

Adam Smith Institute
Omega Report

COMMUNICATIONS POLICY



Adam Smith Institute

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THE OMEGA FILE COMMUNICATIONS	

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From research conducted for the
Adam Smith Institute
1984

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Thanks are owed to all of those who participated in this venture. For this report in particular, thanks are due to Norman Chapman, Michael Fallon, John Kelly, Gerard Neale, Ian Senior, and Professor Lou Schurr, amongst others. All Omega Project

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lengthy period, and as such their contents should not be regarded
as the definitive views of any one author.

The Adam Smith Institute's **Omega Project** was conceived to fill a significant gap in the field of public policy research. Administrations entering office in democratic societies are often aware of the problems which they face, but lack a well-developed range of policy options. The process by which policy innovations are brought forward and examined is often wasteful of time, and unconducive to creative thought.

The **Omega Project** was designed to create and develop new policy initiatives, to research and analyze these new ideas, and to bring them forward for public discussion in ways which overcame the conventional shortcomings. Twenty working parties were established more than one year ago to cover each major area of government concern. Each of these groups was structured to include individuals with high academic qualifications, those with business experience, those trained in economics, those with an expert knowledge of policy analysis, and those with knowledge of parliamentary or legislative procedures. The project as a whole has thus involved the work of more than one hundred specialists for over a year.

Each working party had secretarial, research and editorial assistance made available to it, and each began its work with a detailed report on the area of its concern, showing the extent of government power, the statutory duties and the instruments which fell within its remit. Each group has explored in a systematic way the opportunities for developing choice and enterprise within the particular area of its concern.

The reports of these working parties, containing as they do several hundred new policy options, constitute the **Omega File**. All of them are to be made available for public discussion. The **Omega Project** represents the most complete review of the activity of government ever undertaken in Britain. It presents the most comprehensive range of policy initiatives which has ever been researched under one programme.

The Adam Smith Institute hopes that the alternative possible solutions which emerge from this process will enhance the nation's ability to deal with many of the serious problems which face it. It is hoped that, being free from partisan thinking, they will be accessible and stimulating to all sectors of opinion. The addition of researched initiatives to policy debate could also serve to encourage both innovation and criticism in public policy.

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Communication is 'the science and art of transmitting information'. This science and art is now subject to an ongoing technical revolution. Not only have improvements in such fields as microelectronic technology had effects in product manufacture - anyone with a digital watch will testify to that - but these improvements are also affecting the ways in which people communicate.

The traditional forms of communication - the letter post, the telephone network, radio, and television - will all be affected to a greater or lesser extent by rapid technological development. Indeed, it is fashionable to paint futuristic scenarios of how the ordinary TV set will come to dominate the home as it expands in use and provides more interactive services - shopping, banking, and so on. This idyllic view is debatable but nevertheless it is clear that a communications revolution has started.

If the minimum dislocation is to occur, and the full benefits that the technology will undoubtedly bring are to be realized, then flexibility must be the order of the day. A system of communications controlled by the government, which can only plan 'big', or one restricted by numerous regulations, will prohibit the necessary flexibility, change, and in turn, development.

What is needed is a change in attitude. The British solution in the past has been to nationalize, or strangle by regulation, any development that has strong potential. If the fruits of progress are to be enjoyed, this strategy must be replaced by a more forward-looking and realistic approach which recognizes that what a government can do is severely limited - it is the legions of entrepreneurs who, in a competitive search for profits, will seek out new opportunities and will provide them at least cost.

The development of communications is vitally important today. The role of communications will be extended and their importance increased in the next few years. It is vital that the British people are allowed to ride this wave of opportunity and that over-regulation should not constrain the potential and allow those overseas to achieve success at our expense.

1. INTRODUCTION

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The spectrum which could be used efficiently by time-sharing and the application of modern techniques like cellular radio. For such a proposal to have any hope of success, it would have to be reasonably free from constraint and undue regulation. Anything less would not only result in increased inefficiencies and higher costs, but would seriously affect the significant potential for new manufacturing and other job opportunities.

PRESENT AND PLANNED RADIO REGULATION

At the moment, the Home Secretary is responsible for radio regulation and for licensing the use of the radio spectrum in

2. THE RADIO SPECTRUM

While much of the UK's need for fixed telecommunication has been met by existing networks (or will be met by technological development) the telecommunications needs of people on the move have received little consideration and scant resource allocation. Already, current demand for such facilities as cordless telephones and mobile voice services of various kinds point to a future demand for personal universal communication capabilities which will become an integral part of the social fabric - in the way that, for example, local, inland trunk, and international telephony have successively become essential to our way of life.

In line with this general underestimation of the market, the Warden Report of 1975 estimated a five-year demand of less than a quarter of a million mobile units. In the event, according to Home Office statistics, there were 298,000 mobile units (40% more than forecast) by December 1980, and the same statistics show 347,000 mobile radio units licensed by December 1982.

Estimates by the Mobile Radio Users Association (MRUA) suggest that some 30% of the employed population (at least six million people) spend a significant part of its working day away from a fixed work location. Since there is at present one business telephone for every two employed persons, trends indicate that sooner or later 50% of the mobile employed will demand mobile communication - some three million potential users. With fewer restrictions, mobile radio units in the UK could double within four or five years: growth in the UK was 63% from 1972-1977 and 57% from 1977-1982. In addition to growth in existing services (e.g., two-way radio phones, pagers, public radiophone services, CB radio, cordless phones, and mobile data terminals) new applications, such as consumer access from mobile terminals to information services (Prestel, weather forecast, sports results, and hotel and transport bookings, for example) and vehicle guidance, location, and avoidance systems can be envisaged.

The use of mobile radio, in one form or another, by half of the population (30 million plus) by the start of the 21st century will require a large and efficiently-used radio spectrum. There would have to be an additional 300 MHz of radio spectrum which could be used efficiently by time-sharing and the application of modern techniques like cellular radio. For such a proposal to have any hope of success, it would have to be reasonably free from constraint and undue regulation. Anything less would not only result in increased inefficiencies and higher costs, but would seriously affect the significant potential for new manufacturing and other job opportunities.

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Britain. This is under powers conferred by the Wireless and Telegraphy Acts of 1949 and 1967. Until 1969, the Radio Regulatory Department (RRD) carried out all necessary regulatory work under the aegis of the Post Office. After 1969, the Post Office became part of a new department (the Ministry of Posts and Telecommunications) but when this was disbanded in 1976 the responsibility for broadcasting matters passed to the Home Office, while other responsibilities went to the Department of Industry. However, while the RRD is under the auspices of the Home Office, in practice the operation of radio regulation is through an interdepartmental co-ordinating committee structure.¹

On an international level, organizations such as the ITU (the International Telecommunications Union, an agency of the United Nations), the CCIR (International Consultative Committee of ITU on Radio), and the CCITT (International Consultative Committee of ITU on Telephone and Telegraphy) deal with radio and telecommunications issues.

However, there will also be a new entrant on the regulatory scene. When BT is privatized there will be a new body - OFTEL, the Office of Telecommunications. The convergence of technology and the interchangeability of communication media point to the desirability of channelling the oversight of all forms of telecommunications and information technology into the proposed new Office of Telecommunications and bringing an end to the present licensing responsibilities of the Home Office and British Telecom. Indeed, without this unification, progress in any of the directions indicated is likely to be minimal.

Regulation in practice

Part of the function of the interdepartmental co-ordinating machinery is to produce and update the UK National Frequency Allocation Table. This document, which is classified, sets out the international allocations and alongside each entry the allocation to services in the UK. In most cases this follows the international allocation but it differs in some cases to meet the UK's special requirements.

Licences are issued under Section 1 of the Wireless and Telegraphy Act 1949 by the Home Secretary. However, all Crown users (e.g. Ministry of Defence, and Foreign and Commonwealth Office) do not require licences from the Home Office and they are in general free to make their own plans and manage their own assignments within the frequency bands allocated to them. All in all, there are about seventy different licences to meet a whole range of uses. Any specific requirements attached to these licences are implemented by statutory instruments, and could involve, for example, period of validity, cost of licence, and

1. Report of the Independent Review of the Radio Spectrum (30-960 MHz) (London: HMSO, July 1983), Cmd. 9000, pp. 20-21.

conditions specifying what the licence is issued for.

Lack of a market. The basic problem, at the moment, is that due to the lack of any direct correlation between the value of the licence and the licence fee, there is an excess level of demand over the amount of available space. Although this is the heart of the matter, the wider problems can be split into three areas:

- (a) the radio spectrum is not used efficiently; and
- (b) licensing and frequency allocation arrangements are not efficient.
- (c) past forecasts of mobile radio growth have been understated by government forecasters;

According to the Merriman Report,¹ however, there are a number of points to support the present allocation of the radio spectrum including:

- (a) there is little criticism of the 'technical expertise and competence of the Department and its judgements'; and
- (b) the RRD's activities in international regulation are regarded quite highly.

On the other hand, criticisms of the present system are far more numerous and include: slowness; lack of consultation; lack of information; unresponsiveness to users' needs; and unresponsiveness to manufacturers' needs.

ALLOCATION THROUGH THE MARKET

Scope for change

Much of the 30 MHz to 960 MHz band is unused and some 200 to 300 additional MHz could be allocated to mobile radio without prejudicing realistic government defence requirements in peacetime. Further analysis of current radio spectrum allocation indicates that 229 MHz available for commercial fixed and mobile radio remains unallocated, and that which is allocated to mobile users appears to be inefficiently used.

Home Office statistics reveal that the number of mobiles per base station varies, according to the class of user, from 79.4 (BT services) to 1.7 (work sites). The average ratio is about 15:1.

However, of a total of 346,916 licensed mobiles at 31 December

1. Ibid.

1982, the highest number was allocated to trade cars with a mobile-to-fixed-station ratio of 9.3:1. The third largest group (hire cars and taxis) had a ratio of only 8.6:1 with a total of 3246 licensed stations. This means that a greater use of cellular radio should be allowed to occur in areas (like large conurbations and on motorways) likely to have a heavy and concentrated demand for channels. Effective pricing will ensure that appropriate choices are made as between cellular radio and private point-to-point systems depending on traffic requirements and location.

Over the last few years the government has failed to allocate substantial blocks of the radio frequency spectrum to private mobile services and existing radio services (apart from BT, Mercury and Racal). But the facts show that above 30 MHz to 60 MHz, the most usable part of the radio spectrum for fixed and mobile radio services, there is ample radio bandwidth to accommodate all potential civil radio services, and still leave access for the defence and security services.

It has been calculated that although 200 MHz is required immediately for civil land mobile services, only 37 MHz is currently available. This position is supported by manufacturers and other user organizations. Therefore, there should be priority to allocations in the international mobile radio service bands:

ITU Region	1.	30 - 51 MHz
	2.	68 - 87.5 MHz
	3.	138 - 174 MHz
	4.	406 - 470 MHz
	5.	862 - 960 MHz

Allocations in the international primary broadcast bands 51-68 MHz and 174-225 MHz can be considered if a binding agreement can be obtained from the governments of France, Ireland, and Belgium, and the European Broadcasting Union (EBU), confirming protection from serious harmful interference to the land mobile services in the UK. ITU - WARC 1979 recommendations gave access to a total of over 485 MHz to fixed and mobile services between 30 MHz and 1,000 MHz (1GHz).

Home Office documents confirm that civil fixed services had allocation of over 17,000 MHz between 1 GHz and 40 GHz, while only a very small amount of radio spectrum has in fact been assigned to private sector fixed radio services.

It is a physical impossibility to actually install equipment and operate systems which could usefully occupy the radio frequency spectrum from 30 MHz to 40 MHz: above 40 MHz the limit is a practical one. But cellular techniques can be employed and broad band multi-channel systems are also already well-established methods to improve spectrum efficiently.

Newly emerging technologies and spectrum-efficient digital

techniques can increase information transmission capabilities, making it possible for every person in the UK and every member of the armed forces and police to have personal radio frequency access for telephony, signalling, data, and even video. In addition, over 200 TV channels could theoretically be available in any one small geographical area.

The obstacle. The technology is available now, and even the resources and finance could be available to permit a phased development employing the emerging technologies. The major obstacle is the antiquated radio regulatory administration with its restrictive and inappropriate specifications, rules, and procedures.

Action is now required to allocate substantial blocks of radio frequencies in the international bands and to change the present administrative arrangements to favour user interests.

General licence proposals. Unfortunately, the 'general licence' proposal to permit any mobile licensee to be interconnected to public telecommunication systems appears to have needlessly duplicated the DTI radio regulatory licence, and creates a time- and money-wasting bureaucracy:

(a) all the licence details are already available in the DTI radio regulatory division (RRD). The general licence depends entirely on the RRD licence expressly permitting interconnection;

(b) a general waiver licence could be issued under the BT 1981 Act Section 15, simply confirming that the DTI RRD licensed services can interconnect to public telecommunications systems;

(c) the offer of services to third parties, namely the public, could be best dealt with by a general waiver licence. This is based on the EEC Commission decision of 10th December 1982, which rules that restrictions on the use on behalf of third parties of the telephone or telex services and installation was an infringement of Article 86 of the EEC Treaty;

(d) the position of the forty-seven public mobile radio message service companies licensed by the RRD as at 31st December 1982 requires special consideration. Section 10 appears to eliminate these forty-seven businesses, which have over 19,000 customers. The general licence automatically cancels their present market position.

More effective solutions

However, all of these are part solutions and a complete solution should involve:

(a) sale or lease of parts of the spectrum by auction to user groups in consultation with OFTEL, with subsequent allocation, sale, or lease to individual users; or

(b) sale or lease of spectrum by auction direct to individual users. (The commodity to be allocated, sold, or assigned would be defined as to time and area of use as well as to radio frequency);

(c) permitting the resale of leases between operators and users. (Frequency monitoring against abuse and interference would be necessary as now, but on a wider scale. It could be performed under contract by private sector organizations selling a monitoring service.)

The role of market forces. Consumer choice and the optimization of opportunities for innovation are best served (especially in an environment like telecommunications which has enormous potential for technological advance) by the establishment of a free market. Only certain users (for example, those concerned with national security) should be insulated from the discipline of the marketplace.

More efficient use of the spectrum by the advance of cellular radio and other new technologies, will bring nearer the time when there will be enough available spectrum for all users to compete for frequencies in the marketplace.

For this reason, the ultimate objective should be to move as quickly as is reasonably possible to a position where frequencies are sold (and resold) or leased to the highest bidder in a free market. In this way users will be made aware of the true value of the resource that they are using.

Problems of charging for spectrum use

The Merriman Report outlined a series of potential problem areas which might occur if different user groups were allowed to bid for the radio spectrum.

(a) 'The international framework makes it impossible to create anything approaching a free market in frequency allocation. International frequency allocations are made and revised at world administrative radio conferences held at approximately 20-year intervals, so that changes in allocation are a long-term process in which the requirements of a large number of countries have to be considered.'

This is more of an indictment of the international regulatory system than anything else! In a time of extensive technical change, a single conference once every fifth of a century is nothing short of criminal and at the very least is an argument for a more regular meeting - such as every three years. But it is not an argument against charging, since within the constraints of international regulation, charging can still provide an

1. Ibid., p. 116.

efficient form of spectrum allocation. If the UK were to charge for spectrum when other countries did not, a range of UK

(b) A second objection was that 'The extent of government use of the spectrum is a further impediment to the creation of a free market in spectrum allocation' because '50 per cent of the spectrum is occupied by Crown users, such as the Ministry of Defence and Civil Aviation Authority.'¹

Again, while it may not be desirable to make a real charge in certain cases due to defence interests, the 'charge' would take the form of a paper transfer from one arm of government to another. Without the principle of charging being eroded, the benefits of efficient allocation within the Crown user spectrum could be achieved by this internal accounting.

We suggest that OFTEL should assume responsibility for the over- While it may well prove to be possible to charge for departmental users outside the security area, the worry that such a charge will only be a paper transfer, between a virtual government sole supplier and a major government buyer, has been exaggerated. A similar situation arises at the moment when any government organization using the telephone system is transferring funds from 'one arm of government to another'. Thirdly, even if it is just an accounts entry, it will illustrate in those accounts a true representation of the value of the asset being used. This can only be for the best, and will encourage government agencies to be careful in their use of it.

OFTEL should encourage (where appropriate in relation to (c) A third Merriman objection was that 'Broadcasting is another large user of frequency spectrum (occupying some forty-five per cent of the spectrum between 30 and 960 MHz)'.²

An international restriction insists that a certain amount of the spectrum has to be allowed for broadcasting. While any moves to relax this should be pursued, obviously it will not change in the near future and must therefore be accepted in that light. Nevertheless, within this constraint, charging is still possible.

(d) It was also argued that there are some areas of the spectrum where there is a strong safety element, which may not be accommodated if charging is introduced.

This may be an inconvenience at best. Either a specific part or parts of the spectrum can be retained as being solely for emergency use (in a similar way that CB radio is now permitted to broadcast on 27 MHz and 936 MHz); or alternatively, it can be made the job of some agency, such as a government-supported charity, to buy a particular section of the spectrum and therefore provide an important service - in the same way that, for example, the St John Ambulance provides a valuable service.

1. Ibid., p. 117.

2. Ibid., p. 117.

(e) Finally it is sometimes said that 'If the UK were to charge for spectrum when other countries did not, a range of UK industries could be put at a commercial disadvantage.'¹

This final point is perhaps the weakest of them all. It completely ignores the fact that by charging an economic price for a resource or service, the gap between supply and demand is bridged. It means that it is not only being allocated to the user who values it most, but it is being done so with far greater efficiency.

A PROPOSAL

We suggest that OFTEL should assume responsibility for the oversight of the radio spectrum. It should commission and publish independent forecasts of fixed and mobile radio station growth, with a view to encouraging investment by suppliers and operators.

OFTEL should of course ensure that the maximum bandwidth is made available at all times for commercial exploitation. In this context, it would be best to move as quickly as possible to the establishment of as free a market as possible in radio spectrum allocation, since this will produce the greatest speed of innovation and development.

OFTEL should encourage (where appropriate in relation to geography and traffic requirements) the growth of cellular radio systems and discourage (preferably through commercial pressures) the continuance of point-to-point systems not justified by traffic or operational necessity. Below 1,000 MHz priority should be given to mobile radio services, land, maritime, and aeronautical. Above 1,000 MHz priority should be given to navigational services and broad band digital microwave distribution systems, including television and radio.

The Telecommunications Act separated the newly named British Telecom (BT) from the Post Office. It also permitted competition in three areas:

- * the licensing of additional telecommunications networks to compete with BT;
- * the licensing of private firms to provide services using BT's networks; and
- * competition in the supply of existing equipment.²

1. The future of telecommunications in Britain Dept of Industry, (London: HMSO Cmd 8610, July 1982).

2. Britain 1983, an official handbook (London: HMSO).

3. Let Ringing the Changes: Free Competition in the Supply of Telecommunications Apparatus, April 1982.

1. Ibid., p. 118.

3. TELEPHONES AND TELECOMMUNICATIONS

Up until 1969, the telephone system was a civil service department 'with all that meant in terms of organization, management, and above all attitudes'.¹ Afterwards the nationalized telephone system was brought within the then GPO. This situation was recognized as still being unsatisfactory, when in 1977 the Post Office Review Committee proposed that the telephone network should be split from the mail-carrying division of the GPO. However, nothing significantly changed and when the Conservative Government came into office, British Telecom (BT) was, apart from the city of Kingston upon Hull, the sole supplier of telephone services and most telephone equipment.

Britain 'has the world's fourth largest public telecommunications business. There are some twenty-nine million telephones, nineteen million exchange connections, 92,000 telex connections, and 93,000 data transmission terminals... British Telecom employs 245,900 people, has assets of £15,300 million, and runs eight factories and a fleet of 54,000 telecommunications vehicles'.² It is therefore fair to conclude that the telecommunications industry is big, and if future estimated trends can be relied upon then it will get even bigger.

CURRENT THINKING AND PROBLEMS

The main thrusts of current thinking (and policy) regarding telecommunications appear to be twofold: on the one hand, the official aim is to promote consumer choice and therefore competition; and this is reinforced by the perceived weaknesses of state ownership, and specifically the constraints on BT's borrowing, that argue for the privatization of what is now called BT.

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3. IT leaflet Ringing the Changes: Free Competition in the Supply of Telecommunications Apparatus, April 1982.

In February 1982, the Secretary of State for Industry licensed the Mercury Consortium, consisting of Cable and Wireless, British Petroleum, and Barclays Merchant Bank, to run a new telecommunications network in competition with BT. Mercury will have a licence lasting 25 years and will be BT's sole competitor until 1990 when the - as yet unestablished - Office of Telecommunications (OFTEL) will begin granting others.

In the second area, other network services which compete with BT's (but using the BT network) have also been licensed, including mail delivery, storage, and forwarding. In the near future, the maintenance of new equipment will be opened to competition by the Department of Industry, but as early as 25th June 1982 it was announced that BT and the private sector were to be invited to submit tenders for new radio-telephone networks.

As to the third point, the supply of connecting equipment, it is here that the most apparent effects have been seen. Prior to the 1981 Act the number and variety of telephones (and other telecommunications apparatus) was small indeed. A direct result of the Act has been an enormous surge in the variety and number of telephones available. As an indication of this, a brief stroll through the high street of almost any town will reveal the spectacular increase in shops selling telecommunications equipment.

Words not actions

However, this rosy sketch does not give the entire picture, since the rhetoric of competition has not been backed up by action. For example, in the 1983 White Paper it was suggested that 'cable will increase the possibilities for genuine and healthy competition in the provision of... telecommunication services'¹ but at the same time it worried that competition to BT from anyone other than Mercury would threaten its financial viability. Such a position may have some credibility, bearing in mind the proposal to sell BT as a complete entity; but if BT is split up, rather than being guaranteed its privileged and unnatural position in what could become a competitive and healthy market, the problem vanishes. Looking at the diverse forms of communication that are developing, it can be seen that telecommunications will be available through microwave, satellite, and landline; switch/voice systems (i.e., like the present telephone) will be available through cable. Competition between different telecommunications companies will easily be able to develop and no monopolies need to be promoted by the state in such a diverse world in which flexibility and innovation will be at a premium. Any fears on the ability of one firm to achieve a monopoly position, or to maintain one, can be dissipated by simple

1. The Development of Cable Systems and Services (London: HMSO, Cmd 8866), quoted in Cento Veljanoski, 'UK Cable Policy in the Eighties' Fiscal Studies V.4. No.3., (Nov. 1983).

regulations. In this context it may be desirable that BT should be limited to providing only the main network of lines, i.e., to act as a common carrier, but should, if necessary, be prohibited from manufacturing, selling, or even installing equipment.

Sources of the log-jam. One problem that is aptly highlighted by the case of BT and by the speed of the emerging technology is the log-jam that results from the distribution of communications responsibilities between the Home Office and the Department of Trade and Industry. The jumble of responsibilities is divided as follows:

(a) Home Office. On the break-up of the Ministry of Posts & Telecommunications in 1974, the Home Office took responsibility for the broadcasting department. This department is made up of two divisions, each under the control of an assistant secretary, and they are:

- * **the T.1. Division** (BBC and IBA finance, and related sponsorship functions; technical planning policy; coverage of TV and sound broadcasting; reception problems; direct broadcasting by satellite); and

- * **the T.2. Division** (legislative and constitutional aspects of broadcasting; wired services, including broadcast relay services, and their licencing; broadcast receiving (TV) licence matters in liaison with the Post Office).

(b) Department of Trade and Industry. The main responsibilities here are:

Space and the Post Office (industrial space policy and sponsorship of the space industry (BP); sponsorship and government oversight of the Post Office including National Girobank);

Telecommunications (sponsorship of British Telecom, including borrowing and capital investment matters and board appointments; relaxation of the telecommunications monopolies under the British Telecommunications Act 1981; sponsorship of Cable and Wireless Plc and Mercury; preparation for the introduction of private capital into British Telecom and setting up of new regulatory arrangements as announced in July 1982; co-ordination of departmental policy towards nationalized industries; governmental aspects of international telecommunications relations including the International Telecommunication Union, the Conference of European Posts and Telecommunications (CEPT), and the European Community and Commonwealth Telecommunications Organization matters);

Information technology (responsibility for the encouragement of information technology and its use and application in the UK; sponsorship of the information technology industry and of the electronics industry other than automation and instruments, including the computer industry; electronic components; telecommunications; electronic consumer and capital goods; broadcasting

(c) Other agencies. The Post Office and the British Standards Institute perform associated regulatory functions and are therefore also influential in this area.

If a coherent and efficient communications policy is to be created the starting point must be the concentration of communications responsibilities in one department. If for no other reason than the fact that the DoTI administrators have most of the responsibilities at the moment, it seems reasonable that the responsibilities should be shifted completely to the DoTI. The Department's current expertise makes it an obvious choice.

The privatization of BT

During the early 1970s, British Telecom frequently boasted that it was possible for more customers to dial directly abroad from Britain than from the USA. Even if this were the test of a good system, it is no longer the case, and has not been so for many years now. More recent developments have plainly left BT years behind.

Much of the widespread dissatisfaction with BT that is evident today is directly attributable to its continued reliance on old and redundant equipment. During the 1960s it attempted to introduce new all-electronic exchanges, but when this fell through it had to carry on relying on the ageing electro-mechanical exchanges, which are still used by two out of three callers to this very day. Contributory factors have been the decision to concentrate on installing digital transmission lines instead of digital exchanges which would have made modernization easier, and confusion and delay in the development of a new exchange called 'System X'.

Investment is being financed (and has been for many years) by high customer charges - with around ninety per cent of the current programme of £2,200 million (1982) being funded in this way. For such substantial charges, most users are still getting a sub-standard service. A 1981 survey comparing the telephone services of six countries, including Britain, showed that the rate of calls not getting through, as a result of equipment failure, was higher here than in Japan, Spain, Sweden, and Switzerland and three times higher than in the USA. A Which? poll reported some 2.6% of calls failed to connect, and that 6% of those that did connect were of unsatisfactory quality.¹

Government ownership and involvement substitutes market restraint by political decision-making. Overmanning is preferred to efficiency because of the political costs of unemployment; special interest groups are placated at the expense of the general public; and capital investment suffers. To take the BT example, when economies have to be made, there is always less

1. Which? February 1984, p. 54. December 1983.

protest when capital expenditure (such as on new exchange systems!) is cut, since it would not immediately harm any of the interest groups as much as a cut in the 246,000 labour force. Similarly, competition is resisted because - despite the general gains for the public as a whole - the existing establishment have a greater motive and power to campaign against it.

Partly because of these political shortcomings, the government wishes to privatize BT. A private BT plc will be able to choose the way in which to fund its investment. BT will be able to borrow money, as any other concern will, and pay the market rate for such loans, or it can accept a reduction in its profit levels.

To some extent, then, the political limitations on the telephone system will be reduced, although its monopoly position will always make it subject to political attention. But most important of all is the fact that, whether it remains a monopoly or not, privatization will mean **real** public ownership - where the public can own a share in a firm instead of control being vested in some state bureaucracy.

The 1983/4 Telecommunications Bill. The Telecommunications Bill was originally introduced before the last election but was dropped with Parliament's dissolution and is still progressing through Parliament. However, the main points of the bill have remained the same:

- (i) the government will be able to sell 51% of the shares in British Telecom;
- (ii) a new regulatory body, OFTEL, will be formed to ensure fair competition and prices, while also granting licences to competitors after 1990;
- (iii) British Telecom will operate under a licence which ensures the following:
 - (a) BT must provide a universal service of telephony and telex where reasonable demand exists;
 - (b) BT must provide the existing level of call boxes, rural telephone services and free 999 calls;
 - (c) BT must connect its system to other operators such as Mercury;
 - (d) BT is to supply separate accounting and reporting arrangements for its apparatus supply business by April 1987;
 - (e) BT will be allowed to introduce an access charge to other companies using its network;¹

1. Public Service Review No. 2, December 1983.

- (iv) to replace the Telegraph Acts (1863-99), Telegraph Construction Acts (1908-16) and other relevant Acts, by a Telecommunications Code governing the actions of telecommunications operators in establishing and running systems;
- (v) to continue the arrangements for agreeing standards for and approving connection to, BT's network of telecommunications apparatus;
- (vi) to continue the criminal offences related to telecommunications, as defined by Acts being amended under the bill;
- (vii) to provide powers for the Secretary of State to direct public telecommunications operators to act in the 'national interest'.

European objections. In the Bill and the draft BT licence issued in October 1983, there are proposals to limit the use and the content of communications conveyed by a telecommunications system; and also to discriminate against certain business activities which BT can choose to characterize as infringing their monopoly. The decision of the EEC Commission of the 10th December 1982 clearly ruled that restrictions on the provision on behalf of third parties of telephones and telex services and on the use of telephones were infringements of article 86 of the EEC treaty. BT should therefore be required to terminate any restrictions that are still in operation.¹ There is consequently a strong justification for the Secretary of State to announce his support for this decision and issue a General Waiver Licence under Section 15 of the BT 1981 Act, removing all restrictions on the use and content of communications conveyed by Telecommunications Systems, including the use on behalf of third parties or other business activity.

These changes, by eliminating the need for any licencing of use on behalf of third parties, will allow major simplification of licencing and will limit BT's powers to interfere in other businesses. It will also eliminate the need for the wasteful value added services (VANS) licencing procedure and the now 'illegal' prohibition of re-sale of private circuits and exchange line services. In the case of international services, freedom of use can be immediately available to countries permitting use on behalf of third parties and it would seem sensible that negotiations should commence immediately with those countries which do not accept EEC Commission ruling.

The potential for telecommunications

The advent of new technology means that telecommunications can

1. EEC Commission Decision, 10th December 1982, Sections 29 and 49.

expect a healthy future. Few people actually know the uses for telecommunications that are now technically possible and none can predict with certainty what will be economically possible in the near future; but of the examples available there are a number of important probable applications.

Large organizations, particularly those operating internationally, are now finding that the most cost-effective way of providing internal communications may make use of the international telecommunications network, by providing visual display units (VDUs) with keyboards and printers throughout the organization, supplemented by computers for routing and storing messages, letters and data. Such systems speed communications and allow records of the information transferred to be filed automatically for as long as necessary. Once installed for international links, the system may also provide the best way of communicating even within a single building. Where the communication links involve satellites and there is sufficient traffic, the organization may even install its own terminals for direct satellite communications.¹

But of more interest perhaps is the community angle that is possible via what has been referred to as 'social service telecommunications'. Whilst telecommunications are currently a monopoly service, the provision of specialist services at low cost are very difficult to arrange and provide centrally. Now, the convergence of the liberalization of telecommunications with the growth of the problem of providing reasonable levels of social service support provides a new opportunity.

A telephone line can provide not only voice communications but a whole range of other electrically based services and information monitoring devices. This means that caring for the sick and elderly at home could be aided by a series of services which are available now, such as:

- * push-button 'baby alarm' connected to a central point (social services, doctor, etc);
- * temperature monitors;
- * fall alarms - a simple low-powered radio or ultra-sonic device to trigger an alarm in the house which then automatically dials or calls for help in the event of the person falling or becoming ill.

Many sick and elderly people would gain comfort from something more than the telephone, and properly organized, savings could be achieved in social services, especially if such services were carried out by private companies.

1. *The Economist* April 23, 1983.

1. Cabinet Office Advisory Council for Applied Research and Development, Information Technology, Sept. 1980, p. 11.

THE FUTURE OF TELECOMMUNICATIONS

powerful private quasi-monopoly.
Using Department of Trade and Industry estimates, BT's present
Ever since draft plans to deregulate telecommunications were first announced, the debate about how deregulation should proceed and how much liberalization should be allowed, has been almost continuous. But present concepts do not go far enough to promote competition and to prevent BT exploiting its (virtually) monopolistic position.
in at 1982 prices

Problems of monopoly supply

1982 1987 BT market share
If BT is privatized in one large unit, it will be able to override the limited regulation that is planned. The American system is far less monopolistic than that in Britain, but the one weakness that must be recognized is the problems that the enormous power of AT&T (American Telephone and Telegraph Company) has sometimes caused. As The Economist said:

'In the 1970s the American Federal Communications Commission, under both Democratic and Republican administrations, gradually gave up faith in the power of government to regulate anything as big as AT&T... The inability to control telecommunications giants is international - in many countries the telephone authority, often in charge of posts and telegraphs as well, is the biggest civil spender and employer and as such commands resources and loyalties that defy the attempts of mere politicians to interfere.'¹

call revenue others 0 5
Such strong words may not entirely apply to the post-privatized BT, but are indicative of what could happen if the new regulatory agency, OFTEL, became a case of 'regulatory capture', which the Americans have called the process of a government agency coming under the thumb of an industry.

Because BT is to remain in one piece, the second best solution of regulation through OFTEL has been needed since the regulatory power of competition has been ruled out. However, OFTEL appears to be, if not a toothless agency, then one with vague powers. It appears that if BT should violate its licence (granted by OFTEL) then OFTEL's role would 'merely shunting a complaint to the monopolies commission and back again, with a reprimand to BT to stop any unfair practice detected. The damaged party will not be able to claim compensation in the courts.'²

Total 1170 1725
It is not an effective antidote to attempt to improve the level of competition by granting more licences before 1990 and by providing OFTEL with some more powers to deter malpractice. No doubt such a solution may be popular, but unfortunately it glosses over the crucial problem; namely that a powerful state

[Source: DoT Estimates, quoted in CCT (33) 11]

1. The Economist April 23, 1983.

2. Ibid. and Note.
1. Of the impact of competition on BT's Revenue - CCT (33) 11.

monopoly is becoming an equally powerful private quasi-monopoly. Using Department of Trade and Industry estimates,¹ BT's present and probable future position can be seen:

Table 1
Forecast revenues for telecommunication services
£m at 1982 prices

		1982	1987	BT market share in 1987
International	- BT	980	1090	97%
	Alternative networks	0	30	
Inland Trunk	- BT	1660	2700	96%
	Alternative networks	0	110	
Inland Local	- BT	1100	1500	97%
	Cellular radio	0	50	
VANS - excluding call revenue	- BT others	20 0	30 5	86%
Total Networks	- BT others	3760 0	5320 185	97%

Table 2
Forecast sales of telecommunications apparatus
£ million at 1982 prices

	1982	1987	BT market share in 1987
Total	1170	1725	
of which - BT	920	1040	60%
- non-BT	250	685	

[Source: DoTI Estimates, quoted in CCT (83) 11]

1. Of the impact of competition on BT's Revenue - CCT (83) 11, Background Note.

These estimates have been challenged (in fact the Background Note asks for 'considered estimates from other parties') and the Mobile Radio Users Association (MRUA) proposed certain alternatives to the above tables.¹ In fact the general conclusion of the MRUA accepts that whatever the precise figures the problem is that:

'The forecast of the BT market share in 1987 as 97% does give rise to questioning what positive value will there be in having a market share of only 3% in 1987, divided among a number of private sector competitors? No company could make any impression on the policies of such a massive monopoly.'

'It is difficult to justify the many statements about liberalization since the Secretary of State's announcement of September 1979. It appears public and private money and time has been wasted, if after 8 years only 3% of the market will fall outside the monopoly.'²

Alternative proposals

Given this, it is hardly surprising that other suggestions are being aired which would involve BT being broken up into more manageable units. The two that appear to be the most workable, and which will move BT towards being a more efficient private firm in a competitive market, are based on either BT being split up on a regional basis, or being split up into subsidiaries along the lines of its prime functions.

Division by function. The latter idea would probably involve a break-up between terminal equipment, network services, international circuits, domestic network, and local distribution.

The first three of these functions would then be sold straight away, and with a competitive licence policy, would form the basis for a competitive market. Work would then begin on seeing how the remaining two branches could be sold off. Not only would this improve the competitive atmosphere within the new market, but it would also benefit the consumer, who under the present scheme is in danger of being at the mercy of a near-monopolist; the government would benefit because the sale of shares could be phased at a rate the market would be able to absorb; and there would not be the need for such an extensive regulatory bureaucracy aimed at preventing anti-competitive actions.

Regional division. This proposal would involve BT being broken up on a regional basis, with the regions being sold by auction to the highest bidder. The problem of the more out-of-town-areas being unprofitable could be easily overcome by a system of packages that included rural and urban portions, or even by the

1. See Appendix I.

2. See Appendix I. for list of proposals.

introduction of negative ('least subsidy') tendering for certain areas where the service was socially necessary but not expected to be profitable. Initially competition would be on an inter-regional basis with market pressure being placed upon those regions which had unusually high costs that they could not explain away. However, with the passing of time there would be border competition with firms being allowed to take on work and expand across borders, as long as they accepted the obligations for the new area. Of the two, this alternative could be harder to assess and evaluate and would probably require greater regulation, so it is not surprising that the method of breaking up BT by function has more support, and appears to be more workable.

Spreading ownership. Whatever method of reducing the monopoly were chosen, if it were coupled with a 'first refusal' offer of shares to the employees of BT then it would promote greater interest and involvement from the existing workforce. Attempts to transfer the system into a **real** public asset need not stop there. Other suggestions involve the selling of convertible bonds exclusively to telephone subscribers, who could even be given some tax allowance; or alternatively, a trust could be set up and equity shares would be sold through branches of the Post Office. Not only would these options allow real public ownership but they would probably increase the profit the government received for the sale of BT, and make it harder for BT to be re-nationalized.

This is not to say that improvements in competition by the granting of many more licences are to be frowned upon - but this must be a step towards an end rather than an end in itself. Other steps on the road to a fairer and competitive telecommunications system would involve the implementation of the MRUA's proposals¹ for a set time period (for example, two years) to allow new firms to 'get a foothold' in the market following BT's privatization.

It is always a far better situation to have independent market regulation by competitive pressure, rather than political regulation through a governmental agency. But for it to work, the market must be open, so that consumers can 'shop around'. Competition pressure can come not only from a firm already operating within a market, but also from those outside the market but who will enter the field, if an existing supplier attempts to over-exploit its position. This potential competition can also be supplemented by competition from similar services or products - in the case of telecommunications, the competition against BT can be from microwaves, landline, cable, satellite, etc., but only if new market entry and new methods of service delivery are permitted. It is therefore important that the possible future situation of BT having a consistent 90% of the market and with only one competitor, is recognized as a sizeable barrier to

1. See Appendix I for list of proposals.

effective competition.

At the moment, it seems that since in particular areas, such as for rentals and local services, where there is no noteworthy competition, there are plans to ensure that tariffs are below the rate of inflation, as measured by the retail price index (RPI). This has been referred to as the Local Tariff Reduction Scheme, and would require all tariffs to rise at a rate equivalent to RPI-X, where X was some figure to be negotiated. It has still to be decided, but this scheme looks as if it will last for five years when it will be passed on to the Monopolies and Mergers Commission for review.

Further measures

Professor Littlechild, in his report¹ to the government on regulation of BT profitability made a number of proposals to increase competition in telecommunications:

- (1) give telecommunications a much higher priority in the allocation of the radio spectrum
- (2) encourage additional networks exploiting new technologies that are not being offered by BT or Mercury - such as a domestic satellite services;
- (3) end BT's monopoly of the first telephone in all homes;
- (4) permit unrestricted shared use and resale of capacity on telephone circuits leased from BT;
- (5) allow Mercury, and any others that are interested, to provide a full range of international services;
- (6) permit the shared use of private networks within closed user groups, i.e., large companies; and
- (7) permit cable TV operators to compete with BT and Mercury in offering telephone services.

The last of these (7) has unfortunately been rejected, while (4) has been accepted in principle but is still awaiting the outcome of consultation. These two points would have the greatest effect in opening up the market, while the others, although they are all necessary improvements that will be implemented, do not have the same potential for liberalization.

Therefore, if the privatization of BT is to be successful, and there is to be a free market in telecommunications and not a quasi-monopoly, then BT must be broken up into smaller units. The

1. Regulation of British Telecommunications Profitability (London: Department of Trade and Industry, 1983).

concentrated economic power of a national monopoly would neither benefit the government, the consumers, nor its employees - at best, the investors in BT may probably be the only ones who get a slim advantage. The best idea is for the market to be liberalized as far as possible.

Nevertheless, the monopoly power of BT as presently envisaged could be reduced or mitigated by the following strategies:

- (a) over a short period of time, say five years, the government could divest itself of its shareholdings in British Telecom, and hence its direct control of its investment policies;
- (b) speeding up the creation of a free market in telecommunications by encouraging more operators to apply for licences, with no restrictions other than basic technical ones, with the inclusion of some form of appeal procedure if refused; requiring the successor companies to divest themselves of BT enterprises; removing of restrictions on supplies of telecommunications equipment from abroad (preferably on a bilateral basis, where countries involved reciprocate the abolition of restrictions);
- (c) giving overt subsidies for all unremunerative services provided 'under direction' whether as a licence condition or not; networks would be invited to submit competitive tenders for the lowest subsidy, and in this way it would prevent the government placing an unfair burden on particular firms;
- (d) shift BT away from the manufacturing, selling, and installation of equipment and more towards just the provision of the main network of lines across the country - this would only apply if BT was not broken up when it was sold;
- (e) whilst the EEC decision that restrictions on service provisions for third parties are illegal has been questioned by the Italian government, it has been reported that the British government has supported the decision. Such support could be demonstrated with the issue of a General Waiver Licence under Section 15 of the BT 1981 Act, which removes the restrictions. It could also be expressed as an amendment to the Telecommunication Bill 1983 Part II, Section 6, to remove the exclusive privilege over the use and content of communications conveyed by systems, and the sections restricting classes of persons using telecommunication systems;
- (f) These measures would immediately reduce the bureaucracy involved in the Value Added Service Network Licences and a large part of the work of the BT Regulatory Affairs Department. It would enable currently illegal services to operate openly and will of course permit the explosive development of a host of new fixed and mobile telecommunications services, with a consequent increase in jobs in the service and manufacturing industries.

4. CABLE SERVICES on the roof.¹

There have been some experiments in Britain where TV companies Within the next few years the expanding use of cable services and its associated technological innovations will radically alter existing conceptions of communications. It will also present an unrepeatable opportunity to break out from the straitjacket of the broadcasting duopoly.

The 'cable revolution' as it has been called, will also have profound effects on the transmission of information and on the lifestyle of the ordinary person as interactive services develop. It is therefore not surprising that in the last few years a mountain of paper has been produced and there have been innumerable discussions on the effects of cable. What is not so clearly accepted is the potential that cable services have for transferring decision-making back to the individual users and away from those who 'know what is good for them'.

The effect that technological advancement can have on broadcasting is comparable to the effect that movable type had on publishing. It will bring a large increase in both word and image transmission, which can only bring the opportunity of higher quality television and communications to more and more people. In this respect it is analogous to printing and should be treated in a manner similar to the British press.

British television is still organized as a highly-regulated duopoly with the BBC on the one hand and the 'independent' channels on the other. The choice that has to be made is whether to restrict cable from fear of it damaging the

HISTORY AND TECHNOLOGY OF CABLE

Cable systems were seriously established during the 1930s to distribute radio broadcasts, but were expanded after the war when a potential for providing quality TV broadcasting to areas not adequately covered by conventional air transmissions. Few realize though, that cable was first used as long ago as the end of the last century when some were able to hear West End plays in their own homes. However, with the improvements in regional reception and the prohibition of large external aerials in some areas, the use of cable simply for conventional broadcasting has no future. It is hardly surprising, therefore, that cable has only a small portion of the market. According to a government report:

'About 2.6 million households, or 14 per cent of those with television sets, receive their television services by means of cable systems. About 1.5 million (8 per cent) are connected to the systems provided by some 440 commercial operators; the remainder are connected to 'non-commercial' systems operated by local authorities, housing associations etc. It is estimated that a further 2 million homes are passed by cable systems. In recent years there has been a slow decline (140,000 over 5 years) in the number of subscribers to commercial systems and a rise in those receiving signals from non-commercial systems. Often the latter are small, many covering just one block of flats with

a communal aerial on the roof.¹

There have been some experiments in Britain where TV companies have been allowed to provide their own programmes, but none have been very successful. In the 1960s, Pay-TV Ltd was offering 'coin-in-the-slot' television in three experimental areas. The company lost money and folded in October 1968.² In 1972, five community cable stations were licensed³ to distribute locally-produced programmes designed for a local community. The stations were located in Greenwich, Bristol, Sheffield, Swindon and Wellingborough and have been described as the 'video equivalent of the local newspaper'.⁴ Today, only Greenwich Cablevision is still operating.

The most recent experiment followed the 1979 White Paper, where the Home Office licensed thirteen pilot subscription cable TV schemes which could offer many other services, such as feature films, to a paying subscriber. The intention was to assess demand for pay-cable TV and the effects on existing broadcast television and the cinema industry, with a view to providing safeguards for these industries. It certainly achieved that; but why the government should want such information at all raises some fundamental questions about how officialdom perceives its role in this market.

Whatever the experimentation, little has actually changed, and British television is still organized as a highly-regulated duopoly with the BBC on the one hand and the 'independent' channels controlled by the IBA on the other. The choice that has to be made is whether to restrict cable from fear of it damaging the standard and quality of public service broadcasting, or to improve the overall quality, range and choice of television services by permitting the unrestricted expansion of cable. Whatever the answer, a brief glance overseas will reveal that Britain is not exactly in the forefront of cable usage (Table 3).

The real level of cable usage can perhaps be more accurately assessed by looking at the major cable operators in Britain (Table 4). Most of these systems are nearly thirty years old, and with the arrival of Channel Four, reached their channel capacity. When, for example, satellite channels arrive, there will not be room since the (wire) cables will not have the capability to carry more than four channels - or at most, in some areas, six channels. An exception to this rule is applicable to

1. Information Technology Advisory Panel's Report on Cable Systems (Cabinet Office, January 1982).

2. C G Veljan Oovski and W D Bishop, Choice by Cable (London: Institute of Economic Affairs, 1983).

3. See Appendix II.

4. Choice by Cable, op. cit. March 27, 1982, p. 60.

Table 3
Cable penetration

Country	Number of Subscribers	Percentage of TV households
Austria	50,000	2.5
Belgium	1,700,000	64.1
Denmark	800,000	50
Finland	50,000	3
France	6-8,000,000*	37
West Germany	8,000,000*	35
Ireland	666,000	23
Netherlands	2,000,000	55
Norway	250,000	22.7
Sweden	1,400,000	46
Switzerland	680,000	36.8
<u>United Kingdom</u>	<u>2,546,000*</u>	<u>14</u>
Canada	1,326,000	57
USA	17,400,000	22.4

Source: J Shaw 'ITV must respond to satellite opportunities' Intermedia, July 1981, pp. 42-47.

* These figures include 'master aerial' systems where more than one subscriber, e.g. in a block of flats, shares the use of a single aerial. They thus overstate the penetration of cable systems; other sources suggest 2.3 million cable subscribers in West Germany and only 65,000 in France.

Table 4
Major Cable Operators

Company	Approx No of subscribers
Rediffusion	750,000
Visionhire	300,000
Telefusion	200,000
Radio Rentals	90,000
British Telecom	26,000
Phillips Cable Television	11,000
Greenwich Cablevision	6,500
Cablevision-Wellingborough	4,500

Source: The Economist, March 27, 1982, p. 60.

the smaller cable companies who (having laid coaxial cables) have a capacity of up to twelve channels. Nevertheless, this is still a far cry from the multi-channel potential seen in America, and foreseen to occur in Britain fairly soon. Furthermore, the need for a large capacity cable - through fibre-optics - is urgent when the other services that cable can provide, are considered.¹ These additional services are particularly important because it seems highly likely that cable that relies solely on carrying television programmes may not be viable. Greater emphasis should be placed on interactive services, therefore, if a correct policy for cable is to be designed. In economic terms, the new TV services will have the advantage of increasing revenue in each area, which at the margin could mean the difference between it being financially viable to cable an area and no service at all.

Cable technology

To appreciate correctly the discussion which surrounds cable television (and its other uses), a basic understanding of the technology involved is first needed.

In plain terms, cable is a means of transporting information, whether it be audio signals (e.g., the present telephone network) or video signals (e.g., television), by means of a wire - or cable.

There are three features common to all systems. The first is known as 'the headend', and consists of a number of aerials and other devices which receive signals, and re-transmits them along the cable to the subscriber. Generally this is a one-way process but new systems, especially in the USA, permit two-way communication. These are known as 'interactive systems', where the subscriber transmits his own signals via a keyboard or push button control.

The second part is the cable itself, which is generally buried in the ground but can, in certain cases, be strung overhead. Fibre-optic technology has meant that the limitation set by thick copper wire of at most 24 lines (as currently used for local telephone calls) can be easily surpassed. Two thin filaments of glass can carry 12,000 lines and some estimates believe that this could rise as high as 200,000. At present it is expensive, but its expanding use will inevitably lead to a decline in such cost.

Third is the subscriber terminal. This performs the function of connecting the TV set to the cable.

Service benefits. There are a number of ways in which cable technology will bring benefit to those using it. The following

1. See Appendix III.

are examples:¹

(a) virtually unlimited channels - in the USA there are examples of systems with the potential of over 100 channels, and fibre-optic technology can only raise that figure;

(b) a better picture - since the signal is protected from interference;

(c) narrowcasting - defined by the Hunt report as the 'ability to provide television on a truly local scale and in such abundance that all kinds of specialist interests could find themselves catered for in a way that is not possible on broadcast television' (effectively, the specialization of TV production);

(d) cable complements broadcast TV - it can be used, as it has been in the past, to relay traditional broadcasting in areas of poor reception; and

(e) other uses - the technology now exists for people to input their own information into a network; such interactive services include the ability to shop, bank, advertise, and even work, through the cable network.²

In addition, the introduction of Direct Broadcasting by Satellite (DBS) which is planned to start in 1985/6 from UNISAT will make demands on cable. Further enlargement of the area of reception could come from the use of cable systems where the cost of a larger receiving dish may be spread over a number of subscribers.

The economics of cable

A sticking point has been the precise cost of laying the cable. At the moment, while estimates differ, there is consensus over the fact that it is quite high. The recent fibre-optic cable experiment in Milton Keynes, if used as the basis for calculation, suggests that fibre optic for one or two cities could cost between 25% and 40% more than standard co-axial systems. However, the cost of fibre-optics is falling dramatically, partly helped by the need for fewer boosters along the optical fibre links - eight kilometres compared to every two kilometres for co-axial cable. There is also a real belief that this could be increased to 30 km or more in the very near future. It was said in May 1982 that 'We are now fast approaching the stage when it will cost more to lay a coaxial link than a well-engineered fibre

1. C G Veljanovski and W D Bishop, Choice by Cable (London: IEA, 1983).

2. For further examples see Appendix II.

system.¹ The ITAP study suggested an installation figure of between £200 to £300 per house based on a medium-sized community of 100,000. Of this, around £150 would represent the decoder at the TV set, with the network cost being only £50 and the central station and transmission equipment being around £20. Nationally, to provide for half the homes in the country would represent a cost of about £2,500 million.² Other estimates suggest that the cost of connecting an urban home could be as much as £500³ and calculations by Pearson Longman suggest that a monthly fee of £18 would still be insufficient to make installation of a cable network in Harrow a profitable venture.

Whatever the exact cost, it would appear that large scale cable is a while away yet until it becomes more attractive, since no enterprise with an eye on long-term survival is likely to invest on an obvious loss-making venture. Only time will tell what the actual costs will be, since technological developments are, by their very nature, uncertain.

Need for open market. One conclusion of all this is that imposing restrictions on what cable firms cannot or must do will only raise costs and therefore prevent, at the margin, areas that would otherwise receive cable from being economically viable. Technical standards, e.g. a requirement that all cable should be underground or that the whole franchise should be wired and not just the profitable parts, while being well-motivated, could prove to be the last straw to many cable television firms. (An overhead cable would not be out of place, where it could be laid overland between gardens, for example, or parallel with existing telephone lines. Also, it would make sense to allow a cable firm just to wire profitable parts and then expand as costs fall - as they surely must. It is better for half an area to receive cable because it is profitable, than no-one in the area because the additional cost of cross-subsidizing the unprofitable part makes the whole enterprise uneconomic.)

Widespread economic gains and losses. There are also wider economic effects of cable, both positive and negative, as with any change in an economy. No doubt the construction industry will benefit from the capital investment, and so will many other associated industries. But there are the as yet uncalculable effects on the economy; for example, on the press industry, which could be negatively affected by a decline in the demand for informational services such as the printed version of the Financial Times (although it is likely that such services will quickly adjust themselves to operating on a cable network as well as of on the printed page). The total effects cannot be estimated, since the informational problems of assessing the full

1. Barry Fox, Broadcast 31 May, 1982, p. 24.

2. ITAP, Cable Systems, p. 28.

3. The Economist, March 19, 1983, p. 41.

economic effects prevent it. In any case, were the information available today, it cannot be foreseen what new uses and new cable technologies will be found. And it is doubtful whether the government could improve the situation by controlling the rate or nature of cable introduction and development.

GOVERNMENT POLICY

Existing policy is inherently paradoxical. On the one hand, there is a strong will to allow private development of cable and to promote change. Unfortunately, there is a strong paternalistic lobby, attempting to impose regulatory burdens on the cable industry, and a protectionist lobby in the form of the existing TV networks who are seeking to preserve the existing order.

For example, the ITAP report on cable systems said:

'Our investigations have revealed considerable interest by private firms (not only from established cable companies) in the possibility of participating in cable systems, and we have no doubt that funds would be available from commercial sources to finance the installation of cable systems. Cable systems offer large business opportunities with good chances of profit. We see no need for any public funds to be used to establish them.'

But on the other hand, the government appears to be in the process of applying ill-considered technical standards and restrictions on what can or cannot be shown on cable.² It also intends to extend the obligations that apply to the BBC and IBA to the cable channels.³ For example, the idea of restricting the amount of foreign television programmes to be sent down cables is absurd and illiberal: if the public want to watch overseas programmes the choice should be theirs.

Restrictions which prevent demand being satiated are pointless in the long run and encourage stagnation. It could be called the 'music hall mentality' since, if the music halls had been deemed suppliers of 'quality entertainment', then they would surely still be around today, providing a service that nobody wanted, at everyone's expense. Therefore, any special treatment for the BBC and IBA, such as a 'must carry' rule, should not be permitted. Not only is it questionable whether the BBC still subscribes to its quality criterion, but since one of the features of cable is narrowcasting, it is obviously desirable for existing networks to be able to adjust their practices to meet new demands, rather than to remain petrified in the past.

1. Op.cit., p. 33.

2. See Appendix IV for White Paper recommendations.

3. See Appendix V.

Any doubts about the validity of the ITV and BBC claims to be superior can be brushed away when considering the book market. Free choice has led to an enormous variety in the publishers, producers, and stockists of the written word. Some may be frowned upon, but they nevertheless satisfy consumer demands and by careful choice among the vast alternatives the discerning reader can obtain a quality read. In fact, freedom has if anything allowed an **expansion** in the supply of better quality publications, in that there are many low priced-versions of classics that would be unaffordable to the average reader if there were no large, diverse, and competitive market to keep costs down and cater for all tastes.

Arguments for cable regulation

There are a number of arguments continually cited, either in opposition to cable completely or in favour of strong governmental regulation of the industry.

Standards. Possibly the most commonly cited argument is that 'to ensure the vitality and principles of public service broadcasting and to maintain the current high standards, cable TV must be carefully regulated'.¹

This fear of a decline in standards is a weak argument indeed, and there are several points which can be raised against it. Firstly, standards are a totally subjective notion. If millions of people express a preference for a particular show, it is an act of dictatorship to say that those millions should be forced to watch a 'quality' show instead. Furthermore, the enormous choice available by cable (for example, in Manhattan) makes nonsense of this traditional argument. The greater the choice, the more likely is it that the demand for 'quality' or other special services will be satisfied.² Throughout history, quality has been the cry of the monopolist who wanted to preserve his privileged position. In the face of competition, the coming of cable and satellite TV will mark a complete transformation from a system based on state control to a free market system controlled by everyone. The resistance comes from those who wish to continue the present broadcasting monopolies.

Local monopoly. An argument that deserves greater attention is commonly referred to as 'the local monopoly problem'. It is claimed that the high initial cost of laying cable will inevitably result in a single cable system for a particular geographical area. Accepting this, the natural reaction is to give cable a public utility status and/or place it under extensive government regulation. However, the inherent assumption in this argument is that a local monopoly is enough to give a cable

1. Choice by Cable, Op. cit., p. 19.

2. See Appendix VI.

operator sufficient market power to exploit the consumer unfairly. It ignores other significant factors which weigh against a cable monopolist's position.

First, cable TV is a non-essential luxury good meaning that consumers are sensitive to price changes. This means that it cannot be compared to essential utilities requiring government regulations, e.g., gas, electricity, etc.

Second, there will be 'potential' competition. This will come from the fact that the initial fixed investment required to lay a cable, while being significant, is not prohibitive. With the rapid growth in technology, it is safe to assume that over time such costs of market entry will fall. There will also be real competitive pressures where geographical areas meet as systems try and attract fringe customers.

Third, as the industry and its technology advances, there will be many non-television services which will, in turn, have to compete with other communication and information services. It will also affect the level of costs associated with market entry, as there seem to be doubts about the financial viability of wiring the country on the basis of distribution of television alone.

These three factors indicate that there is no real case for government regulation based on the local monopoly argument.

Unremunerative areas. Another common argument put forward to support extensive regulation is that a cable system free of government control would not find profitable to serve particular areas. But if it is assumed that cable television is a luxury, there can be no logical case for urban taxpayers to subsidize the rural viewer. Indeed, as communications have become better, many rural dwellers are probably more affluent anyway. Those who enjoy the benefits of rural life cannot necessarily expect urban dwellers to carry its costs for them.

However, with the inevitable growth of interactive cable, certain authorities may wish to subsidize the laying of cable in certain areas for welfare purposes - for example, where there may exist a high proportion of OAPs, who could use it as an emergency alarm system. In such a case the local authority could invite tenders to cable an area and accept the firm who could perform this job at the lowest subsidy.

These considerations can at best justify some level of direct subsidy to the needy or handicapped, but no more. If that were the case, then the most efficient system could take the form of tokens issued by the government to pay, or contribute towards, the cost of buying the cable service from the suppliers. However, there is no case for general government control.

Towards a free cable system

The Hunt Report went a fair way in the right direction but more of a laissez-faire attitude is needed to stop any suffocation of cable's potential. Its approach was that 'cable television is about widening the viewer's choice' but unfortunately its remit was basically divided into two main areas, the protection of broadcast TV, and the regulation of the cable industry. This prompted the report to suggest several interventions.

Political control. It seems pointless to have restrictions to prevent the ownership of channels by political parties and religious organizations. A political party's ownership of a television channel is little different from the political bias that exists in newspapers and magazines, and the 'political' radio stations that exist abroad. And religious groups operate cable channels abroad without any obvious harm being done.

Ownership. As to restrictions on foreign firms owning controlling interests in cable companies, this should only be prevented if there are security considerations. Foreign investment may indeed be beneficial in getting the UK cabled more quickly and thus in a better position to handle the information-processing industries of the future.

Schedules. Certain other restrictions to the scheduling of programmes, e.g., no x-rated material before 10 pm, may be found to be convenient; locking systems exist for 'adult' channels, enabling parents to control their use. There need not be any requirement to carry political broadcasts - instead groups should be able to buy television time (or even purchase their own station). Neither should there be any restrictions on the way cable television is financed. Commercial 'pay as you view' sponsorship, or any other form of advertising, should be permitted, with the same standards being applied as exist for advertising on ITV and Channel Four.

Expansion of the television network through cable will permit the specialization of particular channels, e.g., to show just sport, or to specialize in ethnic entertainment. It would be completely contrary to the idea and main benefit of cable if each separate channel were required to show a 'balance' of programmes.

General. All in all, entertainment will undoubtedly be the primary market for cable, but long term success will also be based on the development of other services. Nevertheless, there should be employment benefits in the cable industry itself and it would be safe to assume that spillover effects in the entertainment and film industries would boost British initiative in these areas. It would be folly to kill this development by over-regulation.

A PROPOSED FRAMEWORK FOR CABLE

1. The sensible approach seems to be to accept and treat cable as just another branch of publishing and acknowledge that it is a luxury service (which means that public provision is unjustified).
2. The sale of licences to cable and provide services for areas, in a manner similar to auctioning North Sea oil licences, may be a good approach for getting the country cabled quickly. This would imply the creation of a monitoring body whose task would be to administer the auctioning of licences and oversee all other proposals.
3. The prohibition of firms that are given a franchise of a certain area to provide TV programmes would maintain the competitive pressure even in this quasi-monopoly structure. Firms should be restricted to selling use of their cables to those who wished to provide television and other services.
4. The setting and monitoring of very basic restrictions on broadcasting on cable, e.g., no x-rated material before 10 pm, political impartiality, and other similar laws, may be reasonable during the initial phase, but have less place in the system once people are used to it (say, after two years). The judgements of viewers and parents regarding what is good television are generally preferred to those of government officials.
5. No privileged protection for the existing broadcasting TV duopoly, i.e., BBC and ITV, can be justified. Obligations to carry BBC and ITV on cable should be dropped.
6. No subsidization of cabling is justified.
7. An assessment of all new standards governing the laying of cable with a view to permitting (for example) overground cables, and the partial cabling of areas, is needed.
8. Gains to consumers could be enormous if cable operations were able to compete with BT (and its successor companies) Mercury, and other private telecommunication companies in the provision of telephony services.

Satellite will also increasingly provide greater competition with increased usage of international facsimile services improved in speed and quality; and with even further expansion of satellite telecommunications links.

1. David M. Padric, *The Ultimate Satellite TV Handbook* (Grenada, Mississippi: National Microtech Incorporated).

2. William Whitelaw, in *Hansard* 4th March 1982, c. 414.

5. NEW TECHNOLOGIES AND COMPETITION

The development and application of new technology will present new opportunities to improve the quality and the quantity of information communicated. In the next five to ten years it will, for example, permit electronic mail to challenge seriously the letter post as the main means of written communication. In this way, the 'traditional' methods of communication will face increasingly strong competition as the new technology provides faster communication of a better standard.

The main areas that will alter the communications market are as follows:

Broadcasting and satellite. The broadcasting status quo will face competition both from cable and satellite broadcasting. The latter represents a logical progression from today's widespread use of satellites in geo-stationary orbit to provide telecommunications links; and the government is planning to bring into operation by 1986 Direct Broadcasting by Satellite (DBS). Under the DBS system, a large transmitter, called an uplink, sends a signal that is received by the intended satellite: these signals are transmitted using five watts of power to a broad area.¹

The present proposals indicate that while the government 'expect the capital cost of providing the satellite system to be found in the private sector'² and that it will be 'the first privately-financed satellite in Europe', the BBC will become involved in satellite broadcasts. Since there will be at least two satellite systems, probably increasing to five, the government channels (BBC) should not have any priority if they compete with other possible users. Again, the fact that most of the satellite will be made and designed in Britain should not be used by the government to foist upon the BBC something that it may not even want or to impose unnecessarily high technical standards.

In essence, the decision to participate should be an economic one based on expected future viewers, and ought not to be coloured by political considerations. It is obviously contradictory to fund the DBS privately, to produce it privately, and then to impose unnecessarily tough production and usage regulation to perpetuate an outdated duopoly.

Satellite will also increasingly provide greater competition with increased usage of international facsimile services improved in speed and quality; and with even further expansion of satellite telecommunications links.

1. David M Fedric, The Ultimate Satellite TV Handbook (Grenada, Mississippi: National Microtech Incorporated).

2. William Whitelaw, in Hansard 4th March 1982, c. 414.

Information technology. 'Information Technology - which combines the technologies of computing and telecommunications - will perhaps be the most important area of application of micro-electronics. It will eventually affect virtually every household and occupation. It will change patterns of employment and, if the opportunities to supply new goods and services are taken, has the potential to create many jobs.'¹ This realistic appraisal of IT belies the amount of governmental involvement in its introduction.

The government designated 1982 as 'Information Technology Year' and provided £80 million to IT research and development. It also provided training in the form of 122 information technology centres (with 22 more in the pipeline). 'As far as Information Technology Year 1982 is concerned, there is a joint committee of the private sector of industry and government that has funded a budget of £3.75 million for the awareness part of Information Technology Year. The expenditure of the government in this financial year on schemes... will be £134 million.'²

Clearly, if an economy has evolved, grown, and achieved the present level of output through the natural invention and application of technical innovation, then to argue that government is needed to fund projects that would probably not be funded at all (or not to a sufficient level) has no historical base. If a firm wishes to invest in IT and believes it is economical, then it will do so or will raise the capital to do so.

It would be wise, therefore, to permit the natural introduction of IT. The expenditure outlined above can now have been seen to act as a catalyst in that IT 1982 was successful in promoting greater awareness of information technology. It is now spent money, but continued state expenditure on promotion cannot be justified.

The BBC

The BBC was established in 1925 as a public service body by a Royal Charter, which expires on 31st December 1996. Its original monopoly in broadcasting was created by the 1905 Wireless and Telegraph Act for 'purely technical reasons', and was expanded from the wireless to television in the 1920s, based on a 'public service' philosophy. The powers of the BBC to provide a sound and TV broadcasting service, and the constraints on those powers, come from the Licence and Agreement of 1st November 1927. This document reiterated the original aim of the BBC which was to 'inform, educate and entertain'.

1. Information Technology, (London: Cabinet Office, 1980) p. 7.
2. Hansard (Lords), 22 June 1982, c.912.

6. TELEVISION AND RADIO

'All British broadcasting is based on the tradition that it is a public service accountable to the people through Parliament'.¹ This is the accepted and traditional view which has characterized all broadcasting this century, and television broadcasting since the BBC began back in 1936. It has prevailed since then and is responsible for the duopoly of television and radio production which exists at the moment.

There are two public bodies: the British Broadcasting Corporation (BBC) and the Independent Broadcasting Authority (IBA), which are obliged to conform to specific codes which limit their output. The main areas of restrictions are:

- (a) that programmes must attempt to display, wherever possible, a proper balance, especially 'in matters of controversy and accuracy of news coverage';
- (b) the compulsory transmission of political and ministerial broadcasts;
- (c) limitations over the broadcasting of violence, especially where young people may be able to see; and
- (d) the IBA abides by a code of advertising standards and practice which also prevents more than seven minutes of advertising in any one hour, averaging out at no more than six minutes per hour during the whole day on television or nine minutes in an hour on radio.

While it is true to say that both the IBA and the BBC are public bodies, their limited similarities could be said to end there, because their establishment, structure, and control are very different.

The BBC

The BBC was established in 1926 as a public service body by a Royal Charter, which expires on 31st December 1996. Its original monopoly in broadcasting was created by the 1905 Wireless and Telegraph Act for 'purely technical reasons', and was expanded from the wireless to television in the 1920s, based on a 'public service' philosophy. The powers of the BBC to provide a sound and TV broadcasting service, and the constraints on these powers come from the Licence and Agreement of 7th November 1969. This document reiterated the original aims of the BBC which were to 'inform, educate and entertain'.

'The Corporation of twelve governors... including separate

1. Britain 1983, (London: HMSO) p. 386.

governors for Scotland, Wales, and Northern Ireland, is responsible for all aspects of broadcasting¹, and it is mainly funded by an annual tax, the television licence fee which any owner of a TV receiver is legally obliged to buy. Currently it is £15 for a monochrome and £46 for a colour set, and 'of over 18.5 million licences, current in April (1983) about 14.2 million were for colour'.²

However, the revenue from licences is supplemented to a minor extent by the BBC's trading activities which include television programme exports, the sale of records and publications connected with BBC programmes, the hire and sale of educational films, film library sales, and exhibitions based on programmes.

The IBA

The IBA is governed by statute and (unlike the BBC) it does not actually make any radio or television programmes, but instead provides an independent television and radio service by its programme contractors. There are a total of fifteen television companies covering fourteen regions (London has two - Thames Television and London Weekend Television) plus a separate company operating the new early morning contract (TVAM) and since November 1982, a new channel, Channel 4. Channel 4 attempts to cater 'for tastes and interests not normally provided for by the existing independent service' and there is an obligation in Wales for the Welsh Fourth Channel Authority (WFCA) to broadcast a substantial proportion of the programmes between 18.30 and 22.00 in Welsh.

Independent television began in 1955, the year after the IBA was created. It is constituted until 31 December 1996 by the 1981 Broadcasting Act, which also established Channel 4 and the WCFA. The primary source of finance is through the sale of advertising time. There are, however, certain restrictions on what may or may not be advertised and the types and methods of advertising which are prohibited - they are well known and include advertising with a political or religious object, or on behalf of cigarettes or betting.

The IBA's main job is to co-ordinate the companies contracted to provide television and radio programmes and to that end its main functions are to; appoint the companies, supervise programme arrangements, control advertising, and to build, own, and operate transmitting stations.

1. Britain 1983 (London: HMSO) p. 386.

2. Ibid. (London: HMSO) p. 390.

FINANCING TELEVISION

In principle, television can be financed in three main ways, varying from taxation (the television licence fee), to advertising (which is the primary source for independent television) or to a direct charge (a feature of cable television).

The television licence fee is an annual lump sum tax imposed on those who own a television set. It has two rates, with the higher one being placed on those who own colour sets. The main problem with this is that there is no relationship between the viewer's satisfaction and the revenue that the BBC receives. Thus the BBC is guaranteed a stable income almost regardless of the quality or content of its broadcasting.

Advertising is an improvement on this. The amount that may be charged to broadcast an advertisement is directly related to viewing figures via programme popularity. This means that in order to increase advertising revenue a television (or radio) station must meet audience demand.

Direct charging or 'pay TV' as it is sometimes called, is the most direct method of charging for television and is associated with pay-cable. This can be done on a pay-per-channel or a pay-per-programme basis - the former is by far the most common and it is generally both cheaper and easier to administer.

If television is to have a healthy future in Britain, then it must move towards the demands of its audience. Logically, the only possible way this can occur is by moving away from the television licence fee to other forms of finance. Where the balance lies between advertising and charging is a decision only the market can make. What is clear is that there can be little future for a system which discriminates against the paying viewer in favour of the decisions of the bureaucrat.

Ripeness for change

'The BBC does not give publicity to any firm or organized interest except when it is necessary to provide effective and informative programmes. It must not broadcast any commercial advertisements or any sponsored programme.¹ This is the theory and outwardly it may appear to be true. The yearly debate over football shirt advertising and the absence of 'obvious commercial breaks' lends support to this view but closer examination reveals a different picture.

Beneath its facade of commercial virginity, the BBC's programmes are in fact studded with advertising plugs. The chat show with a guest who just happens to have recently brought out a book, or the broadcasting of a sponsored concert or cricket match

1. Britain 1983 (London: HMSO) p. 390.

are just two examples of how advertising already exists. It is therefore wrong to suggest that any moves to encourage the BBC to become more market oriented would involve much change; the BBC is already heavily commercialized. It competes with independent television for audiences in a quite unrestrained manner; and it devotes much air-time to advertising its own products - books, computers, records, videos, etc.

A common point of resentment is the television licence fee, which is, in effect, a television tax. It is supposed to be an equitable tax, with a higher charge for colour television, but since the overwhelming majority of licences are for colour sets, this is not really true. Such a system of funding allows no consumer sovereignty whatsoever, since the price of television viewing (after the cost of buying a TV) is not related to the consumption of the product. The only way of indicating one's preference for BBC programmes (aside from not having a TV in the first place) is to be motivated enough to write to 'Points of View'. It is not surprising that this problem generates a gulf between the Corporation and the public that both sides recognize.

The need for change

There have been a number of discussions in recent years over why, or why not, the existing duopoly should be continued. Basically, however, two arguments are continually put forward to defend the status quo.

Quality. The first refers to the quality of broadcasting. It has been argued that the quality actually desired by the general public under competition will be noticeably lower than it is now. In turn, this would affect the electorate who will no longer receive the information necessary to make 'good' political judgements. Lower-quality broadcasting will impose an indirect externality on the rest of society.

What is ignored is the newspaper industry's success in 'informing, educating, and entertaining', and to say that the removal of the duopoly would prevent television from achieving these aims is to ignore the facts of other communications media.

It is often argued that television in the United States appeals to what can crudely be referred to as the 'lowest common denominator', but to use this as an argument against a free television network is wrong. Again, under competition, it can be expected that the **total** supply of quality broadcasting will in fact increase, as the supply of all kinds of programme increases.

The alleged decline in quality television that it is presumed would occur if the BBC was broken up and subject to competition from other channels, clearly ignores the benefits of wider choice. While it is no doubt true that the **average** quality of programme may decline (although the case for the transmission of 'Blankety-Blank' as a means of maintaining standards is something

yet to be proven), it would be easily offset by the expansion of all sectors of the market that would inevitably follow the relaxation of controls.

The expansion would be akin to that which followed the invention of printing. Before that event the written word was of a very high quality, but was restricted to those who could afford the elaborate and expensive hand-written books. Afterwards, the 'quality' fell but the market expanded enormously, with the result that more and more publications (including Shakespeare as well as pulp fiction) were available to the mass of people, at a price they could afford. The same should be allowed to happen in television.

The 'quality argument' is clearly elitist. It would be fair to assess the present situation as one where a small elite with access to the control of the existing duopoly, pass judgement on what is, and what is not, a 'good' programme, with the paying viewer having little or no say in what goes on. While their views may, from time to time, coincide with the viewers' (as represented by viewing figures), this is not always so. The idea of a 'quality' programme is a highly subjective one, and everyone, no doubt, has their own personal taste. The only fair criterion for judging programme quality is by how many people like it, and not by how much a few people do. High ratings ought to be accepted as the yardstick of what the people want, and should not be regarded as the object of distain.

Collective nature. The second argument is that since it is not paid at source, i.e., when it is consumed, television can only be financed collectively, through a tax. Again, this is quite ridiculous. Private television stations are not funded at their source but perform quite satisfactorily with advertising revenue; the same can be said about all private radio stations that exist in Britain and abroad. With the introduction of cable, charging at source through a pay-TV system could happen in any event.

RESTRUCTURING BRITISH BROADCASTING

Deregulation under competition

There is a need for minor deregulatory measures to permit the independent television sector to compete with cable and satellite. It is just a matter of choosing the time when such proposals would be enacted to allow development but prevent any exploitation of a privileged position prior to the arrival of competition.

For WFCA the obligation to provide programmes in Welsh should be removed after the arrival of cable, to allow the demand (if there is one) for such programmes to be met by part of that market, and to the level that people choose. If there is a demand for such a service it will be met, both in the quantity and quality that is wanted and not according to a politically pre-

determined level.

There should also be a review of the advertising regulations for independent television. The restrictions that should be removed to allow free development could be the following, in two stages:

(a) the first stage should allow the advertising of cigarettes, betting, and any other products or services that are at present prevented from using the television media. It seems absurd that a person can read a paper to find out the television programmes, and come across advertisements for both cigarettes and betting, but is not allowed to see similar advertisements on the television;

(b) the second stage would coincide with the arrival of competition and then the restrictions on political and religious bias and the limitations on the quantity of advertising could be greatly relaxed or even completely removed.

Reconstitution of the BBC

The BBC should be improved by devolving many of its constituent parts into separate self-financing units. It is wrong to suggest that this would unduly 'commercialize' the BBC, since it is already heavily commercialized. The time has come to change the nature of the BBC from a monolithic corporation, constantly lacking resources, to an association of independent and separately financed stations, operating under the guidance of the BBC board of governors. The BBC governors would play a similar role to the IBA, monitoring programme content, dealing with complaints, and ensuring a due regard to standards.

Television. We propose that the following restructuring measures would stimulate the competitiveness and public responsiveness of BBC-TV:

(a) BBC 1, BBC2, and BBC Breakfast Time would be kept intact as one BBC TV unit, but their method of financing would be changed. BBC 1 and BBC Breakfast Time would be financed by advertising, while BBC 2 would be financed by a mixture of advertising, sponsorship, subscription, and subsidy from revenue gathered by BBC 1 and Breakfast Time; and

(b) BBC TV News should be formed into a separate entity financed by levies on the three BBC channels, and from funds from other TV stations, possibly cable or satellite, which wish to subscribe to its services, along the IRN model. This would preserve the integrity of BBC News services, which have a global reputation of quality.

Radio. A similar solution could apply to national radio services operated by the BBC:

(a) Radios One and Two would function as separate national

Band II - the best-known broadcast band encompassing BBC and 134 commercial radio stations, financed by advertising. These stations are very popular and could very easily be supported by advertising revenue. Given the amount of own-product advertising at present, there would be little perceptible change in their appearance. Private capital would be attracted as backing for these stations;

(b) Radios Three and Four would be formed into separate units, financed largely by sponsorship and subscription, in a similar way to the successful Public Broadcasting System in the USA, and also (but probably in fact to a lesser extent) by advertising. The BBC board of governors would be responsible for ensuring that they retained their essential character;

(c) BBC local radio stations would be made completely independent and be sold to the highest bidder, with encouragement being given to employee buy-outs. There is no reason why the BBC should run local radio stations, which can quite adequately be funded from local advertising, in competition to independent services. These stations would no longer come under the authority of the BBC board of governors;

(d) BBC Radio Scotland, BBC Radio Wales, and BBC Radio Ulster would also be made into separate units, financed by advertising and open to private capital, but would still come under the guidance of the BBC board of governors.

External services. The BBC external service deserves to be treated separately because of its strategic and international significance in broadcasting across the world. So by its very nature, sponsorship and advertising would not be feasible means of alternative funding. Therefore, we suggest that the BBC external services should continue to be financed by a grant from the Foreign Office. They perform a valuable role and their resources, particularly those devoted towards broadcasting to the Eastern bloc, deserve increase.

The IBA

For its part, we suggest that the IBA:

(a) should be replaced by a body more akin to the FCC in the United States - a body that allocates frequencies to prevent interference between stations but which maximizes the number of stations on the air;

(b) should be a commercially-aware body that can effectively promote commercial broadcasting in Britain rather than acting as a body more concerned with control and restriction;

(c) should license large numbers of new stations, both television and radio. With the closure of the old VHF Band I and Band III television transmitters, room can easily be found on these bands for public service broadcasts currently cluttering

Band II - the best-known broadcast band encompassing BBC and IBA VHF radio transmissions (88-108 MHz). For example, the section of the band between 98 and 102 MHz is still not allocated for public broadcasting in Britain - unlike any other Western democracy. Forcing the general public to dial through public service communications (e.g. police and fire brigade transmissions) in order to reach broadcasts in the 102-104 MHz section of the band is absurd - and even encourages people to listen illegally to police broadcasts!

Complementary aspects of radio broadcasting. First is to encourage truly local radio stations - perhaps serving no more than a few thousand listeners, and as

LOOKING TO THE FUTURE. largely voluntary staff, and charging advertising rates affordable even by one-man businesses. Second The BBC and the IBA must now change significantly in form and function to take full advantage of the new technology now available to broadcasters, and to allow the general public a wider choice of programming, both educational and entertaining.

freedom of choice will come to exist, and the power to choose The IBA must be reformed to become a more flexible and commercially-aware licensing body. Such a process involves the transfer from a limited duopolistic market for television and radio to one where there is a multiplicity of systems, each part competing for their viewers, listeners, and financial support - be it advertisers, subscribers, or sponsors.

At present the radio spectrum is inefficiently and badly used. Even with the advent of new forms of broadcasting, cable and satellite, large chunks of the radio spectrum could be used for new services and existing frequency allocations could be reassessed to allow many more stations to share frequencies.

The IBA, as presently constituted, is a body that supposedly regulates commercial broadcasting in Britain yet does its utmost to be as uncommercial as possible. Television and radio stations franchised by the IBA are granted commercial monopolies. The only place in Britain where two commercial radio stations are licensed to broadcast in the same geographical area is in London where LBC and Capital are franchised. Yet one station is designated a 'news and information' service, the other a 'general entertainment' service - competition between the two is not intended. John Whitney, the Director-General of the IBA, has written in the The Times about his local radio stations without once referring to them as 'commercial'. The notion of 'public service broadcasting' is the one uppermost in the minds of the government-appointed officials: not that of promoting a true commercial TV and radio network competing for audiences and revenues.

Promoting small-scale innovation. There is a particular need for the existing broadcast media to respond to the advent of new cable and satellite services. Development need not always be upwards in terms of financial expenditure. Radio especially is essentially a medium that can be most effective in promoting its message at a reasonable cost - at a level supported by advertisers not catered for by television and cable companies.

And it provides a most valuable training ground for new broadcasters. Voluntary work should therefore be encouraged, not discouraged by restrictive trades union and IBA practices.

When Los Angeles can support more than twenty radio stations, and the Greater Paris area fifty-four stations, the argument that the current system is the only way forward for allocating broadcasting frequencies appears suspect. There is a need to allow development in two separate but complementary aspects of radio broadcasting. First is to encourage truly local radio stations - perhaps serving no more than a few thousand listeners, run on small budgets with largely voluntary staff, and charging advertising rates affordable even by one-man businesses. Second is to allow specialist stations, perhaps covering whole cities or parts of the country, servicing ethnic and musical minorities, e.g. Indian or Greek stations, or soul and reggae stations. With a liberalization of the existing licensing arrangements, a true freedom of choice will come to exist; and the power to choose what sort of programme an individual wishes to listen to at any time will pass from the bureaucrat and programme planner to the listener or viewer.

Sometimes it is suggested that letters are different because they must be carried securely - but so must sensitive computer information and live animals, neither of which suffers a carriage monopoly: and only under competition would people have a choice of carriers, and so be able to select one that was more secure, or less strike-prone, or cheaper, as they deemed fit. Lastly, it is sometimes argued that letters are urgent and are therefore different - but the carriage of cut flowers, people, and food is also urgent, so the argument does not hold.

There is, then, no difference in kind between letters and other items that are carried by competitive distributors, and we have to look to other reasons why there should exist a monopoly for them. In most cases, the answer is because of an historical accident: the organization of the mails has traditionally required a large organization and has consequently been started off by governments. But once governments have begun to enjoy the revenue from the mail service, they have been reluctant to let it go; and they have been embarrassed by the threat of private competition. Thus, as Milton Friedman says of the United States:

'The historical reason why we have a Post Office monopoly is because the Pony Express did such a good job of carrying the mail across the continent that, when the government introduced transcontinental service, it couldn't compete effectively and lost money. The result was a law making it illegal for anybody else to carry the mail.'

A natural monopoly? Of course, if there is a 'natural' monopoly whereby the provision of a service by more than one supplier is difficult, we face only three options: to have a

1. Milton Friedman, *Capitalism and Freedom* (Chicago University Press, 1962) p. 30.

7. THE POST OFFICE

THE LETTER MONOPOLY

Of all state monopolies, the letter post is the most curious, because there is no sensible dividing line between letters (where carriage is a monopoly of the state) and other items (where carriers compete freely).

Philosophical objections. A 'letter' is simply an item which requires carriage from one person to another. On most items that need carriage, such as parcels, newspapers, furniture, cut flowers, people, food, live animals, or computer tape, there is no special monopoly; but on letters, there is. Yet there is no logical difference between a letter and any other item that needs to be carried. It is sometimes supposed that a letter is different because it contains information - but so does a newspaper; and in any case, the fact that it contains information is neither here nor there as far as carriage is concerned. Sometimes it is suggested that letters are different because they must be carried securely - but so must sensitive computer information and live animals, neither of which suffers a carriage monopoly: and only under competition would people have a **choice** of carriers, and so be able to select one that was **more** secure, or less strike-prone, or cheaper, as they deemed fit. Lastly, it is sometimes argued that letters are urgent and are therefore different - but the carriage of cut flowers, people, and food is also urgent, so the argument does not hold.

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A natural monopoly? Of course, if there is a 'natural' monopoly whereby the provision of a service by more than one supplier is difficult, we face only three options: to have a

1. Milton Friedman, Capitalism and Freedom (Chicago University Press, 1962) p. 30.

private monopoly, a public monopoly, or public regulation. All are evils and we must choose between them.

However, there is a strong case that letter post is not, in fact, a 'natural' monopoly at all, and its preservation in law cannot therefore be justified. For example:

(a) entry to the market by new suppliers is simple and low-cost, as the increasing number of 'messenger' firms in the last few years indicates;

(b) the industry is labour-intensive, and the skills and capital items required are basic, which again does not suggest any 'natural' monopoly exists;

(c) while there are clear economies of scale in handling postal traffic, it cannot be argued that a private monopoly would naturally develop if restrictions on entry to the industry were removed - there are scale economies in the distribution of parcels, newspapers, and milk, yet none of these has reverted into a private monopoly.

In conclusion, it appears that singling out 'letters' as a special form of carriage is quite absurd and does not justify any special treatment; and similarly, the carriage of letters is not a 'natural' monopoly and cannot be defended as such. Certainly it seems unreasonable to outlaw any form of competition to the state service.

Competition, or monopolistic insensitivity?

When any attempt is made to challenge the Post Office's monopoly of the 'letter', a number of practical arguments are put forward for the status quo.

Existing competition. The first of these argues that while it does operate a monopoly of letter traffic, it nevertheless faces competition. As Ron Dearing, the Posts and National Girobank Chairman has said:

'Competition takes many forms, including the use of alternative communications media - telephone, telex, TV and newspaper advertising, and on-line systems as well as activities excepted from the monopoly, such as the delivery of own mail, unaddressed advertising material, Christmas cards by charities and 'express' mail. And of course, in the other types of business in which we are active - parcels and banking - we have no monopoly and must, and do, compete successfully.'

This certainly alerts us to the fact that there is some

1. Post & National Girobank Report, 1982-83, p. 3.

competition already (and weakens the 'natural monopoly' argument); but it does not explain why there should **not** be open and legal competition with all parts of the postal service. The fact that marginal competition exists is, if anything, an argument for encouraging it further and for reducing the protective shade of monopoly legislation which the state service currently enjoys, because it indicates that there is a firm foundation from which a new, competitive industry will be able to grow.

Insufficient service. There is no doubt that this privileged position has made the Post Office less responsive to its users' requirements than to demand a competitive service - a common problem in protected state industries. This monopolistic insensitivity is manifested in several ways, for example:

- (a) the hundred or more private postal services which came briefly into being when the monopoly was lifted temporarily during the postal strike of 1971 (indeed, the closing down of the entire service during a strike is one of the strongest arguments against a statutory monopoly from which the customer has no escape);
- (b) steady reductions in service, such as the abolition of telegrams, all-day Saturday Post Office opening, and twice-daily deliveries;
- (c) the existence of growing numbers of city, inter-city, and international courier services (the Post Office introduced a same-day messenger service only **after** private firms had demonstrated the need);
- (d) the belated entry of the Post Office into the delivery of unaddressed circulars; and
- (e) the failure of the Post Office for many years to exploit the demand of philatelists for new issues of stamps.

These examples only highlight the more fundamental and widely-held opinion among most users of the 'letter' post, notably businesses, that the quality of the Post Office's service has deteriorated in the past decade beyond customer requirements. The Post Office has generally reduced the level of service without thinking that people, especially businesses, might well have preferred to pay more, perhaps substantially more, for an **improved** rather than a reduced level of service. The evidence of the courier services supports this view.

Objections to ending the monopoly

There are a number of quite understandable doubts that are raised when the removal of the present monopoly is mooted. These objections, however, are often overstated.

Security, urgency, and reliability. As we have seen, objections that private carriage of the mail might be less secure, less speedy, or less reliable, are untenable. In a competitive market, people would be able to **choose** between an ultra-secure service, perhaps at a higher cost like the present registered letter system, and other services that might be good enough for routine personal letters but somewhat cheaper. They can also choose to pay for speed, and may be offered a wider choice than that currently available through the Post Office's first class and second class mail division. And customers can naturally select the carrier which they think is most reliable, using a competitor in the event of one suffering a strike or other disruption, as opposed to their total dependence on a single network today.

Creaming off. Another objection is that once the monopoly was removed, private firms would move in to take the more lucrative intra-urban trade and would leave the Post Office with the most costly or loss-making rural services.

It certainly does seem likely that in a completely free market for mail delivery, the current uniform tariff, whereby the customer is charged exactly the same for taking a letter from Land's End to John O'Groats or Dublin as for taking it next door, would not survive. But this system is almost impossible to justify anyway. There is no reason in logic or equity why urban dwellers should subsidize rural dwellers, or why those who write only to their close neighbours should subsidize those who send large amounts of mail to the furthest reaches of the United Kingdom (and the Republic of Ireland).

Another weakness of this argument is the widespread assumption that rural dwellers are somehow poorer and need the subsidy of a uniform postal tariff. However, many wealthy people live in rural areas and as a welfare measure this is absurd; people **choose** their place of residence, and the costs of inaccessibility must fall to them along with the benefits of rural living; but the postal service is an absurd vehicle for income redistribution in any case.

On another issue, it is quite likely that the extremely high price which is charged for urban mail delivery actually prevents many individuals and organizations from using the services of the Post Office: at present they prefer to deliver 'round the corner' by hand, or to use other services to deliver circulars or bulk city mail. Thus, the Post Office is in fact **losing** this custom at the moment; whereas a more realistic pricing structure would bring much of this traffic back into the hands of the Post Office and its competitors. This 'lost' mail is a cost to the public which must be set against any supposed increase in, say, rural, delivery charges that are anticipated under deregulation.

A final counter-objection to this argument is that it is by no means certain that the Post Office would lose most of the intra-city services even if the monopoly were suspended. When bus

services were deregulated, the national organization maintained a substantial portion of the lucrative routes, and total traffic and service to passengers increased greatly.

Servicing the rural areas. It is by no means clear that rural areas would enjoy a worse service if the current monopoly were abandoned: the chances are, in fact, that the service would improve and that new methods would quickly come in to keep costs down and service high.

(a) One option is to allow commercial firms to carry mail provided that they agree to carry all mail. This would prevent them specializing in intra-urban carriage only, and if they did not have sufficient resources for doorstep deliveries throughout the country, they would have to contract with other institutions (such as the Post Office or existing parcel carriers) to provide it. While this completely guarantees the rural services, however, it prevents many of the advantages of a free market coming into existence.

(b) An open market may bring about more efficient structures for dealing with collections and delivery in rural areas, the nature of which can only be guessed. For example, it may be more efficient to take collections at the same time that deliveries are made; post vans touring rural villages, like travelling grocery shops, may be more efficient than maintaining many small post offices, and may provide a better service to the customer. Private boxes at local sorting offices, from which rural dwellers are expected to collect their own mail have long been used in other countries, obviously save enormous delivery costs, and present a small burden on rural dwellers, who tend to be mobile. Alternatively, end-of-garden or end-of-lane mail boxes along the American model may substantially reduce delivery times and costs.

(c) Another method of dealing with the most costly deliveries would be to impose a surcharge on mail recipients in proportion to their inaccessibility. People who wrote regularly to the rural customers would probably know the amount of the surcharge and add it automatically: otherwise it could be recovered from the recipient just as underpayments are recovered today. Alternatively, a household (or a whole rural community) may elect to pay a standing charge to the Post Office in order to reflect the extra burden of their remoteness.

(d) There is, of course, no reason why an efficient mail delivery network should require a national organization, just as the raising and delivery of groceries does not require a national organization. It would be quite possible that many of the new entrants to the market under open competition would actually be local firms, possibly staffed by part-timers, or people who would otherwise be unemployed, who believed that they could provide a cheaper local delivery service than the Post Office. Thus, the Post Office or any other carrier would simply contract with a delivery organization in each village or other rural community, accepting the least costly tender, just as local authorities

presently contract out for building work or refuse collection.

(e) Combined postal and other services offer a way in which mail delivery might be provided **more** cheaply and **more** frequently to rural areas than at present. There seems to be no objection to mail carriers, including the Post Office, using tradesmen who deliver other goods, such as groceries, milk, human bus passengers, or newspapers, from adding mail to their delivery items (assuming that frequency and security could be assured). Abolition of the monopoly would in fact help the Post Office to take advantage of such services.

Again, it must be remembered that many of the innovations that are likely to occur when the Post Office monopoly is removed cannot be predicted at this stage, just as the enormous growth in the varieties of telephones now available was not predicted before the (very limited) deregulation in that industry. As Friedman says once again,

'I conjecture that if entry into the mail-carrying business were open to all, there would be a large number of firms entering it and this archaic industry would become revolutionized in short order.'¹

The spread of low-cost facsimile transmission, piggy-back delivery systems, localization of delivery firms, tariff redesign, and a huge number of completely new services may actually make the end product of 'this archaic industry' (mail delivery) substantially less expensive, especially to those in the most remote areas (similar to the way in which airline deregulation in Britain and the United States has led to more frequent and cheaper services to remote areas). Competition is not, therefore, to be feared, but should be welcomed.

Sources of the objections. Any move at all to liberalize mail delivery in the United Kingdom naturally comes up against the fierce opposition of existing interest groups. Rural dwellers will no doubt be apprehensive that their existing services will be reduced or made even more expensive - even though, as we have seen, this is not certain to be true and in fact is likely to be quite wrong. But plainly, any reform would have to counter these objections and perhaps make some alternative transitional arrangements until competitive local collection and delivery services come into existence.

The Post Office itself, employing a large labour force, is undoubtedly the greatest potential source of objection, since competition may be seen as a threat to their jobs. But once again, the threat may not be a real one. Private mail carriers would probably draw on existing postal workers for their own

1. Milton Friedman, Capitalism and Freedom (Chicago University Press, 1962) p. 30.

labour; they may even introduce incentive schemes and other arrangements so that those who were most productive would do better than at present; alternatively, the Post Office could be reconstituted as a sort of workers' co-operative to compete with private carriers; or it could perform most of its present services of collection, sorting, and delivery under contract to private suppliers with little or no job loss.

But set against any such arguments must be the enormous benefits that could occur when this 'archaic industry' is deregulated. The structural changes that would be introduced under competition are impossible to predict, as are the new services that would be introduced and the better and cheaper methods of providing the old services. Urban dwellers would almost certainly benefit, but it is also likely that one of the areas of the greatest innovation would be the rural community.

Strategies for deregulation

If the monopoly over letter mail is to be abandoned, and the carriage of letters is to be treated like the carriage of any other item not presently covered by a legal monopoly, there will plainly have to be a significant reorganization of existing postal structures, and this will take time. As we have argued, the best long term solution is a completely free market, subject only to the normal laws that carriers will in fact do what they promise to do, but with the public being able to choose between different and competing services.

(a) One way to ease into this competitive market would be to have a 'licensed carrier' system during the transition, under which the licensee would have to agree to carry mail to any part of the United Kingdom. Most, of course, would deliver the urban mail themselves and would contract out with the Post Office (or with local delivery firms) for the rural services, and might even contract with local retailers to act as collection points and centres for counter services.

It must be said once again that this system thwarts many of the gains to be expected from a competitive market: it does not allow firms to specialize in the delivery of, say, urban mail or urgent mail, or bulk business mail, or even mail that is destined for a particular part of the country (under competition, it would be quite possible to have, say, a Scottish company that would contract out collection from any part of the UK but would specialize in delivering quickly and cheaply throughout Scotland).

For these and other reasons, it is probably better to resist the temptation to replace the present public monopoly with a system of one or more regulated private ones.

(b) One method of safeguarding rural deliveries would be to empower local authorities to subsidize each item delivered.

However, this stifles innovation and cost control and seems unjustified unless it can be shown that rural residents are significantly poorer than others. In fact, those living in rural areas are sometimes much better off than the rest of the population. Farmers, in particular, are already heavily subsidized.

(c) There are a number of structural reforms in the Post Office itself which would help to ease the transition into a completely free competitive system with the minimum of job losses and dislocation of service.

The most obvious measure is to allow the Post Office to provide contract services to commercial carriers, and to set its own tariffs, making it an ordinary commercial company subject only to the condition that it at least broke even. (A temporary regulation on cross-subsidization within it would prevent 'predatory pricing' to eliminate all new competition.) Thus, private carriers would be able to contract with the post office (or its competitors) for services such as collection, sorting, and delivery. Such a role as a national carrier that also hired out its specialist services to independent carriers would be an attractive one which would bring great efficiencies into post office procedures without there being any drastic change in its character. Gradually, as competitive carriers become better established, there would probably be structural evolution and the post office would remain as a (private) carrier that specialized in certain functions that it did well.

(d) Under a free market, however, it would be even more desirable for Post Office workers to form themselves into private co-operatives or small companies taking on only part of the post office's functions if they chose. A co-operative system may produce many gains in sorting, for example, and would no doubt provide a service for which many private firms would be anxious to contract with the co-operatives. Rural deliveries may be another, where local postmen could form a contract company to deliver mail from any private carrier that was destined for their area, and may do it far more efficiently than at present or than most others because of their knowledge of the area and their experience in delivery methods. In such cases, it might be desirable to sell or rent to the co-operative the capital equipment and plant they decide to retain.

This solution of an employee buy-out has been used before in the deregulatory process, and seems to operate with success. It would certainly put the management of the Post Office into the hands of those who might feel threatened by the suspension of the letter monopoly, and would give them a head start in organizational terms against private competitors. Over the course of years, however, new methods and services would be introduced and the Post Office, as one among many independent carriers, would have to keep up with developments and would be subject to all the other commercial pressures from which it is largely insulated at present.

DEREGULATION OF ALL SERVICES

Considering the present state of the Post Office there is much to be said for the creation of a separate company, the Post Office plc or better the splitting of the Post Office into a number of smaller firms:

(a) the carriage of physical objects such as letters is a commercial function and not that of government (which has this role for purely historical reasons connected with exploitation of a profitable monopoly);

(b) the Post Office has made a substantial profit over the past seven years (in 1982-83 it made £131.6 million¹). Admittedly, some of this had been due to improvements in efficiency, but it is probably due largely to its monopoly position, and is mainly attributable to the mail and counter services (the profits of telecommunications are a separate matter);

(c) the post office is currently profitable in all major departments including parcels in which it competes and on which at one time it used to make a major loss;

(d) the days of the paper letter are numbered and in ten to fifteen years it will be replaced, perhaps completely, by electronic letters. The Post Office has already launched two electronic letter services, and will be more able to compete in this new electronic environment as a fully private and commercial concern;

(e) a privatized Post Office in which major users such as mail order houses can hold shares and elect directors will be much more responsive to users' needs;

(f) the notable success of privatizing the National Freight Corporation can be seen as an example and should encourage post office management and staff to welcome privatization.

(g) 'given that the Post Office has to fund all capital investment from internal sources and in addition contribute to the funding of government expenditure'² it would benefit from being allowed to use the capital markets.

Counter services

Only thirty per cent of Post Office counter transactions relate to the sale of stamps and the acceptance of parcels. The remainder are funds transfers, pensions, the issuance of government forms, and other agency services.

1. Annual Report, 1982-83.

2. Annual Report, 1982-83, p. 3.

There seems to be no reason why the post offices should not continue to offer agency services to government departments, although it is plain that some kind of efficient pricing of this service should be introduced. Thus, the post office, reconstituted as a private company or group of private companies, would simply make a charge for each cash transaction or government form handled.

But there is no reason why other companies - such as local grocery shops (especially those with mobile vans in rural areas), newsagents, parcel delivery firms, or others should not also undertake the distribution of government forms, the handling of pensions and other cash transactions, and other activities presently done over Post Office counters. (In the case of pensions, it might in fact be a considerable boon to pensioners to be able to handle this transaction on the doorstep or at the local shop, rather than having to walk or take a bus to the nearest Post Office). Again, these services would be arranged under contract, just as national and local government agencies presently use contractors for cleaning, refuse collection, and a whole host of other services.

On the obverse side of the coin, there is of course no reason why the sale of stamps, or even the collection of parcels, should necessarily be done at post offices. It may be cheaper for the reconstituted Post Office to allow **any** retailer to sell stamps, either at a premium to the customer (as in the United States), or by paying the retailer a small retainer that reflects the post office's added convenience in not having to handle so many small transactions for stamps. An independent Post Office would of course have the latitude to make any such arrangements it deemed appropriate.

National Girobank. Rapidly improving technologies in cash transfer would make it wise to reconstitute the National Girobank as a separate private banking company, or to sell it to one or more of the existing private banks.

National Girobank plc would in future lose its traditional monopoly of government agency services but could bid to provide these in competition with other financial institutions such as banks and building societies.

Like the Post Office, National Girobank plc would be an easy asset to dispose of - more so when it is considered that it made an operating profit in 1982 of £15.6 million¹ plus the fact that both the Girobank and the Post Office is becoming more commercial in its outlook. While the Post Office is operating a new successful advertising service, 'QTV', whereby TV monitors advertise selected products, National Girobank have recently agreed to service Leicester Building Society accounts at 22,000 post office counters. This enterprising development should be

1. Annual Report 1982-83.

encouraged.

General gains

There is, in summary, a number of advantages and benefits that would be expected to occur if the Post Office were given the extra latitude of a commercial operator in a free market. The fact that it already has a national network and a series of post offices in almost every town and village will give it an enormous initial advantage, and it could usefully operate as a contractor to smaller, but possibly more innovative, specialist mail carriers.

Rather than turn a public de jure monopoly into a private de facto one by simply selling the Post Office on the stock market, the best formula would probably be to break it down into as small units as possible and to sell each portion preferentially to the workforce. The workforce themselves will undoubtedly have useful suggestions on how the division could be made and which parts of the service could be made profitable or made more profitable, under new management.

Once again, it is important to remember that the present structure of the Post Office, protected by its monopoly and its privileged position over many decades, insulates it from consumer demand and therefore naturally stems the influx of new techniques and new management thinking - all of which implies that costs to the consumer are higher than they would otherwise be while services are less good. But this privileged position did not grow from a foundation of economic necessity: it grew from the fact that lawmakers found they could easily exploit what was a lucrative business by making it illegal for others to compete. This imprisonment of the public in an unnecessary state monopoly can hardly be justified in enlightened times.

(a) Radio Telecommunications Providers require to be separately listed before Cellular Radio under:

INLAND LOCAL	ESTIMATES	
	1982	1987
Radio Services	£30 m	£60 m
Cellular Radio	0	£40 m
Total Radio	£30 m	£100 m

Over 40 existing services have been established, some since 1957. The revenues have been doubling every four or five years. New Cellular markets will generate new business, 1983-87, additional to current operating services.

APPENDIX I Telecommunications Line Service Companies offering Tele- phone, Telex, Telemetry, Data, Alarm, Direct Electronic Mail and Computer services, but not introducing Delay of

Excerpt from reply by Mobile Radio Users' Association to the Under-Secretary of State J H M Soloman, 9th March 1983.

'1. The fact that **NO revenues for 1982** are given for any BT competitors in Telecommunications Service categories is either a gross error or a reflection of DOI policy. There must be substantial revenues for the following reasons:-

(a) BT Regulatory Affairs Department (RAD) claim to have issued thousands of licences to companies offering a wide variety of telecommunications services, including: Telephone Message Handling, Mobile Radio Telephone, Radio Paging, Common Base Stations, Telex Bureaux, Telemetry and Alarm alerting, Data and Computer Bureaux.

(b) The Classified Telephone Directories covering the whole of the UK lists pages of businesses offering Telecom-
munications Services and Value Added Services.

(c) Many other businesses may also fall within the exclusive privilege owing to the wide interpretation of BT 1981 Act Section 13 (3) (a) quotes:

'That nothing falling within paragraphs (a) and (b) of sub-section 12 is **conveyed** by the system by way of **rendering a service to another.**'

The definition of a Telecommunications Service must be clearly state and must differentiate between the provision of 'physical equipment' and the rendering of 'a service'!

'2. The Table in CCT (83) 11 requires modification to reflect the revenues of the existing companies offering Telecommunica-
tions Services.

(a) Radio Telecommunications Providers require to be separ-
ately listed before Cellular Radio under:

<u>INLAND LOCAL</u>	<u>ESTIMATES</u>	
	1982	1987
Radio Services	£30 m	£60 m
Cellular Radio	0	<u>£40 m</u>
Total Radio	£30 m	£100 m

Over 40 existing services have been established, some since 1957. The revenues have been doubling every four or five years. New Cellular markets will generate new business 1985-87, additional to current operating services.

- (b) Telecommunications Line Service Companies offering Telephone, Telex, Telemetry, Data, Alarm, Direct Electronic Mail and Computer services, but not introducing Delay or alteration of messages as defined in BT-DOI Vans definition.

<u>VANS</u> Excluding Call Revenue	<u>Estimate</u>	
	<u>1982</u>	<u>1987</u>
Service Companies	£50 m	£200 m
DOI VANS	0	£ 50 m

It is difficult to estimate the total business carried out by businesses 'rendering a service to an other' as stated in BT 1981 Act, as it could include almost every business activity!'

And it continues with its recommendations:

'It must be quite clear that the present methods of achieving liberalization and competition do not work, the DOI paper confirms this fact. MRUA has recommended the following approach now long overdue:-

'I. RECOGNITION OF EXISTING COMPETITORS

BT Licence lists and published advertisements confirm the many Private Sector Businesses existing at the time of the Government's Liberalization Proposal in September 1979 offering competitive Telecommunications Services.

'II. PREVENTION OF PRE-EMPTIVE STRIKE BY MONOPOLY

BT to be prevented having undue influence over interim and final arrangements affecting changes in the monopoly.

'III. PROTECTION OF EXISTING RADIO AND LINE LICENCEES

Immediate transfer out of the administration and control of the BT monopoly staff.

'IV. PREVENTIVE ACTION

Positive steps to prevent BT staff using their Technical, Administrative, and Financial dominate position to:-

- a. Grant favoured treatment to their own activities
- b. Unfairly delay or restrict selected companies they believe will be a significant competitor

APPENDIX c. Introduce 'High Hurdle' Technical and Administrative tactics to confuse and delay liberalization

The system of cable licensing is a threefold one. The licence 'V. USER LED CHANGES' is contingent on the service that is to be provided.

BT staff cannot be expected to assist the creation of their own competition. Unfortunately, manufacturers are divided by past market relationships and the convergence of previously separate disciplines. Government must rely on the Professional Users and Academic Institutions with the appropriate contributions from the various manufacturers interests.' Secretary has discretion over the terms of the licences and these requirements could be changed without further legislation.

'If a cable system distributes programmes other than those of the broadcasting authorities, it requires a licence under Part IV of the Post Office Act 1969. The experiments in community television were authorised under Part IV licences.

'Any system that wished to offer "value added" services to subscribers, for example information services, would also need a licence from British Telecom (BT) or the Secretary of State for Industry for that service, but this time under Section 15 of the British Telecommunications Act 1981.'

Source: ITAP Report - Cable Services (London: Cabinet Office, January 1982) p. 11.

APPENDIX II

The system of cable licensing is a threefold one. The licence that the applicant needs is contingent on the service that is to be provided.

'Cable systems which receive and relay broadcasting services have to be licensed by the Home Secretary under Section 1 of the Wireless Telegraphy Act 1949. In general, the licences require the distribution of BBC services and the regional ITV service and permit the distribution of an out-of-area ITV service. The Home Secretary has discretion over the terms of the licences and these requirements could be changed without further legislation.

'If a cable system distributes programmes other than those of the broadcasting authorities, it requires a licence under Part IV of the Post Office Act 1969. The experiments in community television were authorised under Part IV licences.

'Any system that wished to offer "value added" services to subscribers, for example information services, would also need a licence from British Telecom (BT) or the Secretary of State for Industry for that service, but this time under Section 15 of the British Telecommunications Act 1981.'

Source: ITAP Report - Cable Services (London: Cabinet Office, January 1982) p. 11.

Source: As in Appendix II.

APPENDIX III

Services potentially available on cable systems

Terrestrial TV and radio channels (from UK or overseas)
Satellite TV and radio broadcasts (also from UK or overseas)
Subscription TV (films, sport, arts etc)

Specialised subject channels, e.g. news
education
religious programmes
health

Specialised audience channels, e.g. for particular ethnic groups
for different age groups -
children, aged, etc
for people with impaired
hearing

Local channels, e.g. local and national government
information
'What's on'
consumer information
programmes by and about
community groups

Other services e.g. fire and burglar alarms
control of heating systems
remote meter reading
shopping, banking, betting
etc. from home
opinion polling
video games
electronic mail/messaging
interactive computer-assisted
learning
general videotex information
software supply to home
computers
access to national and inter-
national communications
wideband business communi-
cations

Source: As in Appendix II.

Source: The Development of Cable
EMSO Caud 8866, April 1977 pp. 8-9.

APPENDIX IV

The government's final decisions, following the Hunt Report and other consultations, were announced in a White Paper:

In the House of Commons debate on 2 December a number of initial Government decisions were announced. These decisions can be summarised as follows:

- '(1) the Government will bring forward legislation to create a new statutory authority to award franchises to cable operators and exercise a measure of supervision over the services provided;
- '(2) there should be no mandatory separation between the cable provider and the cable operator though the former will require a licence in addition to the franchise of the latter;
- '(3) cable should be able to finance itself by rental payments, subscription, advertising and sponsorship;
- '(4) underground ducts for new cable systems should be laid in a star configuration: tree-and-branch or switched topologies would be allowed;
- '(5) optical fibres and coaxial cable would be permitted;
- '(6) all new systems should be required to conform to certain minimum performance standards;
- '(7) there will be a requirement from the outset that all newly installed cable systems have a two-way capability;
- '(8) only BT and Mercury should be able to link local systems;
- '(9) cable operators should, in general, be free to provide any telecommunications services over local systems other than voice communications, which would remain the exclusive privilege of BT and Mercury;
- '(10) licences for cable providers would run for 12 years in the case of tree-and-branch systems laid in ducts in the star configuration and 20 years in the case of fully switched systems installed from the outset. Twelve-year licences would be extended to 20 years if the licensee subsequently upgraded his system. The Home Secretary subsequently announced in a written Parliamentary answer on 14 December (vol 34 col 71-2) that operators' franchises would run for 12 years in the first instance and 8 years thereafter.'

Source: The Development of Cable Systems and Services (London: HMSO Cmnd 8866, April 1983) pp. 8-9.

APPENDIX V

The White Paper on Broadcasting outlined the responsibilities of both the IBA and the BBC - and have since been incorporated into the 1981 Broadcasting Act (IBA) and the Licence and Agreement of the same year (BBC).

101. The main obligations which are broadly common to the existing broadcasting authorities in relation to the services and programmes they provide are set out in the table below.

BBC	IBA
<p>(1) Each Authority has a duty to provide its respective radio and television services as public services for the dissemination of information, education and entertainment, and to ensure that its programmes maintain a high general standard, in particular as respects their quality and content, and a proper balance and wide range of subject matter, having regard to the programmes as a whole and the days on which, and the times at which, programmes are broadcast.</p> <p>(BBC's Royal Charter, Article 3(a); and Lord Normanbrook's letter)</p>	
<p>(2) Each Authority must ensure that, so far as possible, nothing is included in its programmes which offends against good taste or decency or is likely to encourage or incite to crime or lead to disorder or to be offensive to public feeling.</p> <p>(Lord Normanbrook's letter)</p>	
<p>(3a) The BBC must ensure that, so far as possible, due impartiality is preserved dealing with matters of public policy, and also in the treatment of controversial subjects generally.</p> <p>(Lord Normanbrook's letter)</p>	<p>(3b) The IBA must ensure that, so far as possible, a sufficient amount of pro-features and that all news is presented with due accuracy and impartiality. It must also ensure that, so far as possible, due impartiality is preserved on the part of persons providing the programmes as respects matters of political or industrial controversy or relating to current public policy. (section 4(1)(b) and (f)).</p>

Source: White Paper on Broadcasting (July 1978).

(4a) The BBC must ensure that programmes do not include any expression of the Corporation's opinions on current affairs or on matters of public policy. (Ministerial prescription under clause 13(4) of the Licence and Agreement)

(4b) The IBA must ensure that programmes do not include any expression of the opinions of the Authority (or its Members or officers, or programme contractors, their directors or officers, or persons having control over programme contractors) on matters of political or industrial controversy or relating to current public policy. (section 4(2))

(5) Each Authority must ensure that programmes do not include any technical device to convey messages to, or influence, members of an audience without their being aware of what is being done. (Ministerial prescription under clause 13(4) of the Licence and Agreement) (section 4(3))

(6) Each Authority must ensure that proper proportions of programmes are of British origin and British performance. (Lord Normanbrook's letter) (section 4(1)(c))

(7a) The BBC is obliged to exclude from the earlier part of the evening's programmes those which might be unsuitable for children. (Lord Normanbrook's letter)

(7b) The IBA is required to draw up, from time to time review, and secure compliance with, a code of guidance on the rules to be observed in regard to the portrayal of violence and such other matters concerning programme standards and practice as it considers suitable for inclusion in the code. In drawing up the code the IBA must have particular regard to programmes broadcast when large numbers of children and young persons may be expected to be watching or listening. (section 5(1))

Source: White Paper on Broadcasting (London: HMSO, Cmd 7294, July 1978).

PENDIX VI

Viewer's Choice in New York and London at 9.00 on 7 June 1982.

Manhattan Cable

BBC/ITV

MASH	1. News
Black Ghetto Life (documentary)	2. Hitch-hiker's Guide to the Galaxy
Sister, Sister (film)	3. Minder
Merv Griffin (talk show)	
The Kennedy Years (documentary)	
Baseball	
Spanish Show	
Variety Show	
Adam and Eve, with Nureyev (dance)	
. Spanish Drama	
. Orpheus (opera)	
. International Education (public access discussion)	
. Seminar on Nuclear Arms	
. Baseball	
. Bye, Bye Birdie (film)	
. Danger UXB (drama)	
. Dog Day Afternoon (film)	
. Gymnastics	
. Classified Adverts	
. Royal Ballet	
. Folk Art (discussion)	
. Chinese Cooking	
. News	
. High Country (film)	

Source: Andrew Neil (ed.), The Cable Revolution - Britain on the Link of the Information Society (London: Visionhire Cable, 1982).