

ROCC

PRESS INFORMATION

M. J. ALDRICH

PRESS CUTTINGS

MARCH 1985

-- JAN 1985

New-Look British Computers



MEN WITH THE 'independence and motivation to establish a major new face in the British computer industry' are pictured here at the Crawley headquarters of their new company, ROCC Computers. Mike Aldrich (right), one of the Prime Minister's technology advisers, led the management: City consortium that has

acquired Rediffusion Computers Limited.

Other members of the consortium are (left to right) Keith Banks, Derek Strath and Norman Watling, who, with Aldrich, comprised the executive management team of Rediffusion Computers, and Dick Strong, a director of Charterhouse Development Capital.

EXECUTIVE UPDATE

Brief followups to articles we have published

Spurt of deal-making by British firms

Late 1984 proved to be open season for deal-making by British conglomerates we've written about lately. BAT Industries plc (*International Management*, August), the rapidly diversifying tobacco giant, kicked it off in November with the sale of its International Stores chain to Dee Corp. for \$118 million.

But dramatizing its strategy to expand further into financial services, BAT within a month had agreed to buy Britain's Hambro Life Assurance for a hefty \$764 million. Hambro strengthens BAT's insurance business, which entered the big time with the \$1.4 billion acquisition early last year of Eagle Star Holdings plc, but does not take BAT into the new financial fields it has said it wants to enter.

Imperial Chemical Industries plc (ICI) in early December stunned other suitors of Beatrice Co.'s chemical division by offering \$750 million in cash for the U.S. specialist in advanced materials. ICI's largest acquisition ever is also the boldest move yet by its chairman, John Harvey-Jones, (*International*

Management, October 1983) to shake up Britain's largest industrial company. "In a single move," said Harvey-Jones, "this puts ICI among the world leaders in advanced materials, furthers the development of our speciality chemicals business, and enhances the spread of our existing operations in the U.S."

BET sheds two

British Electric Traction Co. (*International Management*, May) chimed in twice - in late November with its sale of small-computer maker Rediffusion Computer Ltd. to a consortium of its managers and outsiders for an undisclosed sum and in late December with the transfer of subsidiary Rediffusion plc's cable television interests to media magnate Robert Maxwell for \$12.5 million.

These moves followed BET's shedding of Rediffusion's television rental business late last May, soon after our story, in which BET's managing director, Nicholas Wills, referred to that business as "not very attractive". BET got \$136.8 million in cash for the operation plus a share in future profits. BET retains several entities of Rediffusion. □

Extract from
Computer Weekly, London

Management buy-outs continue to set trends

OVER 100 management buy-outs took place last year, and the trend shows no sign of slackening.

Why are so many directors still willing to take their fate into their own hands, with the industry taking so many knocks?

In essence a management buy-out takes place when a company, or one of its parts, is bought by the people who run it. In the two most prominent examples in the computer industry recently — PCL and Rocc Computers — the respective vendors, P&O Steam Navigation and British Electric Traction, encouraged the buy-outs because both corporations are rationalising their interests, and computer services and systems were deemed wholly peripheral.

According to Trevor Clarke, managing director and now major shareholder of PCL (which was renamed from P&O Computer Services), the P&O group decided to concentrate on its core businesses. It considered selling the unit to a third party, but it was the corporation itself which first planted the idea of a buy-out in Clarke's mind.

The deal finally went through in January for an undisclosed sum. Clarke now holds 38.7% of the company and 13 colleagues the rest.

The business was established in 1976, in the time honoured fashion for a computer services company, when P&O decided to sell spare time on its machines. Now the company employs 110 and has 250 clients. It will turnover £5.5 million this year, with a profit margin of about 10%, from business consultancy, applications development, and its bureau.

But why and how did Clarke take on his own company, after, as he points out, "being an employee" all his working life?

Fundamentally, Clarke says, he was confident that the operation was in a strong position. "We had spent a lot of time positioning ourselves in the market. We have a spread of products and customers.

"And we could foresee that if the company was managed by computer people some of the future investment decisions might

be easier," he explains.

Clarke stresses that while the case for the buy-out was convincing it was not all as simple as it sounds. First the process took almost a year to complete, and it consumed a "considerable amount of management time," he says.

Secondly, Clarke points out that there are a bewildering number of options and routes for managers in such a situation to take. But, he comments: "Take all the advice you can get," particularly professional advice, because by definition a management buy-out is likely to be something a manager and his directors have no experience of.

It is probably something you do only once, he suggests, adding that there are a lot of livelihoods at stake, so it has to be got right.

In the end Clarke was passed

by his bank Barclays to a management buy-out specialist in Birmingham, Evershed & Tomkinson. That company led the negotiations with P&O, and Clarke believes that was imperative.

There was a conflict of loyalties, he explains. "In effect you are still an employee negotiating with your bosses. You must let the advisors thump the table — that allows you to maintain a working relationship," and that is particularly important because buy-out talks might fail at any point.

Without doubt it is the development of the Unlisted Securities Market (USM) that has provided the catalyst for the growth in the number of management buy-outs in the last three years. The market gives the institutions supporting buy-outs an

early and concrete way of realising their investment.

And those investors have been encouraged by such notable public success as maintenance group DPCE on the full market and one of the earliest UK management buy-outs to be listed, and more recently, components group Instem on the USM."

According to the Economist Intelligence Unit, there are now over 40 institutions willing to finance buy-outs on a regular basis, and 3i (Investors in Industry) the most active company in the area, says the current failure rate of its management buy-out investments is less than half that of start-ups.

Clarke expects to see PCL to the US in three years time: "Sensibly, as a mature and successful company," he says. By then he thinks the "dust will have settled" and confidence in the computer sector restored, with companies quoted at "more realistic prices". According to Clarke, "the market for computing wrong on the way up, and it has got it wrong now on the way down".

The immediate risk of souring investor sentiment is that managers may find the buy-out route harder to finance. In PCL's case Clarke and his directors did not go to a venture capital institution.

"We felt we wanted to keep as much equity as we could afford," he says, and in fact the directors have ended up with 100% themselves.

The exercise was funded by personal mortgages and clearing bank loans. Clarke hopes to be able to finance the company's growth from profits — but one clear advantage of clinging to the equity at this stage is that it could be capitalised in future.

What has gratified Clarke is that the company's customers have reacted "very positively" to the move. His priorities now are to spread the company's geographical coverage — he is looking to set up in Scotland and the west country — and to ensure that the company makes a complete transition from being a subsidiary, dependent on corporate services, to an independent and self-sufficient entity; and that, says Clarke, is taking time and money.



CLARKE . . . "Future investment decision might be easier."

Network and Electronic Office Systems

M. J. Aldrich

REDIFFUSION COMPUTERS

SYNOPSIS

The Four Circles concept of Telecommunications which defines an overall Telecommunication scenario embodying the main networking methods — broadcast, cable and telephony — is defined.

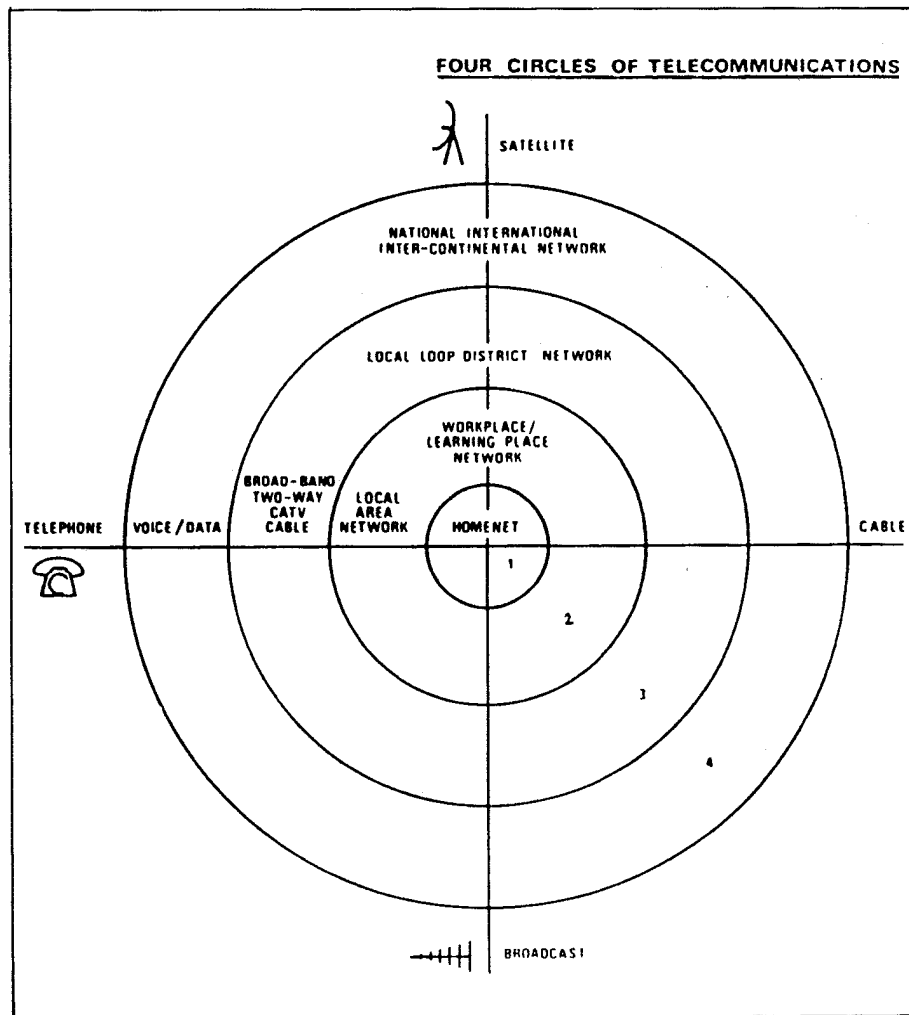
Developments within each of the Four Circles are identified and attention is focused on electronic office systems, not just in the conventional terminology of local area networks but within an overall picture of developments in teleworking and externalised offices, and the economic and social implications of office automation.

In telecommunications, all companies are finding themselves in a world of great — even momentous — changes. So many things are happening simultaneously that a fog of confusion has spread over current activity. There is a need to make some sense out of today before forecasting what will happen tomorrow.

These changes in the environment have been triggered by three main influences — the general acceptance of the role of telecommunications as a fundamental ingredient in the infrastructure of civilisation; the rapid advances in technology bringing a plethora of new electronic products and services to business and consumer markets; and an awareness that some old institutions must be changed if optimum benefit is to flow from the new environment. All this is happening against a backdrop of flat economic growth projections that, in turn, will make the 1980s the decade of market share shift and product/service displacement strategies.

In telecommunications, changes are already apparent. New products and services are proliferating. The liberalization of the PTT monopoly in the UK creates an atmosphere in which these new products and services can address markets previously closed, and succeed or fail on the basis of market forces.

The difference between business and consumer telecommunications is straightforward. In business telecommunications, a finite number of organizations spend relatively large sums of money on the facilities they need to run their businesses. In consumer telecommunications a host of people spend relatively small amounts of money to support and improve their standard of living. In aggregate, of course, the potential consumer-generated revenues are enormous. The subtle trend is that electronic products are falling in price in real terms and there is no sign of that trend



changing. Thus, products developed for the business market may well be transferred to consumer markets when pricing becomes attractive.

Similarly, as consumer products embrace microprocessor-based technology, some consumer products will transfer to business markets. Television is a good example. The technology gap between consumer TV and computer industry visual display units is now trifling. These crossovers will pose threats and offer opportunities to current suppliers.

It becomes important, therefore, to define a telecommunications scenario into which the different elements fit, albeit not perfectly, and speculate about development. A good starting point would be a view of the overall telecommunications network embracing everything from the home to intercontinental satellites.

Such a view can be considered as a series

of concentric circles. At the centre is 'homo sapiens' and the first and innermost circle is the home.

By the end of the century, only 16 years away, the home will have its own telecommunications network. It is already beginning to happen. The first generation of micro-based appliances produced kitchen timers and power tools. Second generation appliances are already providing some interaction for residential remote control and home security systems. New generations of appliances will provide integrated home microprocessor networks. The stimuli for these networks will be consumer-created. They will provide reduced energy consumption, convenience of monitoring and control and improved security. Public power utilities will want to share some of the data produced by these systems for residential load management and control and for remote meter reading.

preceded by some definitions, however simplistic.

An office is an organization of people. Its function is to provide a service of communication and recording and to control assets. Its objective is to support organizational teamwork by creating shared understandings between people within an organization and between the organization and people who communicate with it for whatever reason.

The scope of this definition of office systems is far wider than is currently generally accepted. But it is the only definition consistent with the rich telecommunications networks era that we are now entering and with the economic environment that we are experiencing.

The office isn't a place. It is a system. Where the people are located is dictated by sociological considerations, technological opportunities and economics.

The office as a conjunction of space and time will become more irrelevant as time passes. This is not to say that offices as we know them will disappear. Their topography and use will change.

Up to now, the electronic office has been segmented by technology and by grading people. Thus, an electronic office must handle data, text, voice and image. The people are graded by procedural — clerical, typing, data processors — and occupational classifications — managers, technicals and professionals. The underlying assumption is that nothing has changed. We are merely going to automate that which is already there. But are we?

Let us take two simple examples — the externalization of office labour costs and telework. In this context the externalization of office labour costs means getting an external body to do that which the organization used to do. Industrial teleshopping illustrates the point. An organization supplies computer terminals to its customers and permits them to order goods and services from the terminals. The customers perceive an improvement in service and shared understandings. The organization no longer has an order processing department. Office labour costs have been externalised and service has been improved. It is already happening in many industries.

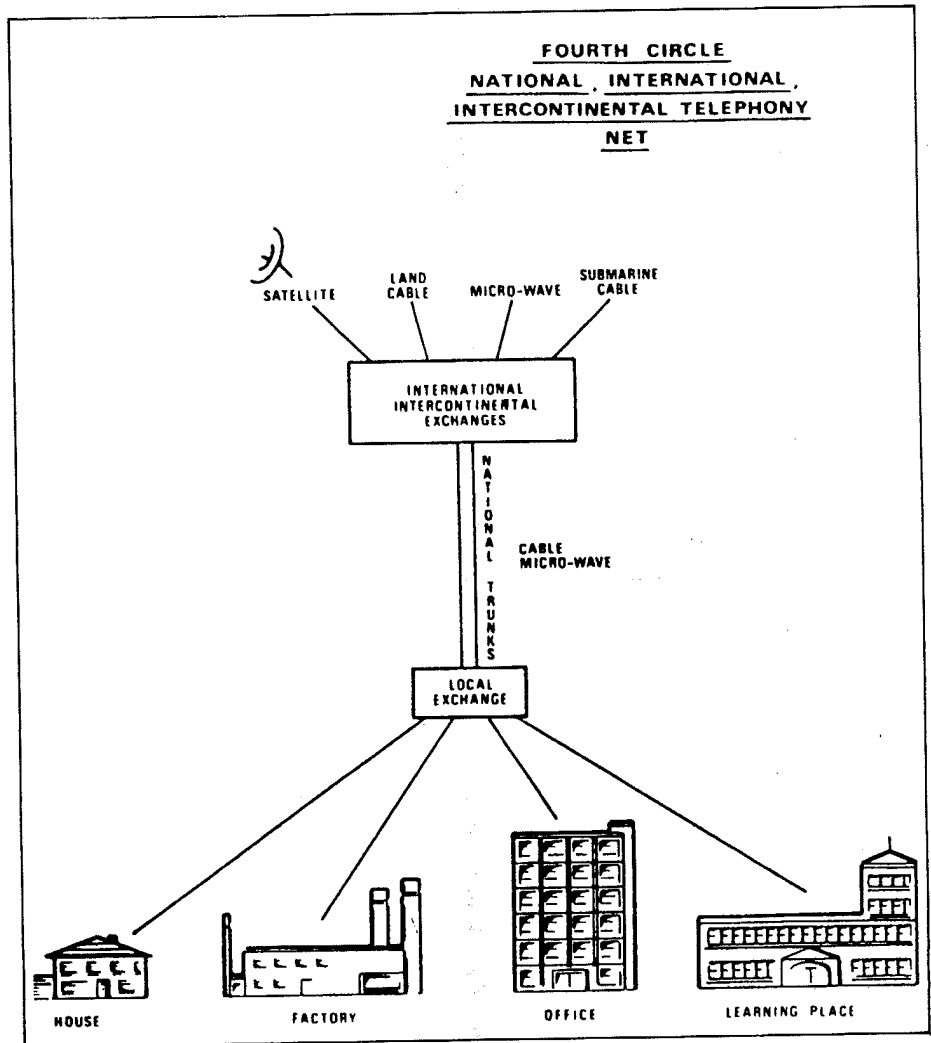
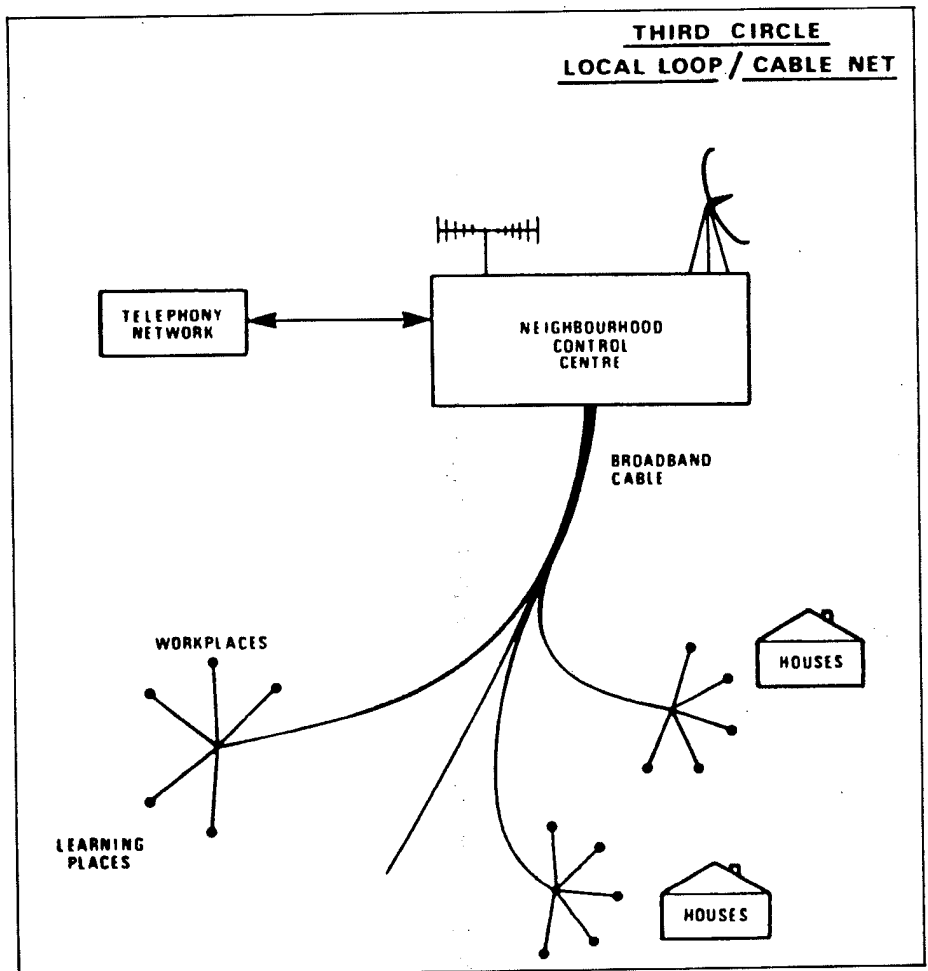
Telework is in its infancy. There are over 1,000 teleworkers in the UK at this time, mainly in the field of information technology. A terminal in the home provides much the same facilities as a terminal on the office desk.

I have a peripatetic office.

The problem that I had was basically that I had acquired a number of jobs in private, public and professional life for a variety of reasons. Some of the jobs were very taxing, most of them were unpaid and I enjoyed them all. The possibility of dispensing with some of the jobs did not enter my mind.

To the contrary, there were many other things that I wanted to find time to do. Thus I was like a juggler trying to add more and more balls. Improved dexterity, timing and concentration could help to a degree but what I needed most was a total re-organization.

I started with an excellent secretary and



If that all sounds futuristic, note that a 'Home Bus Standards Association' has been established and that three of its members are Matsushita, Sony and Texas Instruments. Coincidentally, Philips has recently published a proposal for a Domestic Digital Bus (known as D2B) which is aimed at defining interconnect standards for TVs, VCRs, videodisks and stereo audio equipment. As with all telecommunications issues, standards are critical and it is to be hoped that UK domestic appliance suppliers will move into this area, if only for defensive reasons.

The device that will be at the heart of the home network will be long debated. But an enhanced television with a 16-bit microprocessor and moderate memory could, with today's technology, run a timeshared home bus network. We will return to this subject later.

The home system will have a maximum of four external communication links — a telephone line, a broadband two-way cable TV-like connection, an antenna for terrestrial broadcast and teletext reception and a satellite reception antenna. The home is the first circle.

The second circle is the workplace or learning-place. In the workplace, the emphasis will be on good communication, recording and control functions, so that assets can be effectively used. In the learning-place, the emphasis will be on communications, interactivity and information retrieval. Both will rely on local area networks that will interconnect with other networks outside the work or learning places.

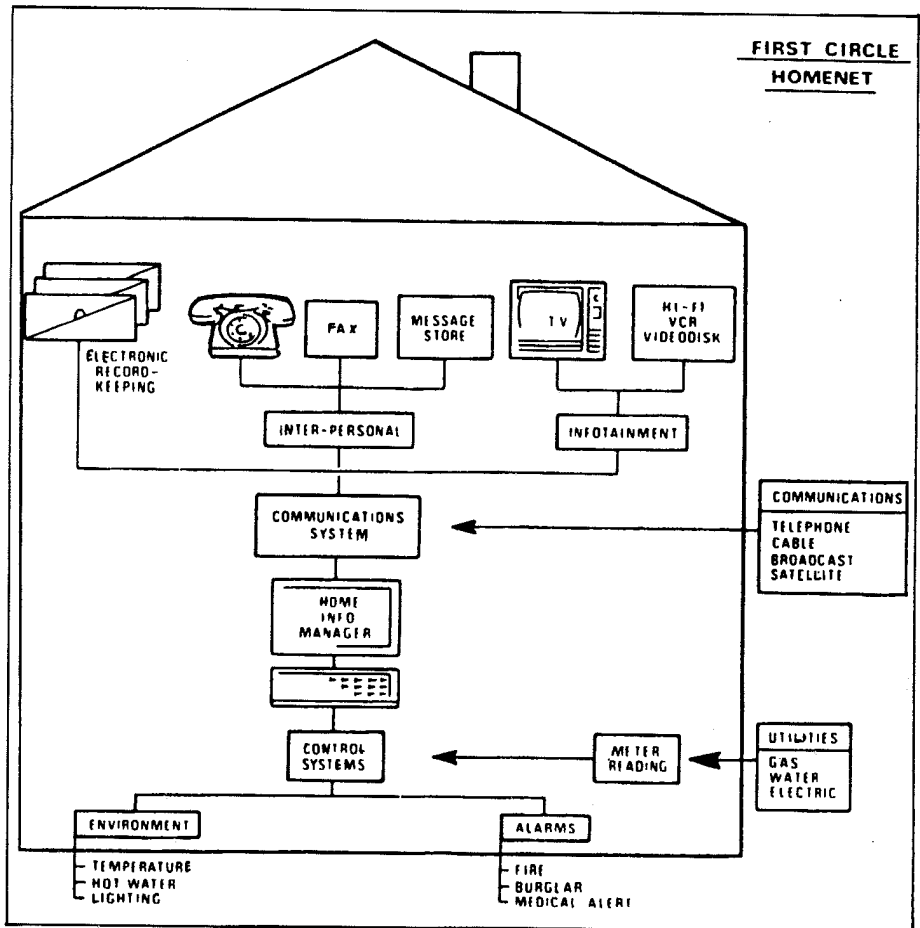
Local area networks (a sort of news and data ring main for a big building or factory) are going the way of all computer-industry telecommunications networks — towards the Tower of Babel.

There are three principal protagonists — ring, baseband and broadband. All have their acolytes and pall-bearers. Broadband, particularly using TV technology, would seem to offer the most comprehensive facilities at the lowest cost — but that is no guarantee of its success. At the moment, industry is heading for a classic rerun of the old AC/DC and analogue/digital arguments. The workplace/learning-place will have the same multiple external interfaces as the home.

The third circle is the local or district loop now known as metropolitan area networks — a subject most renowned for its neglect. This loop is for residential consumers. It will be broadband cable providing multi-channel television with broadcast and narrowcast facilities, two-way transactional services for telebanking, teleshopping et al, that are data-based, not voice-based. There will be interfaces for home security and, perhaps, environmental management systems.

The local loop will connect with the Packet-Switched Service (PSS), so that data can be routed from and to the home using the low-cost, high data integrity and national, international and intercontinental capabilities of PSS. Terrestrial and satellite broadcasting will be received from the local loop by community antennae. Narrowcasting will originate locally.

The local consumer loop has many



attractions, not least the facility to improve the cost-effectiveness of satellite broadcasting by distribution through local cable. It is perhaps not generally appreciated that the overall cost of implementing a direct broadcast satellite (DBS) system for the UK, providing a maximum of five TV channels with satellite reception dishes on every roof, is much the same as the cost of cabling most of the homes in the UK with broadband cable and providing up to 50 video delivery channels — ten times as many — together with two-way data services. An attractive strategic and commercial development would be to deliver DBS by local loop from a community antenna.

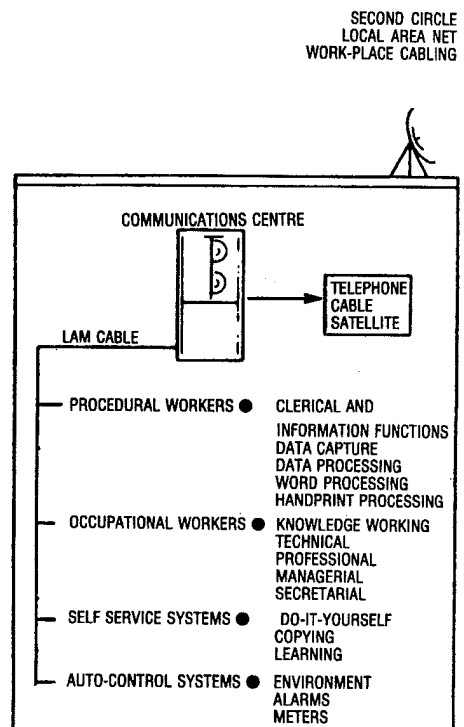
The local loop is the prerequisite for the development of consumer telecommunications. It may well have an impact on the standard of living of consumers similar to that of the advent of piped gas and electricity at the turn of the last century.

The fourth circle, connecting all the others together, is the national, international and intercontinental telecommunications (NIIT) network. NIIT includes PSTN and PSS. This is the ring that holds the circles together and gives the overall network a system environment in which it can function. The NIIT in the UK will be a mixture of public and private enterprise, although it is hard to see the pre-eminence of British Telecom in transmission and switching ever being seriously challenged. However, the spur of competition is likely to cure the old problem of customer dissatisfaction and encourage innovation and enterprise. Long term, the user can only benefit.

There are thus four circles and they fit together. The scheme is not entirely tidy. There are some loose ends. One of these is

radio systems. Business demands for mobile radio are growing. Mobile radio is of critical importance to business transportation. At the same time, consumers are becoming aware of the convenience and social benefits of Citizen's Band. Our cluttered airwaves in the UK are not conducive to simplistic solutions, but Cellular Radio is here, and this will help. Mobile radio and radio paging are mass markets.

Electronic office systems are not synonymous with local area networks. Any discussion of electronic office systems must be



then addressed the problem of my peripatetic office. Basically, I have three offices, one at home in Sussex, one at our Sussex headquarters and one in London. In any single day I use all three offices — except if I am out of the country. My secretary is located at the Sussex headquarters.

I needed to have all my office facilities in three places, and I needed a communications system while travelling between them. The communications system in the car was easily solved with a car mobile radio. The multi-office facilities were a little more difficult.

At any office, I needed to be able to process all incoming communications, examine and if necessary up-date my diary/schedules, send messages to anyone anywhere, quickly find information on performance and projections of the business and not to be hassled by never being able to locate people on the telephone. Finally, I needed a system that worked 24 hours a day, 7 days a week and didn't take holidays or get sick.

When the system arrived it didn't seem very sci-fi. It was called ADVISOR — after the know-all guru on the 'Jimmy Young Show' — and it was a 'management support system'. I didn't need support. I needed help but the system was too charitable to mention it.

One terminal was installed on both my work offices' desks and a third went on a

pine teleputer table on wheels (a piece of pine and wheeled TV stand that I had designed myself) so that I could work it from my favourite two seater-settee at home in my study. The facilities turned out better than expected. Besides the desired functions already mentioned, the system had document handling (find a document by various keys etc), jotter, multiple files (pending, in/out), a run-your-own computer program facility, an electronic wastebin and datacommunications connections to many computers including PRESTEL. There was also local computing, floppy disks and a printer. Everything on the screen was technical and it turned out to be a joy to use.

There were a couple of snags. I refused to have any training in how to use 'it'. I thought that if 'it' didn't understand how I worked that was its problem. We had to compromise eventually, or at least we came to an understanding. I agreed that the way 'it' did it was logical and 'it' agreed that I was in charge. I haven't had any training. I don't want any and I won't read the manual 'it' produced one particularly acrimonious afternoon.

The other snag concerned my wife and my diary. I had given up carrying a personal diary years ago when I failed to receive one at Xmas. As a wanderer without a diary, the only place to find out where I was going was from the diary my secretary kept at headquarters. With a reasonable

memory I could remember my business engagements for a week or so at a time without difficulty. But of course I could never remember social or school engagements and unfortunately holidays were a total blind-spot. So, as you have probably guessed, I have put my wife on the system. She can browse through my diary and organise our family life. After 21 years of marriage she can now find out where I am and what I am doing.

The world of telecommunications is changing rapidly and so is our perception of the office.

It is time for a re-think.

The opinions, ideas and concepts expressed herein are those of the author and they should not be construed as representing those of any governmental or commercial organization with whom the author may be associated.

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