The number of people aged 65 and over is projected to increase from 10.5 million in 1990 to 12.5 million in 2020. The number of people aged 65 and over is projected to increase from 10.5 million in 1990 to 12.5 million in 2020.

The number of people aged 65 and over is projected to increase from 10.5 million in 1990 to 12.5 million in 2020. The number of people aged 65 and over is projected to increase from 10.5 million in 1990 to 12.5 million in 2020. The number of people aged 65 and over is projected to increase from 10.5 million in 1990 to 12.5 million in 2020.

The number of people aged 65 and over is projected to increase from 10.5 million in 1990 to 12.5 million in 2020. The number of people aged 65 and over is projected to increase from 10.5 million in 1990 to 12.5 million in 2020. The number of people aged 65 and over is projected to increase from 10.5 million in 1990 to 12.5 million in 2020.

The number of people aged 65 and over is projected to increase from 10.5 million in 1990 to 12.5 million in 2020. The number of people aged 65 and over is projected to increase from 10.5 million in 1990 to 12.5 million in 2020. The number of people aged 65 and over is projected to increase from 10.5 million in 1990 to 12.5 million in 2020.

The number of people aged 65 and over is projected to increase from 10.5 million in 1990 to 12.5 million in 2020. The number of people aged 65 and over is projected to increase from 10.5 million in 1990 to 12.5 million in 2020. The number of people aged 65 and over is projected to increase from 10.5 million in 1990 to 12.5 million in 2020.

The number of people aged 65 and over is projected to increase from 10.5 million in 1990 to 12.5 million in 2020. The number of people aged 65 and over is projected to increase from 10.5 million in 1990 to 12.5 million in 2020. The number of people aged 65 and over is projected to increase from 10.5 million in 1990 to 12.5 million in 2020.

EXHIBIT

PHYSICAL DESIGN STAGE

- o LAN / WAN / BROADBAND
- o DATA / VOICE PABX / ISDN / FDDI
- o CONSULTANCY
 - ADVISE ON TOPOLOGY
 - CONNECTION METHODOLOGY
 - TARIFS
 - PROCUREMENT MANAGEMENT

the 1990s, the number of people with a mental health problem has increased by 50% (Mental Health Foundation 2000).

There is a growing awareness of the need to address the needs of people with mental health problems in the community. The Department of Health (2000) has set out a vision for the future of mental health services, which includes a focus on preventing mental health problems, supporting people with mental health problems in the community, and providing specialist services for people with severe mental health problems. The vision is based on the principles of recovery, which emphasizes the importance of helping people to live meaningful lives and achieve their goals.

One of the key challenges in implementing this vision is the need to develop a workforce that is equipped to provide the range of services that are required. This includes a range of professionals, including mental health nurses, social workers, psychologists, and community workers. It also includes a range of support staff, including care assistants and administrative staff. The workforce must be able to work in a range of settings, including hospitals, community mental health teams, and primary care.

One of the ways in which the workforce can be developed is through the use of training and development programs. These programs can help to ensure that staff have the skills and knowledge that they need to provide high-quality care. They can also help to ensure that staff are able to work in a way that is consistent with the values and principles of recovery. Training and development programs can be delivered in a range of ways, including through formal education, on-the-job training, and self-directed learning.

Another way in which the workforce can be developed is through the use of supervision and support. Supervision and support can help to ensure that staff are able to provide high-quality care and that they are able to manage their own workload. Supervision and support can also help to ensure that staff are able to work in a way that is consistent with the values and principles of recovery. Supervision and support can be provided in a range of ways, including through formal supervision, peer support, and self-reflection.

One of the key challenges in implementing this vision is the need to develop a workforce that is equipped to provide the range of services that are required. This includes a range of professionals, including mental health nurses, social workers, psychologists, and community workers. It also includes a range of support staff, including care assistants and administrative staff. The workforce must be able to work in a range of settings, including hospitals, community mental health teams, and primary care.

One of the ways in which the workforce can be developed is through the use of training and development programs. These programs can help to ensure that staff have the skills and knowledge that they need to provide high-quality care. They can also help to ensure that staff are able to work in a way that is consistent with the values and principles of recovery. Training and development programs can be delivered in a range of ways, including through formal education, on-the-job training, and self-directed learning.

EXHIBIT

INSTALLATION PHASE

- o UNISYS OPEN CABLING SYSTEM
- o LAN / WAN / BROADBAND
- o ISDN / PABX / FDDI
- o PROJECT MANAGEMENT

the 1990s, the number of people in the UK who are aged 65 and over has increased from 10.5 million to 12.5 million, and the number of people aged 75 and over has increased from 4.5 million to 6.5 million (Office for National Statistics 2000). The number of people aged 65 and over is projected to increase to 15.5 million by 2020, and the number of people aged 75 and over to 8.5 million (Office for National Statistics 2000). The increase in the number of people aged 65 and over is expected to be due to a combination of factors, including a decline in the birth rate, a decline in the death rate, and a decline in the rate of emigration.

The increase in the number of people aged 65 and over is expected to have a significant impact on the UK's health and social care system. The number of people aged 65 and over who are in need of health and social care services is expected to increase from 1.5 million in 1990 to 2.5 million in 2020 (Office for National Statistics 2000). This increase is expected to be due to a combination of factors, including a decline in the birth rate, a decline in the death rate, and a decline in the rate of emigration. The increase in the number of people aged 65 and over is expected to have a significant impact on the UK's health and social care system.

The increase in the number of people aged 65 and over is expected to have a significant impact on the UK's health and social care system. The number of people aged 65 and over who are in need of health and social care services is expected to increase from 1.5 million in 1990 to 2.5 million in 2020 (Office for National Statistics 2000). This increase is expected to be due to a combination of factors, including a decline in the birth rate, a decline in the death rate, and a decline in the rate of emigration. The increase in the number of people aged 65 and over is expected to have a significant impact on the UK's health and social care system.

The increase in the number of people aged 65 and over is expected to have a significant impact on the UK's health and social care system. The number of people aged 65 and over who are in need of health and social care services is expected to increase from 1.5 million in 1990 to 2.5 million in 2020 (Office for National Statistics 2000). This increase is expected to be due to a combination of factors, including a decline in the birth rate, a decline in the death rate, and a decline in the rate of emigration. The increase in the number of people aged 65 and over is expected to have a significant impact on the UK's health and social care system.

The increase in the number of people aged 65 and over is expected to have a significant impact on the UK's health and social care system. The number of people aged 65 and over who are in need of health and social care services is expected to increase from 1.5 million in 1990 to 2.5 million in 2020 (Office for National Statistics 2000). This increase is expected to be due to a combination of factors, including a decline in the birth rate, a decline in the death rate, and a decline in the rate of emigration. The increase in the number of people aged 65 and over is expected to have a significant impact on the UK's health and social care system.

EXHIBIT

COMMISSIONING PHASE

- o PROJECT MANAGEMENT**
- o TESTING UNITS**
- o STAGE PROVING PRODUCTS**
- o CERTIFIED NETWORK ENGINEERS**
- o USER TRAINING**



EXHIBIT

NETWORK CHANGE

- **MOVING PEOPLE**
- **MOVING LOCATIONS**
- **ADDITIONAL PEOPLE**
- **ADDITIONAL LOCATIONS**
- **CABLE MANAGEMENT**
- **STRUCTURED CABLING**
- **NETWORK IMPLEMENTATION**

the 1990s, the number of people in the world who are undernourished has increased from 600 million to 800 million. The number of people who are malnourished has increased from 1.2 billion to 1.5 billion. The number of people who are obese has increased from 100 million to 300 million.

The World Bank has estimated that the cost of malnutrition to the world economy is \$100 billion per year. The cost of obesity to the world economy is \$100 billion per year. The cost of undernutrition to the world economy is \$100 billion per year. The cost of malnutrition to the world economy is \$100 billion per year.

The World Bank has estimated that the cost of malnutrition to the world economy is \$100 billion per year. The cost of obesity to the world economy is \$100 billion per year. The cost of undernutrition to the world economy is \$100 billion per year. The cost of malnutrition to the world economy is \$100 billion per year.

The World Bank has estimated that the cost of malnutrition to the world economy is \$100 billion per year. The cost of obesity to the world economy is \$100 billion per year. The cost of undernutrition to the world economy is \$100 billion per year. The cost of malnutrition to the world economy is \$100 billion per year.

The World Bank has estimated that the cost of malnutrition to the world economy is \$100 billion per year. The cost of obesity to the world economy is \$100 billion per year. The cost of undernutrition to the world economy is \$100 billion per year. The cost of malnutrition to the world economy is \$100 billion per year.

The World Bank has estimated that the cost of malnutrition to the world economy is \$100 billion per year. The cost of obesity to the world economy is \$100 billion per year. The cost of undernutrition to the world economy is \$100 billion per year. The cost of malnutrition to the world economy is \$100 billion per year.

The World Bank has estimated that the cost of malnutrition to the world economy is \$100 billion per year. The cost of obesity to the world economy is \$100 billion per year. The cost of undernutrition to the world economy is \$100 billion per year. The cost of malnutrition to the world economy is \$100 billion per year.

The World Bank has estimated that the cost of malnutrition to the world economy is \$100 billion per year. The cost of obesity to the world economy is \$100 billion per year. The cost of undernutrition to the world economy is \$100 billion per year. The cost of malnutrition to the world economy is \$100 billion per year.

The World Bank has estimated that the cost of malnutrition to the world economy is \$100 billion per year. The cost of obesity to the world economy is \$100 billion per year. The cost of undernutrition to the world economy is \$100 billion per year. The cost of malnutrition to the world economy is \$100 billion per year.

QUESTIONS FROM THE USA

The following are some of the questions posed to the U.S. hotline over the last month. The questions and their answers may be general interest to all INPUT Customer Service clients.

Question: Does DEC offer disaster recovery services? If so, what do they cover?

Answer: DEC offers three components to their disaster recovery services. These components are:

RESTART: this service provides access to a "hotsite" within hours of disaster notification. The site is fully equipped with equipment to resume processing and personnel to assist up to 24 hours per day, seven days per week. Periodic testing of the recovery of critical applications is also available with technical staff to assist.

RECOVER-ALL: this supplement to the DEC Field Service agreement guarantees the restoration of computer operations after damages caused by environmental or accidental occurrences. This component takes over where the on-site Field Service agreement leaves off, after mechanical and component failures.

RECOVERY PLANNING SERVICES: this set of services offers a comprehensive planning methodology designed to help companies develop a disaster recovery contingency plan. Consultants with recovery planning experience assist the company in planning for the event of the computer facility being inoperative for an extended period of time.

Question: Can a customer purchase DEC Direct Access Advisory Services if they have only DE personal computers installed, or must it be a multi-vendor environment?

Answer: The DEC Direct Access Advisory Services does not



apply to installations of only personal computers. It does not matter if the installation is DEC only or multivendor.

Question: Is the Surety program the only program Unisys has that covers software?

Answer: Software Excel Basic does not cover minicomputer software. Coverage is available under the program "System Extra", which is similar to Excel Basic, but not as comprehensive.

SNIPPETS:

It was recently announced that TRW, Inc. has placed its Customer Service Division, headquartered in Fairfield, NJ up for sale. This move comes as a result of the companies strengthening focus on their main lines of business. TRW is still actively involved in the provision of customer service support and continuing to grow their business.

NOTE TO GRAPHICS - THE REST OF THE SNIPPETS ARE IN ANOTHER FILE ON THIS DISK CALLED SNIPPETS!



SNIPPETS

* Granada Computer Services International Ltd. has recently acquired a New Jersey company, Essex Computer Service Inc., a specialist in Data General machines. Granada now has 16 sites in the US.

* In contrast to the recent spate of mergers and acquisitions, Advance Technology Maintenance has preferred to remain small and stable. ATM has no immediate plans for expansion, preferring instead to direct its efforts towards the changes in the marketplace. ATM has around 100 employees and a turnover of around \$11 million. Its size does not mean that it cannot take on corporate clients, however; one of its clients is British Petroleum.

ATM has also recently been signed up by NEC as its approved maintenance supplier.

* ICL is now in a position to offer disaster recovery services for ICL mainframe users. There are already around 8 companies offering ICL disaster recovery services, such as Sherwood Computers and NMW Computers, but ICL claims to be able to offer the full range of services from consultancy to restart services. ICL is offering two portfolios: contingency management and recovery management. There are plans to extend the service to cover its UNIX machines by the end of the year.

* Tesco Foodstores Ltd, a British supermarket chain, has upgraded its computer to an Amdahl 5990-1400 mainframe. This is to provide an additional computing facility and to handle its disaster recovery programme. The machine handles warehousing applications, financial programming and on-line stock control.

* MBS has acquired the Exchange Telegraph Company Ltd. which has contracted annual maintenance revenues of \$9.5 million. MBS believes that this will reinforce its position as the second largest independent maintenance company. MBS is also merging its engineering operation with that of Extel Information Technology. This will lead to job losses and closure of 6 Extel and MBS locations. Nearly all the service engineers will be retained, however.

* Synapse Computer Services plc has won a contract to convert Reuters European Data Centre from DOS/VSE to MVS. The contract is worth \$480,000 and is due to be completed by September this year.

* AT&T Istel Computer Systems is a new company formed to market UNIX systems, workstations and servers. It will sell both by direct and indirect channels.

* Olivetti's Customer Support Group has been awarded a further independent maintenance contract from Barclay's Bank, worth \$4.7 million. The total value of Barclay's account with Olivetti is now worth around \$27 million a year. This new contract includes responsibility for over 2000 cash dispensers, installation of more



workstations and provision of a team to address network faults.

* Getronic Service, a Dutch independent maintenance company, has a five year agreement to take on the repairs of the Mita Europe.

* Sorbus has beaten IBM to win a contract to maintain Sun Alliances's IBM equipment



Route:

INPUT

A Publication from INPUT's Customer Service Programme—International

June 1990

IN
THIS
ISSUE:

- 1CONNECT - Network services from Unisys X
6 Questions from the U.S.A.
7 Snippets

Unisys Launches CONNECT New Network Services

^{announced}
At the end of April 1990, Unisys ~~launched~~ ^{announced} CONNECT in Western Europe. Unisys describes CONNECT as a new and comprehensive range of network products and services, designed to cover every type of specialist network service the user could require. The CONNECT product is based on Novell Netware™, a software platform which will be sold by Unisys in the LAN market.

Prior to the launch, network services had been embedded in the Environmental Services operation of Unisys' Customer Services division. As part of Environmental Services, Unisys claims that its network service activities had been successful to the point of contributing about 50% of the total revenues of

Environmental Services. As a result of this success, Unisys decided to establish network services as a separate business unit within Customer Services—hence CONNECT.

CONNECT provides bridging between the network products of all major manufacturers and heralds a move by Unisys into the provision of full network services. Exhibit A provides a

"CONNECT—Total Solution Network Service"

The major strategy and product of CONNECT is the provision of open systems cabling based on the concept of twisted pairs. The key to CONNECT lies in an alignment between Environmental Services, intelligent buildings, cabling and networks within Unisys.

model of the CONNECT concept.

Unisys claims that CONNECT provides single solution service to satisfy user needs ranging from planning to installation, including ongoing support, monitoring and upgrading.

Continued on next page



2

CONNECT ...from page 1

Exhibit A

Unisys CONNECT

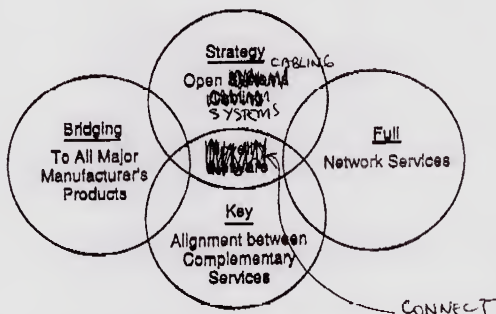
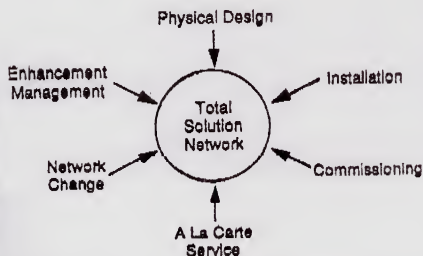


Exhibit B

Unisys CONNECT—Six Key Services



CONNECT provides everything from single products to high-level management and integrated turnkey solutions.

CONNECT is intended to complement the specialist consultancy skills of the Unisys Professional Services Division and Complex Systems Organisation. The services available are illustrated in Exhibit B and are summarised in the following descriptions:

1. Physical Design

This service is intended to assist the user in achieving optimum design of the network by providing consultants to work alongside the user. The concept is to assist the user in the paper



planning stage to arrive at a preferred solution which takes into account the latest technology, structure and location of buildings, optimisation of links between computers and future user business plans. Exhibit C lists the services and technologies involved in the physical design phase.

In addition, Unisys works with the user on a consultancy basis to design information systems that support the user's business needs and objectives. The aim is to provide a complete network blueprint for the necessary cabling and building work, which can then be carried out by the Unisys Network Installation Service.

2. Network Installation

Unisys provides full expertise on site for complete project management and quality control at every stage of installation. Unisys consultants analyse the correct methods of trunking, taking into account the structure of different parts of the user's building. In the case of a WAN installation, Unisys provides expertise at each site, to effect smooth and coordinated installation across the whole network. This includes monitoring for environmental protection and cosmetically acceptable installation. Exhibit D lists the services and technologies involved at the installation phase.

Exhibit C

Physical Design Stage

- LAN/WAN/broadband
- Data/voice PABX/ISDN/FDDI
- Consultancy
 - Advise on topology
 - Connection methodology
 - Tariffs
 - Procurement management

Exhibit D

Installation Phase

- Unisys open cabling system
- LAN/WAN/broadband
- ISDN/PABX/FDDI
- Project management

Continued on next page

June 1990

© 1990 by INPUT. Reproduction prohibited.



4

CONNECT...from page 3

3. Network Commissioning

At the commissioning phase, Unisys will accept full responsibility for project management, while the user

the work they do stage by stage, testing for faults and overseeing each aspect of the total commissioning phase. This includes the handling of any problems in interfacing with the PTT. The services and technologies involved in the commissioning phase are listed in Exhibit E.

4. A La Carte Network Service

As part of the strategy to provide total solution networks, Unisys offers A La Carte Network Services, which it describes as a complete solution for network maintenance and support. A La Carte is designed so that one simple contract can be used to cover the whole system by providing a complete menu of network services. From this menu, the user can select the exact level of support required to suit the needs of the user's business. The type of service available under A La Carte ranges from telephone support to full on-site support, tailored to match the criticality of the user's system.

5. Network Change

The concept of the Network Change service is to ensure sufficient flexibility of the network, so as to keep pace with the changing needs of the user's business and organisation. Unisys personnel will oversee and organise any changes or

Exhibit E

Commissioning Phase

- Project management
- Testing units
- Stage proving products
- Certified network engineers
- User training

retains management control. Unisys consultants will monitor and test each step of the commissioning, and all experienced Unisys network engineers are fully trained and certified by Novell™ to work with the Netware™ product. Unisys will deal with the subcontractors on behalf of the user, checking and guaranteeing



expansion required by the network. This service ranges from one project to constant reviews, and from specific redesign to full forward planning. Unisys claims that this service can protect the user from the high cost of uncontrolled proliferation of cabling and equipment by keeping the network under review to ensure optimum efficiency. The services and technologies involved in this service are listed in Exhibit F.

6. Network Enhanced Management

The objective of ^{these} ~~the~~ services, available as part of the Unisys total network solution concept, is to enable optimisation of the network and maximisation of the user's computer resources. In the application of ~~the services~~ ^{these} Unisys claims that the user can improve the cost-effectiveness of the network through: usage monitoring, identification of areas of system redundancy, and checking the uncontrolled proliferation of duplicated ^{these} resources. The elements of ~~this~~ service can be summarised as follows:

- Network Audit: regular analysis and review to check the costs of redundancy or proliferation.
- Network Optimisation: measuring and monitoring to identify and improve underperformance or sections under strain.

Exhibit F

Network Change

- Moving people
- Moving locations
- Additional people
- Additional locations
- Cable management
- ~~Structured cabling~~ ^{Unisys cabling system}
- Network ~~implementation~~ ^{integration}

- Network Streamlining: cutting costs by removing unnecessary equipment or inefficient cabling.
- Network Integration: developing links with other systems.
- Network Software Management: keeping the user's software up to date and in step with other software in the user's organisation.
- Network Security: protecting the user's network from physical damage or unauthorised use through cabling or PTT lines.
- Network Expansion: major review to meet new capacity requirements. ■

June 1990

© 1990 by INPUT. Reproduction prohibited.

TABLE I	
Summary of the results of the experiments	
Experiment	Results
1. Effect of temperature on the rate of reaction	Rate of reaction increases with temperature
2. Effect of concentration on the rate of reaction	Rate of reaction increases with concentration
3. Effect of surface area on the rate of reaction	Rate of reaction increases with surface area
4. Effect of catalyst on the rate of reaction	Rate of reaction increases with catalyst
5. Effect of pressure on the rate of reaction	Rate of reaction increases with pressure
6. Effect of solvent on the rate of reaction	Rate of reaction increases with solvent
7. Effect of pH on the rate of reaction	Rate of reaction increases with pH
8. Effect of light on the rate of reaction	Rate of reaction increases with light
9. Effect of time on the rate of reaction	Rate of reaction increases with time
10. Effect of distance on the rate of reaction	Rate of reaction increases with distance

The following table shows the results of the experiments. The rate of reaction increases with temperature, concentration, surface area, catalyst, pressure, solvent, pH, light, time, and distance.

1. Effect of temperature on the rate of reaction: The rate of reaction increases with temperature. This is because the molecules have more kinetic energy and are more likely to collide and react.

2. Effect of concentration on the rate of reaction: The rate of reaction increases with concentration. This is because there are more molecules in the same volume, so the chance of collision is higher.

3. Effect of surface area on the rate of reaction: The rate of reaction increases with surface area. This is because a larger surface area provides more space for the molecules to collide.

4. Effect of catalyst on the rate of reaction: The rate of reaction increases with catalyst. A catalyst provides an alternative pathway for the reaction that has a lower activation energy.

5. Effect of pressure on the rate of reaction: The rate of reaction increases with pressure. This is because increasing the pressure increases the concentration of the gas molecules.

6. Effect of solvent on the rate of reaction: The rate of reaction increases with solvent. A solvent can help to break down the reactants and make them more reactive.

7. Effect of pH on the rate of reaction: The rate of reaction increases with pH. A higher pH means a higher concentration of hydroxide ions, which can act as a catalyst.

8. Effect of light on the rate of reaction: The rate of reaction increases with light. Light can provide the energy needed to start a reaction.

9. Effect of time on the rate of reaction: The rate of reaction increases with time. The longer the reaction is allowed to proceed, the more product is formed.

10. Effect of distance on the rate of reaction: The rate of reaction increases with distance. This is because the molecules have to travel a longer distance to reach the reaction site.

The following are some of the questions posed to the U.S. hotline over the last month. The questions and their answers may be of general interest to all INPUT Customer Service clients.

Questions from the USA



Question: Does DEC offer disaster recovery services? If so, what do they cover?

Answer: DEC offers three components to their disaster recovery services. These components are:

Restart: this service provides access to a "hot site" within hours of disaster notification. The site is fully equipped with equipment to resume processing and personnel to assist up to 24 hours per day, seven days per week. Periodic testing of the recovery of critical applications is also available with technical staff to assist.

Recover-All: this supplement to the DEC Field Service agreement guarantees the restoration of computer

operations after damages caused by environmental or accidental occurrences. This component takes over where the on-site Field Service agreement leaves off, after mechanical and component failures.

Recovery Planning Services: this set of services offers a comprehensive planning methodology designed to help companies develop a disaster recovery contingency plan. Consultants with recovery planning experience assist the company in planning for the event of the computer facility being inoperative for an extended period of time.

Question: Can a customer purchase DEC Direct Access Advisory Services if they have only DEC personal computers installed, or must it be a multivendor environment?

Answer: The DEC Direct Access Advisory Service does not apply to installations of only personal computers. It does not matter if the installation is DEC only, or multivendor.

Question: Is the Surety program the only program Unisys has that covers software?

Answer: Software Excel Basic does not cover minicomputer software. Coverage is available under the program "System Extra," which is similar to Excel Basic, but not as comprehensive.



2nd largest in U.K.,
in Europe?

Snippets

- ◆ It was recently announced that TRW, Inc. has placed its Customer Service Division, headquartered in Fairfield, NJ up for sale. This move is a result of the company's strengthening focus on its main lines of business. TRW is still actively involved in the provision of customer service support and is continuing to increase its business.
- ◆ Granada Computer Services International Ltd. has recently acquired a New Jersey company, Essex Computer Service Inc., a specialist in Data General machines. Granada now has 16 sites in the U.S.
- ◆ In contrast to the recent spate of mergers and acquisitions, Advance Technology Maintenance has preferred to remain small and stable. ATM has no immediate plans for expansion, preferring instead to direct its efforts towards the changes in the marketplace. ATM has around 100 employees and a turnover of about \$11 million. Its size does not mean that it cannot take on corporate clients, however; one of its clients is British Petroleum.
- ATM has also recently been signed up by NEC as its approved maintenance supplier.
- ◆ ICL is now in a position to offer disaster recovery services for ICL mainframe users. There are already around 8 companies offering ICL disaster recovery services, such as Sherwood Computers and NMW Computers, but ICL claims to be able to offer the full range of services from consultancy to restart services. ICL is offering two portfolios: contingency management and recovery management. There are plans to extend the service to cover its UNIX machines by the end of the year.
- ◆ Tesco Foodstores Ltd, a British supermarket chain, has upgraded its computer to an Amdahl 5990-1400 mainframe. This is to provide additional computing capacity and to handle its disaster recovery programme. The machine handles warehousing applications, financial programming and on-line stock control.
- ◆ MBS has acquired the Exchange Telegraph Company Ltd., which has contracted annual maintenance revenues of \$9.5 million. ~~MBS has acquired the Exchange Telegraph Company Ltd. as part of a larger restructuring and rationalisation of its services. MBS is also merging its engineering operation with that of Exel Information Technology. This will lead to job losses and closure of six Exel and MBS locations. Nearly all the service engineers will be retained, however.~~
- ◆ Synapse Computer Services plc has won a contract to convert Reuters European Data Centre from DOS/VSE to MVS. The contract is worth \$480,000 and is due to be completed by September this year.
- ◆ AT&T Intel Computer Systems is a new company formed to market UNIX systems, workstations and servers. It will sell through direct and indirect channels.
- ◆ Olivetti's Customer Support Group has been awarded a further independent maintenance contract from Barclay's Bank, worth \$4.7 million. The total value of Barclay's account with Olivetti is now around \$27 million a year. This new contract includes responsibility for over 2,000 cash dispensers, installation of more workstations, and provision of a team to address network faults.
- ◆ Getronic Service, a Dutch independent maintenance company, has a five-year agreement to take on the repairs of the Mita Europe.
- ◆ Sorbus has beaten IBM to win a contract to maintain Sun Alliances's IBM equipment.

