

P R E S S C U T T I N G S

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Extract from
Index to Office Equipment & Supplies,
Croydon

SEP 1982

Prepare for 'telework', says UK manufacturer

British company Rediffusion Computers Ltd has become the latest of the major computer vendors to enter the 'office automation' stakes. Accompanied by some futuristic jargon, it has launched a new range of minicomputers backed by office application software.

Called by the umbrella name 'Telecentre', the range is designed, according to Rediffusion, 'for the age of teleworkers'. In case readers are in any doubt, these are not the helpful men in overalls who fix

the vertical hold, but rather the growing number of employees who work at remote locations.

As the firm's Managing Director, Mike Aldrich, explains: 'The new range presupposes that the person engaged in office work may not physically be in the office. The teleworker could be at home, in another company's office, or even out of the country!'

As one might therefore expect, the Telecentre (also more prosaically called the

R2800, since it supercedes the existing R1800) is strong on communications facilities.

In addition to offering links to most other vendors' systems, Telecentre is designed to operate within Rednet. This is a distributed networking system, based on intelligent switching multiplexors, which effectively allows users to access information on any machine which is a part of the network.

There are four models in the range, differing only in the maximum number of terminals (or 'teleworkstations') which can be attached (8-64). According to Rediffusion a Telecentre supports four different types of 'teleworkstation': 'procedural, occupational, self-service and external'.

Procedural workstations are



One of the new Advisor procedural workstations

for clerical staff with fixed functions tasks such as data entry, word processing, etc. A new family of visual display units, which conform to international ergonomics and safety standards, and Rediffusion's Writaway hand-print terminals are used for this category of workstation.

Occupational stations, on the other hand, are intended for secretarial and managerial personnel, and are based on Rediffusion's existing Telepu-

ters. These range from simple videotex terminals to stand-alone microcomputers with local processing capability and storage.

Service stations include optical character recognition devices for the inputting of documents, and computer assisted learning stations, whilst external workstations comprise videotex terminals and a voice response system called Chatterbox.

To complement this array of

hardware is a software system called Advisor. This provides a number of office services and management support tools such as document storage and retrieval, electronic mail, and a message editor which enables users with limited keyboard skills to rapidly prepare memos and short messages.

Other features include diary management, calculator, and a 'desk top' facility which enables users to keep a 'note pad' as well as pending and reminder files on their workstation.

Sharing the same database as Advisor is also CVS - corporate videotex system - an enhanced version of Rediffusion's existing private interactive videotex system, Viewdata Plus. CVS offers information retrieval, transaction processing and messaging, as well as the ability to 'gateway' to third party databases via Prestel or a mainframe system.

Prices for Telecentre start at around £40,000 for an 8 workstation system to approximately £300,000 for a 64 workstation configuration.

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Competition hotting up in battle for the home

US ELECTRONIC companies are falling over themselves to grab a place in the growing home information, entertainment marketplace.

A new report from New York-based research company Frost & Sullivan states: 'Never before has any product or service, either consumer or industrial, been the subject of so much marketing experimentation.'

Market tests

The 335-page report says that 'HIES' - home information and entertainment systems - an industry which merges communications, computer and consumer electronic technologies, will be a multibillion dollar market in the '80s. More than 100 companies are already pursuing that market and nearly 80,000 homes in the US are taking part in the market tests.

Investment on research and product development exceeds \$100 million.

These products and technologies, says the report, must be developed before the futuristic home services often talked about are to become fact.

The central concept behind 'HIES' systems is the technique for querying remote databases,

whether for information or entertainment purposes.

This will be in part by telephone, calculator-type keypad, typewriter-like keyboard, or special entry devices, but especially by home computer terminals and personal computers. During the '80s these will increase from the 500,000 units in 1980 to more than 15 million in 1990.

Transmission will be by telephone, TV, radio and cable TV networks, or combinations of these (called hybrid networks).

The TV set is the pivot to 'HIES' concepts, since TV provides the visual format 'which consumers so strongly favour', says the report.

Plug-in modules

Already a myriad devices may be attached, including video disc and video cassette players, video games, home video cameras and so on. 'More and more plug-in modules will be added during the '80s,' adds the report.

The home information electronics boom will reach 'mass market proportions' about 1985 and by 1990 subscribers' payments for home information software and services will have soared to \$560 million, up from the current \$5 million.



Mike Aldrich, managing director of Rediffusion Computers, at home with a Teleputer system, his company's contribution to the UK's own expanding 'HIES' market.

Described by Rediffusion as 'revolutionary', the Teleputer terminals combine broadcast TV, videotex, VCR, video disk and telecommunications technologies with personal computing.

The irony behind the 'HIES' boom, concludes the report, is that the information which will be delivered by electronic means will be 'essentially the same kinds as that which are provided today'.

So manufacturers who lose sight of the fact that it is first and foremost the information which people want, not the technology which will bring this to them, will also be the ones who will lose in the marketplace.

Communications International
Planner No. 18-03
Monthly - 20,000

AUG 1982

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The future now

A range of office computer systems designed for the era of 'telework', when office information flow is controlled through computer terminals, has been announced by Rediffusion Computers. The systems are offered under the name of Telecentre.

There are four types of teleworkstations supported by the systems: procedural, occupational, self service and external. These are for clerical and professional staff, and include electronic scanning intrays and computer assisted learning stations. External workstations include videotex terminals and voice response systems.

There are four models in the Telecentre range, differing only in the number of workstations that can be attached. Gateways, office support system software and videotex are

available. Prices range from £80 000 for an eight workstation system to £300 000 for a 64 station system. (Rediffusion Computers, Kelvin Way, Crawley, Sussex RH10 2LY, UK. Tel: (0293) 31211.)

Rediffusion promotes wide area nets for home workers on the telephone

Rediffusion's office products — the Teleputer, the Writeaway pad, the Chatterbox — can now be connected into a fully-fledged office system using the R2800 Telecentre. The Telecentre system uses the telephone network to connect terminal devices either internally or over national or international networks.

The Telecentre system is based on a management minicomputer controlling information organised into a 33 to 66Mbyte fixed disc unit and a switchable magnetic tape unit. The four versions of the Telecentre, the R2810, R2820, R2830 and R2840, differ in the number and types of terminals that can be connected. The minicomputers are Rediffusion 3000A and R5000A — the former with 16bit cycle time up to 800ns, the latter with 16bit cycle times of 400ns.

The minicomputer also controls network interfaces to other

system computer and telecommunication systems. Rednet, an array of intelligent switching multiplexers which pass h.d.l.c. messages, connects Telecentres together and to many different communication systems. Rednet allows for user switching, contention, load balancing, auto re-routing and network supervision.

Mike Aldrich, managing director of Rediffusion Computers, stressed that the Telecentre and Rednet system is a wide area network system: 'the new range presupposes that the person engaged in office work may not be physically in the office.' Rediffusion does not market either a local area network or a p.a.b.x.; Rediffusion terminals within the office would be connected through another manufacturer's p.a.b.x. or through the Rediffusion cabling system.

Rediffusion has no plans to develop a broadband local network

for the office. Rediffusion is involved in the development of cable TV systems, and sees a natural convergence between broadband office systems and cable TV, says Aldrich.

Aldrich considers that the user still buys systems for one purpose only; 'it is a monofunction market', he said. The 2800 system may suffer the same fate as the 1800 system, announced two years ago, which was primarily used as a videotex system although it could accommodate other forms of data entry and retrieval. However, Aldrich pointed out that the installed systems could prove a good market for Rediffusion when users realise the multifunction potential of their systems.

Rediffusion makes extensive sales in the UK, Ireland and Eastern Europe, and is presently expanding its operations in the Far East. *For details circle 253

The Telecentre is a range of office computer systems



SEP 1982

eived in our office recently is given below in full – followed by some comments

* * *

TELEWORK OR FLEXI-PLACE IS HERE SAYS COMPUTER EXECUTIVE

LONDON, July 8. . . . "With improved telecommunications there is no need to fill offices with people – the work will be taken to the people. Two-way cable links to the home will improve the economics and attractiveness of flexi-place working; it may even dispose of dormitory towns."

The concepts of telework and flexi-place were given an airing in London today by Mike Aldrich, managing director of Rediffusion Computers, at the Info '82 Conference, held at the Bowater Centre, Knightsbridge. Aldrich, a member of the Prime Minister's Information Technology Advisory Panel (ITAP), was presenting a personal view of the ITAP proposals for the rewiring of Britain, published in March as the 'Cable Systems' report.

"Telework is already with us," Aldrich said, "and the local community should benefit. Consumer services such as teleshopping, telebanking and telemail would develop along with cable, but the biggest impact in a social sense would be on the place of work. The 'logical environment' created by cable systems would bring worldwide information, communications, computing and work support services directly into the home," he said.

"The framework for the cable revolution could be established this year," said Aldrich, commenting that there could be few reports ever submitted to Government, particularly by an advisory body, that had received such a speedy and positive response as the ITAP Cable Systems report.

The report, which envisages a first-stage UK investment in cable systems of at least £2.5 billion, made five major recommendations. Firstly, that the Government should announce an early start for direct broadcasting by satellite (DBS) services, which it had done even before the report's publication. Acknowledgement had also been made of the supportive relationship between DBS and cable.

Secondly, that the Government should announce by mid 1982 the broad outlines of its future policy towards cable systems in order to allow the private sector to start planning. The Government had said that it would make the announcement by the end of 1982.

Thirdly, that the Government should review all the implications for the financing and regulations of broadcasting and announce detailed proposals by early 1983. A committee under Lord Hunt had been established to look into this and there seemed to be a good chance that this recommendation would be met.

Fourthly, that the Government should urge cable operators and programme providers to set up effective means of self-regulation to help create public confidence and simplify new regulatory arrangements. "And fifthly," said Aldrich, "that the Department of Industry should establish a technical working group to define technical standards for the new system. Steps had been taken to get both these processes under way.

"The consultative stage is now being implemented," he went on. "There are many issues and many viewpoints and, in pursuing its objectives of securing the benefits of cable for the nation the Government is now in a listening and planning mode."

There were many interests to be reconciled, without undermining the basic commercial viability of the project or compromising the range and quality of our public service broadcasting. The nature of the commercial proposition for the cable operator must be clearly defined along with the operator's rights and responsibilities.

Expressing a personal view, Aldrich hoped for really widespread participation in cable operation as the means towards revitalising local communities. "Participation should be encouraged, not just through new commercial and industrial alliances, but through local interests where possible – particularly local newspapers and local companies," he said.

* * *

Mr. Aldrich's views should not be dismissed lightly: there is much food for thought in what he says and the technology is certainly available.

The concept of using modern communications technology to decentralise the working environment makes a great deal of sense. What, after all, is the point in transporting thousands of office workers into the big cities so that they can perform clerical activities which could just as easily be completed in a home equipped with suitable terminal equipment?

From the overall economic viewpoint there are many advantages inherent in the concept which are not mentioned by Mr. Aldrich. Public transport in the conurbations has long been a problem and the waste of resources caused by the existence of two peak periods, inwards in the morning and outwards in the evening, is a long-recognised phenomenon which now approaches crisis point as the railways and other transport concerns struggle for survival in the current economic climate.

Continued on page 3

If, however, Mr. Aldrich's suggestions are to be treated seriously they will need to be modified and extended to take account of some of the corollaries. The homes of many office workers are not really suitable places for the installation of terminal equipment -- however compact and unobtrusive it may become. Space is at a premium in the modern house or flat -- particularly where there is a family. If it is a *young* family peace, quiet and seclusion are difficult to find. Anyone who works at home is aware of the practical problems that have to be overcome and of the self-discipline that needs to be exerted if adequate productivity is going to be maintained. The reaction of wives and mothers to the installation of terminal equipment and to the presence of the operators "under their feet" will have to be studied and evaluated.

At the other end of the spectrum account must also be taken of the fact that, for many people, going to work is an escape from domestic monotony providing, as it does, the most important single opportunity they have to meet other people and thus to avoid the isolation and loneliness that can be one of the most destructive aspects of present-day life patterns.

A possible solution could lie in the establishment of work-centres in each local community so that there would be the benefits of reduced long-distance commuting combined with the provision of adequate working and social facilities. It seems likely that the costs -- both economic and social -- would be reduced by this type of development. The general concept requires a great deal of study and development but would seem to offer a line of advance which could combine the technological vision of Mr. Aldrich with the needs of human beings in a modern society.

We hope that future discussions will ensure that this combination is given adequate consideration.

Extract from
Video Today, London.

-- SEP 1982

Stateside Teletext

British hopes to establish Ceefax and Oracle as an international standard for Teletext have suffered a major setback. Two of the major US broadcasting companies have announced that they will inaugurate a teletext type system next year — but they will not be using the British system. Instead they will use the North American Teletext technical

standard for their service — this is compatible with the Canadian and French systems but not with the older British one. But the American companies may have little success with the system they have chosen. It seems that the Stateside consumer is not interested in the TV information service as it stands and that it must be greatly improved

before it finds an audience. To attract a large following the service would have to include high resolution video pictures and perhaps sound. The style of presentation would have to change too — probably to a tabloid style with topical and entertaining items rather than the cold precise way it is presented on British screens at the moment. Ultimately the American public will probably end up with a hybrid of the present cable system and videotex incorporating fully interactive two-way services. However, the Americans are wary of the failure of Prestel in this country

and intend to make sure it doesn't happen in the States. ● Rediffusion Computers are to sell videotex systems in the US. They've signed a deal with Blodgett (sic!) Computer Information Systems, of Salt Lake City who will sell Rediffusion's Telecentre range of office videotex systems and the Teleputer terminal range. The deal, worth 20 million dollars over the next five years, means that Prestel's database access method will be seen in the United States, as it's one of the applications of the Coporate Viewdata System — part of the Rediffusion package.

INTERNATIONAL PRESS-CUTTING BUREAU
Lancaster House,
70 Newington Causeway, London, S.E.1
Extract from
Electronic Engineering, London.



Front: Jack D. Blodgett — president, Blodgett Computer Information Systems, Mike Aldrich — managing director and chief executive, Rediffusion, Ray Gardiner — Blodgett's attorney — back row: Ken Coulter — marketing director, Dennis Smith — company secretary, Derek Strath — financial controller and Keith Bankes — manager, systems engineering operations all of Rediffusion Computers Ltd.

Small family computer firm, Blodgett Computer Information Systems Inc., has signed up one of the world's leading suppliers of private videotex systems in an exclusive distributorship deal covering the US market. Blodgett, with 1981 revenues of \$3.6 million and 150 employees, will represent the British firm, Rediffusion Computers. Videotex is the technology that hooks the ordinary TV set into computers. Rediffusion Computers 482 on enquiry card

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INTERNATIONAL

VIDEOTEX TELETEXT NEWS T.M.

July 1982

VIDEOTEX 82: PRODUCTS AND PROMISES, BUT QUESTION REMAINS "WHAT DO YOU DO WITH IT?"

- Rediffusion Computers introduced a videotex-based integrated office system, the Telecentre line, which includes three models. The system marks Rediffusion's first entry into the U.S. market and will be sold through a marketing agreement with Blodgett Computer Information Systems of Salt Lake City.

COMMUNICATIONS NEWS GENEVA ILL. AUGUST 1982

Videotex/Teletext Services Poised for Major Growth in United States

Rediffusion p. 97
By Morris Edwards
CN Data Editor

Another British firm, Rediffusion Computers Limited, which has installed over 120 corporate videotex systems, is currently establishing a United States distributor network for its products. Last year, the firm introduced its "Teleputer," which combines six technologies: color TV, videotex, computing, video cassette recording, video disk and telecommunications. Commenting on the terminal, which sells for about \$1300, Mike Aldrich, the firm's managing director noted that personal computing and videotex have one thing in common: "both set out to conquer a mass domestic market and find themselves selling to the businessman." Acknowledging that the unit is aimed initially at the business market, Aldrich nevertheless believes the Teleputer terminal will be the device that "takes the personal computer and videotex into the home 'into a new-style study called, perhaps, the 'information' room."

Contracting & Installation

New hunting ground for contractors?

If cable television comes to Britain, large sums of money will be around for manufacturers and installers to aim for. Electrical Times tried to find out if any of this could come the electrical contractor's way.

A REPORT by the government's information technology advisory panel has estimated that it could cost some £2.5bn to provide cable services to half the homes in the country, but there are powerful economic and industrial arguments for encouraging installation.

This money, says the report, could all come from private sector sources if current restrictions on the programmes that can be transmitted down cables were lifted.

The panel thought it desirable that new cable systems should be in operation before satellite broadcasting services start in 1986.

The cables discussed by the report would be co-axial or optical fibre, allowing several channels to be relayed simultaneously to a building.

These could be used for terrestrial television and radio channels, satellite television and radio, and subscription television; specialised subject channels, specialised audience channels, local channels and other services such as shopping, banking, electronic mail and business communications.

Cable systems carrying up to 100 t.v. channels have been installed in the US in recent years. The report argues that UK systems should have local switching points, serving groups of subscribers who select programmes from trunk lines.

Cable systems are based on individual communities, says the report. One of their advantages is that they permit the transmission of very local news items and can allow local businesses the opportunity of advertising on television.

At a seminar on telecommunications last March, M. J. Aldrich of Rediffusion Computers predicted that, at the end of the day, the major stakeholders in consumer telecommunications services would probably dictate what happens and when.

These stakeholders would include banks, broadcasters, communal aerial t.v. operators, communications carriers, computer services vendors, and consumer electronics suppliers; electronic equipment suppliers, governments, investors, marketeers and retailers, programmers, publishers and utilities.

This diversity of interested parties makes it difficult to predict the future. At present, the fragmentation of the market is preventing the building of a cohesive British consumer telecommunications industry.

There were no signs of a local area network standard emerging, said Mr Aldrich, even though such standards are pre-requisites for establishing an office system industry.

He thought the competition between the three major networking mediums - telephone, cable t.v. and broadcasting - would probably continue.

Cable t.v. is poorly placed to win against this opposition because of a long history of tight control and the present small number of participants.

Without a local loop strategy, consumer telecommunications would be a piecemeal affair restricted to higher income groups which could afford a satellite dish on the house roof and the extensive use of public switched telephone networks for a two-way services. Consumer telecommunications would be for the leafy suburbs, said Mr Aldrich.

The cost of wiring up the urban population with multi-channel t.v.

and transactional services using broadband technology is between £200 and £300 per household. This figure depends on the number of households per unit area and on the topology of the actual network.

The cost of a satellite receiver dish at present, together with fittings for fixing it to the roof and so on, would be around £400 and the installation cost, depending on how easy it is to install, would be about £100.

Attractive

But such dishes would only start to become attractive in price when they are sold in large volumes, and this situation might not come about until the late '80s or early '90s.

If a decision is made to install a national cable t.v. network, probably the most practical method will be to leave the provision of the cable network in the hands of British Telecom.

This organisation already provides point-to-point transmission of radio and t.v. transmissions along its landlines. It has an established force of engineers in the field and is the owner of way-leaves, ducts, poles and street furniture.

It has already provided cable t.v. to some areas, including an experimental optical fibre network in Milton Keynes.

Modifications to the telecommunications network will require a certain amount of re-cabling. If independent franchised pro-

gramme companies were to provide the cable system, unnecessary duplication would result.

At the moment, however, there is no overall policy to say which way the potential market for cable t.v. will go. British Telecom has carried out installations in new towns and has about 18,000 customers for cable t.v. It is experimenting with optical fibre cables as an alternative to co-axial.

Report

The government has commissioned a report on the social impact of the wide availability of channels made possible by telecommunications, due out this month.

Private industry is ready to go ahead with local networks for in-

ternal use, but the problem with such systems is that there would be little control or coordination of standards, and hence little compatibility between individual networks.

British Telecom feels the development of separate systems should not be allowed. It also feels it has a role to play in this field as the only organisation able to provide the standards for interconnectability of systems.

The government has two decisions to make with regard to cable t.v. — whether wide-band cable t.v. should take off in this country at all, and who will be in control of the process of introduction should the go-ahead for a national system be given.

One move which revealed a potential target for the electrical contractor was British Telecom's loss of its monopoly to supply and install telephone equipment.

Although companies such as GEC, Plessey and STC were the major manufacturers, British Telecom held complete control of connections into the network. Opening up a market such as this is bound to be difficult, since the company which once held the monopoly will still hold most of the expertise on the market and will always be at an advantage in competition with firms trying to elbow their way into the market.

The position on installation of telephone equipment is that British Telecom is now responsible for a customer's line to the exchange and for the prime instrument in an installation.

Freedom

The user has the freedom to buy extension phones from the manufacturer and have them installed privately.

Most existing residential lines have one telephone, but British Telecom is presently doing a brisk trade in supplying and installing extension sockets and plugs in both new and existing installations.

Telex systems can be supplied direct by the manufacturer to the public, with firms such as ITT, Transtel and Trend doing the production.

All PABX systems are next in line to become open to private supply. The user will be able to go to an outside company for maintenance. The monopoly on these systems will be lifted in October 1983.

Competition

So it would appear that some gaps have appeared in the market since the lifting of the monopoly, and British Telecom says it welcomes competition — providing it is fair.

From the contractor's view it would be certainly worth keeping an eye open for contracts for installation and maintenance of private, internal telephone systems.