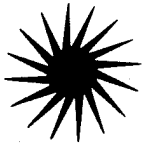


# Press Information



**REDIFFUSION**  
Computers

A Member of the Rediffusion Group of Companies

P R E S S   C U T T I N G S

JANUARY 1984

***For further information  
contact Press and  
Public Relations Department***

**REDIFFUSION COMPUTERS LTD.**  
Kelvin Way, Crawley, Sussex, RH10 2LY  
Telephone: Crawley (0293) 31211  
Cables: Redcom Crawley  
Telex: 877369

Extract from

Crawley Observer 5.1.84

## Supply

**CRAWLEY** - based Rediffusion Computers Ltd has won an order to supply P. J. Computer Entry of Slough with an R50 system. It will be used for data entry work. No value has been placed the contract.

**INTERNATIONAL PRESS-CUTTING BUREAU**  
Lancaster House,  
70 Newington Causeway, London, S.E.1

Extract from  
Minicomputer News, London.

A Rediffusion R2800 Telecentre system has been ordered by the City of Kingston-upon-Hull. The new mini will be used by the local authority in applications such as rents, rebates, rates, payroll, expenditure and telephone accounts. (Circle number 31)

**INTERNATIONAL PRESS-CUTTING BUREAU**  
Lancaster House,  
70 Newington Causeway, London, S.E.1

Extract from  
EDP Europa Report, London

16 JAN 1984

## ORDER BOOK

### MINIS

MAKER	MODEL	QTY	VALUE	DELIVERY	CUSTOMER	APPLICATION NOTE
ModComp	Classic 11/45	2			SEAT Madrid	Data network
CTL	8066	1			Derwent Plastics	With Momentum replaces 8050
CTL	8066	2			British Telecom Merlin	With Momentum for Int. Bus Systems
Perkin-Elmer	3250	1	£150,000		Midland Bank, Manchester	Stores control
Perkin-Elmer	3230	1			Durham County Constabulary	Fault Tolerant System
Prime	550-II	1			Petrocardran Developments, Burmah Oil, London	With PDMS software
Data General	MV 8000	1		Spring 1984	Twyfords Bathrooms, Cardiff	Productions control
Prime	550-II	1		Installed	ERSAC Ltd., Livingston, Scotland	Research
British Aerospace	8066	2			British Aerospace	Satellite checkout

### MAINFRAMES

MAKER	MODEL	QTY	VALUE	DELIVERY	CUSTOMER	APPLICATION NOTE
Burroughs	B1900	1	£200,000		Guilford Ropwood, Derbyshire	Replaces Honeywell 2040
NAS	9080 Dual	1			CNRS, Paris	Largest in Europe
NCR	19300	1			Naylor Bros., Barnsley, Yorkshire	Replaces NCR 8250
Amdahl	5840	1		Installed	Midlands Electricity, Kingswinford	Replaces IBM 3022. First in UK
Sperry	1100/71	1		Early 1984	Ronaldsburg Aircraft, Isle of Man	Replaces IBM 3/15D

### DDP

MAKER	MODEL	QTY	VALUE	DELIVERY	CUSTOMER	APPLICATION NOTE
Nixdorf	8870/15	1			Ryobic Masterline Ltd., Tewkesbury	Stock control
Rediffusion	R2800	1			Molins Tobacco	Includes 17 workstations
Nixdorf	8870/35	1			Home Automation, Hoddesdon	Accounts & Production
Nixdorf	8870/35	1			Kirk Care Housing Ass. Edinburgh	Sheltered Housing Group for budgeting control
UCL	Ultimate	1		Installed	Macmillans Publishers, London	Order entry
Rediffusion	Telecentre	1		Installed	Bulton & Paul Joinery	Sales and Marketing
Rediffusion	R1800	1		Installed	Forestry Commission	Replaces Univac System
Modata	Micro master	1	£29,000	Installed	Queen Elizabeth Medical Centre, Birmingham	Plant and Equipment Record

extract from  
Office Information Systems - Europe  
December 1983

### ICE CREAM VENDOR MOVES INTO COMPUTERS

Welsh ice cream company, J. Thayer & Sons Ltd has signed a dealership agreement for the Teleputer/3 with Rediffusion Computers Ltd, with a call-off value of 60,396 pounds. Thayer has been a Rediffusion user for the last 10 years, and has entered into this agreement as an affirmation of its faith in the computer company, and to provide assistance to its customers, some of whom are on the verge of entering the micromarket but are unsure of what to purchase.

Thayer will be offering these, and other prospects, the Teleputer/3 with selected business software packages. The company itself uses Rediffusion videotex TVs linked to a Rediffusion R1800/30 systems running Corporate Videotex Software (CVS). The company started using Rediffusion equipment for a key-to-disk application but added videotex facilities to improve management information and control. In addition to installations in offices Thayer has installed videotex TVs in directors homes, the factory and the company secretary's home.

Corporate  
videotex  
software  
exploited  
by Thayer

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\* \* \* \* \*

## Computers

Extract from  
Municipal Journal, London.

27 JAN 1984



Computing centre at Bankers' Automated Clearing Services, Edgware, London

Despite some initial resistance nearly half-a-million employees in the UK every year change from being paid in cash to other forms of payment. It is a logical movement. In computing terms it is simply a nonsense for sophisticated payroll calculation systems to interface with a clerk counting out notes into a pay packet or with a company director signing a pile of cheques. In this article a special correspondent describes how access to the automated alternative is made easier by telecom link.

The coming of a new service called Bacstel makes manual systems seem more antediluvian than ever. They are an unnecessarily high cost that employers from Wick to Penzance could take steps to reduce by following the example of West Midlands Regional Health Authority. Input can now go on-line direct to the banks' clearing centre for automated payments at Edgware in north London, opening up new possibilities for data-processing and accounts people.

David Rodrick, West Midlands RHA chief programmer, believes this transmission is going to make a great deal of difference. 'With transmission and a little bit of rescheduling we can begin to pay a lot of people weekly by automated transfer because we can get the money into their banks on Thursdays or Fridays', he says.

From its start in 1972 the Edgware computer centre operated by Bankers Automated Clearing Services (BACS) took in data on magnetic tape. Cassette and diskette were added as input media in 1982 and in April 1983 direct transmission via public telephone lines or leased lines became available, followed later in the year by SwitchStream and Kilostream (digital high-speed data transmission).

West Midlands RHA was a pilot user of Bacstel but for any organisation or local authority any distance from Edgware telecom input has obvious benefits, especially for time-critical applications such as

weekly wages.

Monthly wages are never a real problem time-wise and over 90% of the West Midlands RHA's 50,000 monthly salaried staff have been paid by automated transfer since 1977. Now it is planned to offer automated transfer to the weekly paid as an option to payment by cash or cheque.

Creditor payments also made through BACS include bought ledger, expenses and other settlements, and these too will be switched from tape input to telecom. Already events in this direction have moved quickly. After tests, the authority's mainframe centre at Harborne, Birmingham, took its South Birmingham Health Authority as a parallel run, processing the 2,800 monthly salary payments for the authority on tape but also transmitting them on line. There were no problems with this final pilot and in April these payments were transmitted live.

During May all automated salaries were put on line - 51,000 to cover the authority's 197 hospitals in 22 health districts from North Staffordshire to South Warwickshire, taking in the rural counties of Hereford and Worcester and Shropshire as well as the populous West Midlands metropolitan county.

At Harborne the management services division has two ICL 2966 mainframes that provide a mainly administrative service to the RHA and the districts. Work includes batch systems for payroll, accounting,

budgetary control, creditor payments and stores ledgers, and manpower, child health and hospital-activity statistics.

Hospital-based systems are provided for the region by an ICL 2960 based at the North Staffordshire Royal Infirmary at Stoke-on-Trent and a Univac 481/3, soon to be replaced by an ICL 2955, at the Queen Elizabeth Medical Centre at Birmingham.

For Bacstel, users can select any transmission equipment that meets the standards. Harborne leases a line to Edgware and connects with a Racal Milgo 26LSI modem attached to a Rediffusion R800/70. The only other equipment used is a Centronics printer on the R800 for the BACS acceptance advices that are sent back down the line as soon as the user's transmission ends.

The present speed of 2,400bps is taking 10 to 15 minutes to transmit details for 1,000 people. But there are plans to upgrade the existing line and to put in another to BACS' second computer centre at Dunstable in Bedfordshire. Two modems to run at 9,600bps will also be installed so that transmission will be three times faster.

The total capital cost of the existing and extra equipment is relatively small. It costs something like 30p to 35p to make up a wage packet against 3p for a BACS entry. In bank charges alone a cheque costs about six times as much as a BACS entry and a paper transfer four times as much. It does not take many people to go on to transmission for it to pay for itself.

Conversion of the weekly-paid from cash and other payments media to automated transfer will not happen overnight, nor would the authority ever attempt to impose a change on its staff. The fact is, though, that we lag in this area. In contrast to the UK, few advanced countries still burden employees with a packet stuffed with bank notes and coins to take home. The invitation to violent crime that the handling of close on £2,000m cash each week is made painfully clear in the news columns.

In France and the USA less than 1% and in West Germany and Canada less than 5% of employees are still paid in cash. In Britain the figure is 40%, which represents over 10 million pay packets to be handled every week.

How many of the authority's 45,000 weekly-paid staff will agree to the change is hard to predict. The banks are keen to co-operate and in some cases are offering free banking for an initial period. Those already paid weekly by cheque or paper transfer into bank accounts will almost certainly welcome the change, but for those paid in cash the conversion task will be harder.

-- JAN 1984

# RITA GETS A GOOD RESULT

The finalists for the 1983 RITA (Recognition of Information Technology Achievement) Awards have been decided and the trophies will be presented at a dinner at the Grand Hotel, Birmingham on 17 January by John Butcher, MP, Parliamentary Under Secretary of State for Industry. The Awards ceremony is held in conjunction with the opening day of the fourth Which Computer? Show.

The purpose of the Award is to heighten national awareness of advances in information technology, and to support these developments by rewarding outstanding achievement. It is a scheme which is endorsed and supported by OEN's Information Technology News, too, as regular readers will be aware by now.

To this end, OEN has sponsored one of the Awards — that of User Training Manual of

the Year. An eminent panel of judges has decided that the three finalists are: Wordstar 3.3 from Micropro International; Friday from Ashton Tate; and IBM Displaywriter. The three were chosen from a shortlist of six, out of nearly forty entries. An excellent response from you all, thank you.

As well as the respective sponsoring Editors, the panel of judges comprised Dr. Doug Eyeions, Director General, Computing Services Association; David Firmberg, Deputy President, British Computer Society; David Fairbairn, Director General, National Computing Centre; Ted Cluff, Secretary General, Institute of Data Processing Management; and Dr. Paul Freeman, Director, Central Computer and Telecommunications Agency.

Finalists of other categories are as follows: *Systems Innovation*: Brailewriter from

Pathway Communications; Micronet 800 from Telemap; and Signcheck from Rediffusion Computers.

*Newcomer*: Bluebird Software; Medical Systems Ltd; and Tycom Corporation.

*Software Product*: Nucleus from Compact Software; Financial Director from Financial Director Software Ltd; and MicroSaFe from Safe Computing Ltd.

*User of the Year*: Haslemere Estates; Reward Regional Surveys; and Stewart Warner Ltd. Office System: AES 7200; Lisa from Apple; and Xionics.

*Personality*: John Alvey; Herman Hauser; Alison Newell; and Brian Oakley.

The Supplier of the Year has still to be decided.

For tickets to the Awards Dinner or for more information on RITA quote No.

*Rediffusion*  
**R&C**  
TRADE & TECHNICAL CLIPPING SERVICE  
DIVISION OF ROMEIKE & CURTICE Tel 01 882 0155  
**Micro Decision**  
Planner No. 5B-115  
Monthly

-- JAN 1984

## Hertfordshire

Wright Computers in Sawbridgeworth in Hertfordshire stocks the ITT 3030, OEM Orion, Rediffusion Teleputer 3, Microwriter, and ITH Tiger micros. It supplies Peachtree and Comshare's software as standard, as well as BOS and CP/M packages. Before customers buy, Wright offers advice on suitable systems, this cost being included in the price of the system. If you decide not to buy, then nothing is payable. Training is provided either on-site or at Wright's premises; hardware maintenance is through a third party, and software maintenance is through a local company.

Wright Computers  
70 London Road  
Sawbridgeworth  
Hertfordshire  
Tel: (0279) 725028

Extract from  
Financial Times, London

Technological developments in only a few key areas explain the industry's sudden growth. Here the major advances are considered.

# 'Seeing' machines take their first steps

## Robots

PETER MARSH

ROBOTS that see are making their first, tentative steps on to the factory floors of the industrialised world.

The machines are more advanced versions of the "blind, deaf and dumb" robots whose population over the past few years has grown at a rate of some 30 per cent annually.

The "seeing" machines number no more than a few hundred and are only just making their way out of the research laboratories.

They usually require special lighting and advanced programming techniques. As yet, they cannot be relied upon not to go wrong in the hurly burly of the typical industrial workshop.

But the hardware seems likely to become gradually more accepted in some areas of industry, especially where manufacturers want to link conventional robots to tasks such as inspection.

To use the most widely accepted definition, a robot is nothing more than a mechanical arm, controlled by a computer. By changing the program in the computer, an engineer can instruct the machine to do different jobs.

In this way, for example, an industrial robot with a welding torch can alternate between joining together lumps of metal

of different sizes.

Such machines are far from those envisaged by Mr Karel Capek, the Czech writer who brought the word "robot" into the English language.

The devices that figured in RUR, Mr Capek's play of the 1920s, were true humanoids that behaved like people and gradually took over the world. The machines could see, feel and think like humans.

By contrast, only a tiny proportion of the 40,000 or so industrial robots in the Western world can take note of their surroundings and react accordingly.

In ordinary robots, an engineer programs the device in a set way. The robot then continues in a fixed pattern, for example, in taking finished items off a conveyor and putting them in boxes.

The routine may be disrupted if, for instance, an object is substituted other than the one that the robot expects. But a conventional robot will carry on regardless, sometimes with disastrous results for factory managers.

A machine that senses its surroundings, perhaps with a TV camera or with devices that register touch, could be one way out of an engineering dilemma.

Most robots with sense feature a camera that records pictures of the items that the robot is handling. The camera sends details of the images, in the form of digital code, to a computer which processes the data.

With this technique a robot perceives the identity of objects

### APPLICATIONS FOR PROGRAMMABLE ROBOTS (U.S. 1981)

Welding metal in foundries	1,500
Machine loading	860
Painting	840
Assembly	540
Other	100
Total	870
Source: Frost and Sullivan	4,700

### PRODUCTION OF PROGRAMMABLE ROBOTS (1982)

Japan	7,000
U.S.	1,800
Europe	3,200
Source: Frost and Sullivan	

In front of it and modifies its action accordingly. For example, the machine would pick up a steel bar in a different way to a china tea cup.

In recent years, advances in computer software and the reduction in the cost of solid-state memory have produced vision systems for robots at a price that factories can afford.

Several manufacturers are selling vision equipment for robots at about \$25,000. The ordinary "blind" robots that cost between \$20,000 and \$50,000.

### Academic deals

Most of the companies that are leaders in this technology are in the U.S. They include

Unimation (Europe) engineers test the final consignment of 34 PUMA robots built at the company's Shropshire headquarters and destined for a Spanish customer. Worth £750,000, it is the largest single order Unimation has received

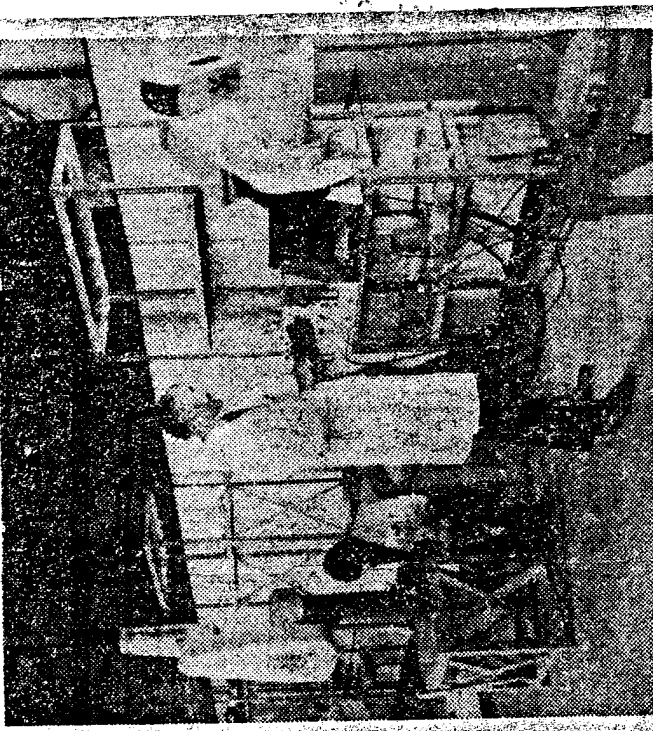
Automatic, Perceptron and SRI International. Perceptron and SRI are concerned with testing and evaluation of products.

In such applications, cameras send information about faults in products to an industrial robot. The cameras obtain the data as the parts—which could be anything from medicine bottles to foundry equipment—glide past on a production line. Instructions are then sent to robots which remove the items to different bins depending on their characteristics.

In the U.S., Chesebrough-Pond's, a manufacturer of toiletry goods, has made its own vision hardware for inspecting labels on bottles. In some of its factories, the company has linked the equipment to robots. According to Mr Don Bragg, a British consultant in machine vision, companies are interested in installing automatic hardware for inspection not to save money by employing fewer human workers. The motivation, he suggests, is that technology can simply do a better job than people who often will fail to spot faults as they become tired.

In the past couple of years at least four companies have signed deals with laboratories or the academic world to sell vision equipment. They are British Robotic Systems, Omnicron Electronics, Rediffusion and Computer Recognition Systems. These organisations are selling hardware developed, respectively, at the National Physical Laboratory, London's University College, Manchester University and Brunel University. Among the pioneers in vision hardware for robots is General Motors, the American car giant. Back in 1961, the company installed the world's first industrial robot.

And for more than two years the company has operated in one of its Canadian factories two robots equipped with TV cameras. The machines pick up castings that are positioned randomly on a conveyor belt. Most applications for "seeing" machines are, however, likely to be in areas con-



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

Extract from  
Electronics Weekly, London

# Taking the rough with the smooth

REDIFFUSION, the electronics side of industrial holding group British Electric Traction, upped turnover for the half-year to September by 7 per cent, but saw pre-tax profit decline by 21 per cent to £6.19m.

The decline was largely due to increased depreciation and interest charges from a heavier investment in VCRs for rental said chairman Hugh Dundas. The company has more than twice the number of VCRs on hire as it had last year, and sales are running at almost three times last year's rate.

The company recently won a licence to build a high technology switched-star cable TV network in Guildford, and has applied to provide additional programming services over 54 of its existing networks.

Rediffusion Computers suffered from low sales, said the company, but should make up some of the lost ground in the second half.

Other divisions of BET performed better, and overall the group reported a 17 per cent rise in profit to £31.8m on turnover of £610m.

## DIARY

### JANUARY 5

Microcomputer Appreciation is a Polytechnic of the South Bank introductory course in London. Cost is £55. Details: Sally Justice, 01-928 2790.

Polis-Parliament Online Information System. BCS West Yorks branch. Victoria Hotel, Bradford. 6 for 6.30pm. Richard Morgan, House of Commons.

### JANUARY 6

Seminar to give managers and users working knowledge of local area networks and their introduction, run by Cranfield School of Management and Milton Keynes Information Technology Exchange, to be held at Cranfield, Bedford. Fee is £125, plus VAT. Details: Eric Bird, Milton Keynes 668866.

### JANUARY 9

Visit to Prime Computers. BCS Bedfordshire branch. Contact W. R. Chisnall, Bedford 56013.

Contact Alan Staines, Henley 6922.

Audio-enhanced Computer Aided Learning. BCS Wolverhampton branch. The Polytechnic, Wolverhampton, 7pm. Dr Keith Miller.

### JANUARY 11

Demonstration of Teleputer 3 by Rediffusion Computers. BCS Chester and North Wales branch. Hayden Rees Room, Theatre Clwyd, Mold, 7.30. Contact Peter Leonard, 0244-812300.

TIS and Ultra, Cincom's new generation of integrated database technology. BCS Huddersfield Database Group. Textile Tower, Room T601, The Polytechnic, Huddersfield, 7.15. Contact G. Mansell, 0484-22288, ext. 2254.

Times Past and Present Computing at the NPL. BSC Kingston branch. Kingston Polytechnic, 7.30. Donal Davies, NPL.

Norsk Computers. BCS South Wales branch. College of Higher Education, Allt-yr-Yn, Newport. 7pm. David Billingham, Norsk

## INTERNATIONAL PRESS CUTTING BUREAU

Extract from:  
MANAGEMENT SERVICES,  
-London-

4526 -- JAN 28

### South East Region

The Croydon Branch meeting on 'Office automation and IT' in November provided an interesting and enjoyable evening. Peter Norman of CSC UK, ably assisted by Marianne Wright of Rediffusion Computers Ltd gave an enthralling account of what is now happening in the office and what is just around the corner. Peter showed that the real target for the introduction of microcomputers is middle management. Capital investment per office worker is extremely low. He demonstrated the relationship between investment and productivity in other sectors to show that the office still had a long way to go. Those who spend the most time dealing with information and communicating both within and outside of the organisation are the middle managers. It therefore followed that the most productive applications are in this area. The evening ended with a demonstration of the Rediffusion terminal, the use of Videotex and colour and the range of uses of the system.

### South East Region Diary

Croydon  
Thursday 26 January, 6.30 pm  
MTS - state of the art' by Keith Gower, senior lecturer in industrial engineering at London College of Fashion. Croydon Technical College.

### Sussex

Wednesday 11 January, 7.30 pm  
Visit to Rediffusion Simulaffon Ltd, Gatwick Road, Crawley. Prior booking is essential with the secretary on Horsham 64191 ext 166.

Wednesday 20 January, 7.15 pm  
'Workshop on redundancy' with professional speakers and cheese and wine. Sackville Hotel, Hove.

### Sussex

Wednesday 8 February, 7.30 pm  
'So you think you're a manager' by representatives from Ford Motor Company at Courtlands Hotel, Grand Avenue, Hove. Controversial, witty and informative presentation.

**PRODUCT/TELETYPE**

**Private  
viewdata  
systems**

MANY of the most successful private viewdata systems around have arisen from private company enterprise — the Stock Exchange's Topic, British Leyland's Comet, Talbot's VITAL — because large companies wanted to use the available technology, but the products weren't there.

As a result of each developer going his own way, there is a wide divergence of systems available. Some suppliers offer software which will run on a company's existing mainframe computer. Some offer both software and hardware in a dedicated system upon which no other applications

can be run. The user must initially decide which type of system will best suit his needs. In many cases, the latter will be more expensive but has all the benefits of a dedicated system.

Another alternative is to opt for a bureau service. There are at least 30 companies in the UK offering

<b>PUBLIC SERVICES</b>								
Supplier	Service	Access	Hardware	Costs	Word & text processing	Closed user group	User directory	International mail
BL Systems (0527) 64274	Comet	PSTN/ PSS	DEC or IBM mainframes	N/A	0	0		
British Telecom 01-583 9811	Prestel Mailbox	PSTN	GEC Enterprise	Free to Prestel users		0		0
British Telecom Gold 01-403 6777	Telecom Gold (Dialcom)	PSTN/ PSS	2 x Prime 750s	N/A	0	0	0	0

<b>PRIVATE VIEWDATA SYSTEMS</b>									
Manufacturer/ Supplier	System	CPU	Cost	Applications	No. of terminal ports	VDU terminals	TV set terminals	Closed user group	Prestel compatible
Aregon 01-831 7536	IVS-3	PDP-11, VAX-11	£10,000+ basic (S)	Travel, retail, motor trades	200	0	0	0	0
Computex (0892) 45178	Computex	PDP-11, VAX	£10,000+	Business, motor & travel, public sector	N/A	0	0	0	0
MGS (0753) 30721	PVS-990	TI Business Systems	£4,300+S £15,000+H	Publishing, manufacturing, insurance	64	0	0		0
Minscan 01-263 2179	Visual Public Address System	Dynabyte 500	£8,000 for 16 terminals	Transport, betting shops	20	0	0	0	0
Rediffusion Computers (0293) 31211	Corporate Videotex System (CVS)	R-range	N/A	Business	32	0	0	0	0
Stock Exchange 01-588 2355	Topic	Modcomp Classic	£3,500 pa for one terminal	Financial	under 1K		0	0	0
Sperry 01-965 0511	Videotex	Sperry 1100	N/A	Broad range	N/A	0	0	0	0

private viewdata on a bureau service. Some suppliers are: **Intercom** (01-567 2211); **Telefile Computer Services** (0753-76375); **ADP Network Services** (01-637 1355); **Unilever Computer Services** (04862-27933); **Baric Computing Services** (01-890 1414); **Datasolve** (01-499 7099); **Scicon** (01-580 5599); **IP Sharp Associates** (01-730 4567); and **Great Western Computing** (0793-485517). Ask around your area for other bureau suppliers.

Our accompanying table touches only the tip of the private viewdata iceberg. But we trust that it shows a range of systems, working on micros, up to DEC's VAX super-mini range. It shows a variety of prices and applications.

For any potential buyer, things to look out for are the number of terminals which can be attached (the table shows number per CPU), whether the attachments are tv sets or vdu terminals (this can make a vast difference to the price, especially if you opt for a dedicated system). If the system is Prestel compatible, the user has access to the public service. A closed user group is frames within an information provider's database to which access is restricted, usually by issuing passwords to each user.

Other points which the user should note are: response time

from frame selection to its appearance on the screen (under two seconds is the acceptable norm); how many frames (pages) are available; how many frames can a user review by going back through those already seen, rather than re-selecting; is there a facility for enhanced graphics (this may be important to your company).

There are approximately 50 suppliers of private viewdata systems in the UK. These include **AVS Intext** (01-434 2034); **Business Electronics** (0703-738248); **Comart** (0480-215005); **Comdial Computer Systems** (02516-6776); **Computer Automation** (0923-771211); **Computer Machinery Co.** (0442-61266); **Data & Control Equipment** (0296-32971); **Data General** (01-572 7455); **GEC Viewdata Systems** (01-836 8000); **Geest Computer Services** (021-643 9313); **STC** (0273-507111); **Modular Computer Services** (0734-698888); **Owl Micro-Communications** (0279-723848); **Philips** (01-580 6633); **Plessey** (02013-5161); **Systeme** (0532-702277); **Xionics** (01-636 0105); **Xitan Systems** (0753-79127); **Zynar** (0895-59831); **ICL** (01-788 7272); **Honeywell** (01-568 9191); and **Metrotel Viewdata Systems** (08956-77071). Terminal manufacturers of tv sets for viewdata systems include GEC/Hitachi, STC, National

Panasonic, Philips, Rediffusion, Sony and Thorn. Manufacturers of specialist viewdata vdu include Bellfruit Manufacturing Company (0602-700101); Bishopsgate Terminals; C.W. Cameron (041-633 0077); Doric Radio (01-397 5411); Sony (UK) (09327-87614); and Thorn Consumer Electronics (01-363 5353).

Abbreviations used in the table are S = software; H = hardware; and N/A = not applicable (unlimited capacity) or not available (prices).

## Public services

THE advantages of using public electronic mail services is that they require only low cost hardware, no software is required and you can access other users.

The main disadvantage is that the service charge may work out to be very expensive. Public services only allow for messaging; they are not designed for file transfer. But if you are looking for a simple electronic mailing system, they could suit the application very well. You may find it expensive if just used in the UK, though, but they come into their own for international messaging systems where you may not be able to contact an overseas office during normal office hours.

By far the most sophisticated

public electronic mail/teletex service so far is the Telecom Gold Dialcom. As well as electronic mail it features express delivery, post-dated mail, multiple message facilities, phone messages, data filing and diary scheduling, plus many more features.

British Telecom's Prestel Mailbox is going nationwide in April/May so will be available to a wider range of users. It currently handles from 8,000 messages a week from 10,000 mailboxes or users. It features over 200 different frame designs and there is a frame customisation service. Its online user directory contains about 3,500 entries.

Other public electronic mail, or 'bulletin' systems include **Dialnet** from **Dialog Information Services** (0865-730969); **Micronet** (01-278 3143); **Ambit International's Rewtel** (0277-230909); **Maptel** from **Maplin Electronic Supplies** (0702-552941); and **Distel** from **Display Electronics** (01-679 1888).

Companies can subscribe to these services to offer the most up-to-date information on products and marketing strategies. Triumph Adler, for example, has recently subscribed to Micronet to provide its dealers with the latest information on its products, services and prices. TA hopes to eventually include end-users in the scheme.

## Electronic mail for micros

ELECTRONIC mail software packages for microcomputers offer a low cost alternative to public and private viewdata systems, although there are not many packages available at the moment which are dedicated to just this task.

Packages which you can just put into your existing micro and which allow you to send messages to other departments or branches in your company are attractive to small and medium sized businesses where the electronic mail requirement is limited. There are several file transfer packages available for microcomputers, although pure message handling systems are still in their infancy.

Purpose-built network systems which use micros, such as Xerox's Ethernet, are available, but this is a different and more expensive alternative to be covered in future issues.

The table shows six electronic mail packages for microcomputers. Other packages include **MicroMail** from **ACT** (021-455 8686) and **Zycor's Microview** (0753 79127). It will be worth contacting networking companies such as **Wang** and **Xerox** for electronic mail facilities on network systems.

Manufacturer/ Supplier	Product	Micro	Price	Group addressing				
				Auto answer	Auto receive	Auto dialling	Remote terminals	
Executive Software 0101-213 660 2019	EXECmail	DEC Professional	\$495	0	0	0	0	0
Hawkeye Grafix 0101-213 348 7909	Electronic Mail Manager	CP/M, MS-DOS based	\$400	0	0	0	0	
MCP Systems 051-426 4178	Inter-Comp	as above	£150	0	0		0	
Microcom Inc. 0101-617 762 9310	Micro/Courier	Apple II Apple III	\$150	0	0	0		
Telepost Systems (02813) 82028	Telepost Electronic Mail Software	6809 based	N/A	0	0	0	0	0
Torch Computers (0223) 841000	Torchmail	Torch	£195		0	0		

extract from  
Computer Weekly 5.1.84

**INTERNATIONAL PRESS  
CUTTING BUREAU**

Extract from:  
**CRAWLEY NEWS**

DEC 1983

**Manager**

**GRAHAM Stallard** has joined Rediffusion Computers as materials manager.

Previously, Mr Stallard worked as production controller at Sangamo Transducers from 1980 to 1983 and from 1974 to 1980, he was production control manager at Sonicaid.

■ **Joe Fisher** has joined Rediffusion Computers as manager for marketing services at its Crawley, Sussex, branch. Previously Fisher worked for Lombard Elizabethan Insurance in Tonbridge, Kent, as computer liaison controller. **Iain Wilson** has also joined Rediffusion Computers, as senior systems analyst based at the Edinburgh branch. He has spent 4½ years as systems designer for the Lothian Health Board and, prior to that, was a programmer at Davidson Radcliffe. **Lesley Farrow** has joined Rediffusion Computers as a systems analyst for the London, North, branch. Previously Farrow was with the Dutch Civil Service as a programmer.

**INTERNATIONAL PRESS-CUTTING BUREAU**  
1, Knightsbridge Green, London, S.W.1

Extract from  
Computer Weekly, London

10 JAN 1984

■ **Chris Henderson** has joined Rediffusion Computers as Northern dealer manager in the teleputer marketing group and will be based in Manchester. Previously he worked as a sales executive for 18 months at Hourds Computing and before that was with Aset as a sales executive for two years.

**INTERNATIONAL PRESS-CUTTING BUREAU**  
Lancaster House,  
70 Newington Causeway, London, S.E.1

Extract from  
Weekly Marketing Bulletin, London.

Extract from

Crawley Observer 5.1.84

**Market**

**HAZEL Nott** has joined Rediffusion Computers Ltd of Crawley as a customer relations officer in the Teleputer marketing group based in Crawley.

CO  
571

David Parsonage has been appointed UK manager of field marketing for Rediffusion Computers. 4526

extract from Computer  
Weekly 19.1.84

**INTERNATIONAL PRESS-CUTTING BUREAU**  
1, Knightsbridge Green, London, S.W.1

Extract from  
Computer Weekly, London

12 JAN 1984

■ **Hazel Nott** has joined Rediffusion Computers as customer relations officer in the teleputer marketing group based in Crawley. She has spent two years with Waterfall, a business bureau in Haywards Heath, as a director.

**Graham Stallard** has joined Rediffusion Computers as materials manager. Previously, Stallard worked as production controller at Sangamo Transducers.

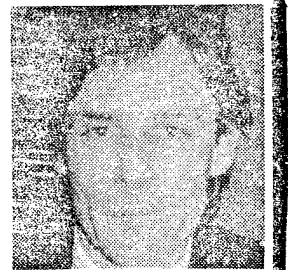
**INTERNATIONAL PRESS  
CUTTING BUREAU**

Extract from:  
**CRAWLEY NEWS**

25 JAN 1984

**DAVID Parsonage** has been appointed UK field marketing operations manager for Rediffusion Computers.

Mr Parsonage, who joined the company in 1977, has moved over from product marketing to take up this new post.



# Piloting a project to

The government's Office of the Future scheme has won applause

## success

as Ron Coates reports

It is not often that the Whitehall bureaucrats get a loud round of applause for their initiatives, particularly in any field involving advanced technology. But the mandarins at the Department of Trade and Industry (DoTI) look set to collect a full set of laurels for the new 2½-year-old Office of the Future project.

For the users in the scheme, a mix of government departments, local authorities, nationalised industries and other public sector bodies such as the BBC and Leicestershire Constabulary, are at worst quietly confident that their participation will pay dividends. At best they are ex-

uberantly enthusiastic. And the suppliers of systems for the

**The original eight suppliers were all either UK companies or had a substantial UK manufacturing capacity**

ject show the same range of reaction.

And the UK scheme, unique when it was set up, is far ahead in scope and its accomplishments than either of the two similar projects, being run in Canada and the European Community.

The project, when first announced with only moderate fanfare, was a simple plan to encourage the development of office automation in working offices by establishing pilot projects through a £250,000 a time grant. The total cost was then to be only £2 million for eight pilots, each with a different equipment and system supplier.

The original eight suppliers, which included IBM, were all

either UK companies or, which was not stated explicitly at the time, companies with a substantial UK manufacturing capacity.

Information Technology Minister Kenneth Baker said at the time: "This is intelligent public purchasing. It means that the public sector can show that the new technologies will create greater efficiencies and lower costs. These will not be showplaces but working offices."

The scheme was also a brave leap into an area in which others had or were about to come to grief. Oil giant Exxon was then winding down its own efforts to cash in on what many had predicted to be a

major boom. It was estimated that the multinational was left with little change out of a billion dollars.

And closer to home, the government-backed company, Nexos, set up in the heady days of the challenge of the chip with its brothers, Inmos and Inscac, were clearly on the skids. Six months after the Office of the Future project was announced, Nexos, which was one of the original eight suppliers, was wound up with an estimated loss of £10 million.

For the problem facing anyone dealing with the office of the future, automated office, electronic office, or whatever snappy title the high technology prophets give it, was that no one really knew how the equipment and systems would be used by the people who worked in offices.

Robb Wilton, who in 1981 had just moved into ICL as one of a pair of potential rescuers, said succinctly at the time: "The problem with the electronic office is that more people are writing about it than doing it."

The DoTI's project was specifically designed to solve this problem.

It now has over 20 pilot schemes in operation, each with a separate supplier and the whole covering a range of potential applications. These run from the fairly small project at the Cabinet Office with around a dozen or so terminals to the almost infinitely expandable

More importantly the department decided, as Kenneth Baker pointed out, to use public sector procurement as a tool to get product development and use of developed systems underway.

And by offering its grants to individual departments or sections of organisations the DoTI avoided both the faults of over-centralisation in control of the pilot schemes and stretching the resources of its own advisor, the

The system there is a Xionics-supplied local area network designed for multi-author report preparation under pressure. It also has diary and electronic mail facilities. What the Cabinet ministers tell the evaluators about the system is unlikely to become public knowledge, as that part of the DoTI report is to remain confidential.

Other users have been more forthcoming. At the Long Range and Strategic Studies Division of British Telecom, which is using a star system based on a DEC Vax 750 with a mix of DEC personal computers, and screens, the spokesman's comments were revealing.

"Most users have accepted the system quite happily and there is considerable pressure from those not yet on the system to be brought into the trial. The professional and managerial staff have adapted to the use of keyboards and desktop terminals remarkably quickly and have grown to accept even the most annoying system idiosyncrasies fairly quickly," he reported to the EIU conference.

But he also warned that there is still a long way to go before office

although the CCTA itself has a great deal of experience in evaluating it within the civil service.

Another question that will take some time to establish is whether or not the project has succeeded in its aim of encouraging independent suppliers.

Among the big battalions — the IBMs, Honeywells and Plesseys — the general attitude is one of quiet pride in taking part in a scheme with the scope and prestige of the Office of the Future project.

But they also regard office automation as something that they are doing every day and would be doing without the DoTI.

At small UK firm Xionics, which can also claim to be doing it every day, Mike Bevan is unqualified in his enthusiasm and has little doubt that landing the Cabinet Office project and implementing it have greatly helped his company.

CCTA (Central Computer and Telecommunications Agency), in supervising them.

At Cambridgeshire County Council, officials had already experimented with IBM's 3730s and were actively examining alternatives for installing office automation in some form in council offices. The council became one of the first organisations to join the project when it was invited by IBM, after consultation with DoTI, to participate.

The council opted for a mainframe-linked system based on its own IBM installation. It combines a star network with subsidiary local area networks.

Under the scheme the department purchases the equipment up to a maximum of £250,000, of which up to 25% may be allocated to research and development. It then lends the system to the user, which is obliged to carry out its trials for two years.

At the end of that period the user buys out the DoTI's interest under terms that have not yet been made clear.

Control of individual pilot schemes is vested in the user and outside consultants. Potential users are obliged to prepare a coherent plan for the implementation of a system, complete with objectives and general technical specifications.

During the run of the pilot scheme, a series of four evaluations is run by the outside consultants. These are known, for some reason of jargon, as snapshots.

Snapshots consist of a battery of questionnaires, interviews and surveys, including interviews with end-users or clients — those people who use the final information that is processed by the system.

A particular emphasis of the interviews is on determining how the use of the systems changes people's work habits and procedures in the office.

At the Cabinet Office, where staff are trained to say little to outsiders, it is clear that using the system with it and improving that evaluations managers for so that the case it prejudiced evaluations.

Automation systems come of age and that running a mix of electronic office systems and those based on paperwork creates an entirely new set of problems. In a special aside to DP managers, he added that DP-based solutions needed to pay more attention to the changes for office workers.

More of the results of the pilot projects will be made public this year at two national conferences run by EIU Informatics. These will take place in London in late March and early October and will consist of presentations from both users and suppliers.

The DoTI will also issue a summary report, which is expected to be published this year after the official end of the project in September. These reports will probably concentrate on the use and practicality of current office automation systems.

The question of cost-effectiveness and efficiency is likely to take a lot longer to establish,

**The problem was at no one knew how equipment systems be used in offices**

projects at Wales Gas and Strathclyde Regional Council. Central government funds so far committed are just over £5 million.

The first major public evaluation of the progress of the project was made at an EIU (Economist Intelligence Unit) Informatics conference at the end of last September. EIU Informatics is itself the main monitor of the project.

At the conference the spokesmen for the Information Technology Division of the DoTI spelled out what the government's aims for the project were. Although these were carefully couched in the usual civil service way — so as to be objectionable to no one — they were also concrete enough to use to evaluate success.

The department saw the scheme as an effort to secure the competitive standing of suppliers and to use and encourage independent expertise. It also wanted it to inform potential users (the market), and to demonstrate office automation products and some at least of their potential uses.



... Has little doubt that landing the Cabinet Office project has greatly helped his company.

**DoTI office automation pilot systems**

<i>Manufacturer</i>	<i>User</i>
Xionics Limited, Mike Bevan, 01-636 0105	Cabinet Office
Office Technology Limited, R.J. Taylor, (0962) 54444	British Rail Engineering Limited
IBM (UK) Limited, Stephen Quigley, (0705) 694941	Nottinghamshire County Council
Plessey Office Systems Limited, John Hooley, (0602) 254831	Nottinghamshire County Council
International Computers Limited, Ken Howe, 01-788 7272 x2276	Science and Engineering Research Council
Data Recall Limited, Anthony Jones, (0306) 87777	Science and Engineering Research Council
Rediffusion Computers Limited, Beryl Hutchins, (0293) 31211	IT Division, DoTI
Rank Xerox (UK) Limited, James Bake, 01-895 1133	Greater London Council
Allied Business Systems Limited, Tim Wickes (Wickes Associates), 01-398 7531	Brighton Health Authority
Honeywell Information Systems Limited, Tony Wood-Smith, 01-586 9191	Strathclyde Regional Council
Hewlett-Packard Limited, Tony Andrews, (0514) 5100	BBC Breakfast TV
Aregon International Limited, John Pearce, 01-831 7536	British Gas
GEC Information Systems, (0203) 452152	Export Credits Guarantee Department
Burroughs Machines Limited, Tony Bovill (Consort PR Consultants), 01-493 7535	Central Electricity Generating Board
Future Technology Systems Limited, Mike Smith, (05055) 3637	Leicestershire Constabulary
Phillips Business Systems Limited, Jean Frost, 01-580 6633	Department of Transport
Digital Equipment Co Limited, Jackie Boxall, (0734) 868711	British Telecom
Logica (VTS) Limited, Dr Marion Lewis, (0793) 36291	Wales Gas
Racal Information Systems, Eddie Carey, (0734) 782158	BBC Personnel Department