



10 DOWNING STREET

5 December 1983

Dear Jim

NEW TECHNOLOGY IN THE GIS

The attached letter from Ivor Roberts (FCO) indicates a degree of misunderstanding over the functions and structuring of the proposed GIS system.

It will not and cannot duplicate the Folios system which is limited to a few buildings in Whitehall. It will be not just a transmission system but will have the essential features of storage and retrieval. As such it will complement the Cabinet Office proposed scheme, which is aimed principally at the transmission of classified material.

You may wish to bring these points up at tonight's MIO. I understand that all Departments have agreed that they would participate in the GIS system.

Could we please discuss a reply?

Yours sincerely

SHEENAGH WALLACE
PRESS OFFICE

Jim Coe Esq
Central Office of
Information



Foreign and Commonwealth Office

London SW1A 2AH

Ms Sheenagh Wallace
Press Office
No. 10 Downing Street
London SW1

1 December 1983

Dear Sheenagh,

INFORMATION TECHNOLOGY IN THE GOVERNMENT INFORMATION SERVICE

Please refer to the minutes of the MIO meeting on 7 November and the relevant annexes which included your minute of 5 November stating that a network for the GIS should be pursued independently of initiatives being taken by central departments. We have now considered this within the FCO and are concerned about the apparent duplication in setting up a parallel system. Page 11 of the minutes of the meeting of MIO on 7 November records the view that the proposed central system would not meet the needs of the GIS because it would carry classified material. While it is of course the case that the system can cope with classified material it could also carry unclassified material.

Moreover at Leslie Wright's meeting on 4 November which you and Jim Coe attended it was explained that two systems for linking Whitehall Departments were being considered. The introduction of the new GTN system by 1987 will make possible the use of the telephone network to transmit electronic data from point to point. This project is controlled by the CCTA. Meanwhile Departments have been asked to consider whether a form of Whitehall electronic data exchange system centred on the Cabinet Office should be pursued in the shorter term. As I understand it if this project is supported enthusiastically it will be for the Cabinet Office to take the lead. Either system would make it possible for News Department to communicate with colleagues elsewhere in the GIS. If for example I wished to pass a message to Martin Hall in the Treasury, the route would be FOLIOS to whatever point communicated with the pan Whitehall system; through that system to the Treasury; through whatever internal system the Treasury set up in imitation of FOLIOS to the press officer's desk. This may seem slightly complex but from the user's point of view communication would be in practice close to instantaneous.

/ Given



Given the substantial financial commitment we have already made to FOLIOS we would be extremely reluctant to commit ourselves to a parallel system and I imagine this may go for other Departments who are similarly well advanced in their own version of FOLIOS. Perhaps it would be useful to have another special MIO meeting on I.T. in the GIS to which our specialist, Adrian Thorpe, Head of Information Technology Department here, could be invited.

Yours ever

Ivor

IVOR ROBERTS
News Department

CC: Mr Coe, COI
Mr Wright, Cabinet Office

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Mr Flesher:for info.



10 DOWNING STREET

HEADS OF INFORMATION

INFORMATION TECHNOLOGY IN THE GIS

At MIO on 6 June 1983 it was agreed that a study should be put in hand with a minimum of delay into the Information Technology requirements of the Government Information Service.

Enclosed you will find a personal copy of a report: "The Potential for New Technology in the Information Service" prepared by Jim Coe, a Principal Information Officer at the Central Office of Information.

The report will be discussed at a special MIO which has been arranged for Thursday, 6 October 1983 at 11.00am in Conference Room 'D', Cabinet Office. It is hoped all Heads of Information will be able to be present, Mr Coe will be invited to attend the meeting.

Yours sincerely,

W. L. FOULDS

MIKE FOULDS
Secretary, MIO

9 September 1983

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THE POTENTIAL FOR NEW TECHNOLOGY
IN THE INFORMATION SERVICE

Central Office of Information,

August 1983

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1. INTRODUCTION

1.1 The survey was carried out at the request of the Chief Press Secretary to the Prime Minister, following discussions on new technology at the meeting of Information Officers (MIO). The main aim was to investigate the potential for new technology in the information service. Secondary tasks were to look at the possibilities for transmitting press releases electronically to the media and to consider the question of public access to computerised departmental databases.

1.2 Detailed discussions have been held with all departments represented at MIO, with a number of other departments, with media organisations and with private computer firms. The report concentrates on the work of press offices but, where relevant, includes references to publicity, writing and other units in information divisions. I am grateful to all those who have given me their time and in particular to representatives of the Central Computer and Telecommunications Agency (CCTA) and to COI colleagues, for their technical advice.

1.3 From my initial discussions and from reading various reports I came to the conclusion that one of the main reasons why several experimental information technology schemes had not been very successful was that the needs of the people involved in the schemes had been squeezed to fit in with the technical capabilities of the equipment (usually viewdata) being used. The result of making needs subordinate to means is that people have to continue to rely on existing methods for too large a proportion of their work, interest in the new equipment wanes and eventually the system can become a hindrance rather than an asset.

1.4 I believe it is essential for any new system to be capable of enabling the information service to carry out a high proportion of its most crucial tasks more effectively. And as I was assured by more than one

expert that the technology is available to do a wide range of tasks (assuming that organisational, institutional and financial problems can be solved), this is the basis of the report.

- 1.5 On CCTA's advice as much detail as possible has been included so that, should a professional consultancy firm be appointed at a later stage, it will start with a reasonably clear picture of information service operations. But the information technology field is vast and constantly changing, and I am conscious that a great many more facts could have been included.
- 1.6 During the survey a report was circulated which is very relevant to this investigation. The report - "Making a business of information" - prepared by the Cabinet Office Information Technology Advisory Panel, is unpublished at the time of writing but is being considered in a number of departments.
- 1.7 The main thrust of the report - which is directed as much to the private sector as to government - is that information is a valuable national resource which should be much more actively exploited. It suggests many ways in which this could be done and although it concentrates on the commercial aspects of information supply the implications for the information service are considerable, including possible effects on departmental and media relationships.
- 1.8 Information divisions are currently responsible for handling the bulk of the official information which reaches the press and public. If the dissemination of information was handled on the scale and in the manner implied in the Advisory Panel's report the information service role would certainly be affected. Its efforts could either be diffused (with effects on policy presentation etc) or - if it had the equipment - its role could be considerably enhanced.

- 1.9 Also, the more that information is passed directly from Government (or, indeed, from any organisation) to the public the less important becomes the role of the media. This can be seen happening now with television, where broadcast programmes are being watched by fewer people because of the growth of videocassettes.
- 1.10 There are also bound to be questions about who should receive information free of charge and who should pay for it. Already, the growth of electronic "information providers", particularly in the financial field, often makes it difficult to decide between "true" media and normal commercial enterprises.
- 1.11 The Advisory Panel's suggestion that Government should use its role as a major source of information to persuade private businesses to accelerate the installation of IT systems (in order, for instance, to be able to receive official facts and figures electronically) is very relevant to the media. If newspapers, radio and television were told that they could either have a press notice in an hour by car, or receive it in 30 seconds electronically it might well persuade managements to greater efforts with new developments.
- 1.12 The Panel, like the Report of the Independent Review of the Radio Spectrum 30-960 MHz published on 27 July, suggests that there is a need for one Government department to be responsible for all aspects of information technology to prevent unco-ordinated and piecemeal developments. And in this respect it is interesting to note that there does not appear to be any other comparable interdepartmental survey in hand or planned at present. The nearest study concerns possible departmental links with FCO's integrated office system, FOLIOS, but by no means all departments are involved. It means that if the system outlined in this report was installed, the information service would possess the only interdepartmental computer network in government.

2. SUMMARY OF MAIN CONCLUSIONS/RECOMMENDATIONS

- 2.1 In many ways the information service is an ideal candidate for new technology. Its numbers are relatively small; it handles large volumes of paper; it has a high percentage of staff who are already accustomed to keyboards (on typewriters); it operates in a fast-moving field; it is widely dispersed, yet needs to present government policies in a co-ordinated fashion.
- 2.2 Departments, industry and commerce (including PR agencies) and parts of the media have already introduced new technology and plan further developments. Unless the information service follows suit it may find it increasingly difficult to operate effectively.
- 2.3 For the purposes of introducing new technology there are advantages in regarding the information service as a single entity, installing the system as a network with fully defined common operating standards, and financing it centrally. This approach is likely to be more effective than, for example, a recommendation from the centre that all departments should introduce a system as soon as possible. The system will need to be sufficiently flexible to meet variations in departments' needs.
- 2.4 At present no information division is so far advanced in its planning that it cannot await the outcome of this report, but this position is unlikely to last for long and if departments develop their systems piecemeal there are certain to be problems of equipment incompatibility, and the benefits of networking maybe lost.
- 2.5 Whatever system is introduced should be capable of enabling the information service to carry out a high proportion of its most crucial tasks more effectively. A network of communicating word processors, linked to microcomputers, high speed printers and other equipment appears to be the best option. Everyone involved should have their own terminal (screen and keyboard).

- 2.6 The systems discussed in this report are potentially vulnerable to outside interference. Some experts consider the risks to be slight, but they do exist and it will be for the proper authorities to assess them, together with the counter-measures required.
- 2.7 The training of staff to operate the system is unlikely to present major problems but it is worth considering whether, as an interim measure, groups of press officers and others should attend new technology courses at the Civil Service College.
- 2.8 If an information service-wide network is introduced there is likely to be a need for a permanent systems supervisor to be responsible for the maintenance of the equipment, advising on training and keeping divisions up to date with the latest developments. MIO might also wish to establish a system for monitoring new uses which individual divisions find for their equipment so that "best practice" can be followed throughout the service.
- 2.9 There would be advantages in any information division which is not already being consulted by its department about new technology developments to make known its interest.
- 2.10 The system proposed would make possible the electronic transmission of press releases to newspapers, radio and television but there will need to be changes in the way press offices operate and there are implications for departments and for the media which need looking at in more depth. There is likely to be a changeover period of several years during which three kinds of delivery system will be required. Some parts of the media will be able to receive releases directly into their computers, some will use an interface between existing teleprinters and computers and others will continue to require hard copy deliveries by hand.
- 2.11 Several departments are already charging non-media outlets for copies of press notices. There is scope for marketing much of the information

service's output by putting the details on to departmental databases and offering access to organisations (there is unlikely to be much interest from the general public). In the longer term, the ease with which organisations and the general public will be able to obtain information directly from departments could dilute the role of the media.

- 2.12 It is unlikely that the system proposed will result in any staff savings, but it should enable an information service which has been reduced in size to carry out its work much more effectively. There will, of course, be less need for messengers, typing capacity will be increased and there will be savings in such things as paper and envelopes. The network could also become a showpiece for demonstrating British technology to overseas governments, and might have considerable export potential.

3. CURRENT SITUATION

3.1 Before considering the potential for new technology in the information service it was necessary to establish what equipment individual information divisions have now and what they are planning. It was also important to take into account systems in use or envisaged in the rest of their departments and how the information division fits into the picture.

3.2 A survey involving 21 departments is bound to reveal variations - sometimes quite large - in resources and in approach, but there is also a good deal of common ground.

In addition to standard equipment such as typewriters and telephones a typical information division has a number of televisions (at least one of which can receive Ceefax and Oracle), video and audio recorders, a photocopier and a PA/Reuters printer. It also has access to a facsimile machine, telex and word processors, but often these are some distance away and the press office does not have priority for using them. Another problem is that the staff who operate the machines often leave the office as early as 4 pm - when press office needs may be greatest. Consequently, the equipment is not used as much as it might be.

3.3 Extensive use is made of the TVs and recorders for off-air recording. Some divisions automatically monitor all the main news and current affairs programmes while others make pre-set recordings when they are aware that an item of interest to their department is to be broadcast. Transcripts are either done by the press office or ordered from private firms or from COI. Sometimes the actual tape is played back to a minister or official.

3.4 All information divisions have given some thought to how they might use new technology and several either have experience of trial schemes or have drawn up quite detailed plans for the future.

- 3.5 The Ministry of Defence, for example, established a viewdata system during the Falklands war to provide a bank of information for journalists and press officers. The information, which was continually updated, covered each day of the war and included details of ships and other equipment as well as statements on the major events, and other facts and figures. It was a useful self-briefing tool for reporters (although it is interesting to note that it was better used by foreign correspondents, notably Americans, than by the British press), and provided a rapid-access filing system for MOD staff in dealing with queries. It is estimated to have saved MOD from having to answer at least 10,000 telephone calls. The system, which uses GEC computer bureaux facilities, is still operated by the press office. In addition to Falklands information it contains such details as the names, addresses and home telephone numbers of staff and press contracts. However, pressure of work often means that it is difficult to keep the information right up to date and there are only three terminals between ten staff. The Department of Energy also used GEC viewdata during the run-up to the threatened strike by tanker drivers. A complete list of all filling stations at which approved users could get petrol was entered into a database. Had the strike gone ahead this information would have been transferred to Prestel for general release. The data is now stored on disc and can be reactivated and updated if necessary.
- 3.6 The Department of Industry (pre-DTI) press office was included in a departmental viewdata experiment (now ended). Among information on the system was a list showing press notices available and officials could obtain copies if required. Various statistics were also available on screen and it offered a message facility. However, it does not appear to have been very successful, possibly because too few people were on-line. The department has been considering making a bid to have teletex machines installed in the division and in a number of newspaper offices.

Teletex, which can interface with most forms of text-generation equipment, produces letter quality text in upper and lower case and operates 30 times faster than conventional telex. Messages can be prepared in advance, stored and transmitted later. They can be sent and received automatically and there are generating cost savings.

- 3.7 The News Department at FCO will be included in the FCO's planned computerised integrated office system, FOLIOS, which will enable telegrams and other information to be received, actioned and filed electronically. Possible links with other departments are being considered.
- 3.8 The Scottish Information Office and the DHSS Information Division have both drawn up detailed objectives for introducing new technology (all of which would be met by the system proposed in this report). They have been discussing their requirements with administrators (and in the case of the SIO these discussions are well advanced) but they will wait to see the outcome of the survey before proceeding further.
- 3.9 A number of information divisions now have mini word processors. These are really electronic typewriters with a limited memory and a "screen" which can display a line of up to 20 characters. The Department of Education and Science, for instance, has two of these machines and is using them for among other things - preparing and storing standardised press notices (incorporating better lay-out) and lists of correspondents and journals.
- 3.10 Finally, The Central Office of Information has a considerable amount of equipment in the way of TVs, VCRs, facsimile and telex machines, large-screen word processors and a remote conferencing unit. For some time it has had a number of micro-computers - in Exhibitions Division and at the Government Services Centre and recently took delivery of a Sperry Univac System 80 computer with, initially, 24 terminals, which will be used for

the management accounting system. The Central Film Library now has a computerised booking system. Other computer systems will be in the Overseas Visitors and Information Studies Division and there are proposals for installations in other divisions. COI will also shortly install a computerised message switch, which will be capable of handling text electronically as well as on normal telex, and is planning to replace its standard telex network with teletex machines.

- 3.11 Divisions vary in their knowledge of what computer systems their departments have or are planning. Some are an integral part of the department's overall scheme, either because they were invited to become involved or made known their interest. Others have hardly been brought into the picture at all. But there is little doubt that most departments are planning substantial expansion of their information technology capacity.

4. SUGGESTED SYSTEM

4.1 The main requirements of any computerised system are that it should:

- be capable of assisting with a high proportion of the work of the press office and those directly associated with it;
- have considerable flexibility;
- be simple to operate and reliable;
- offer compatability with similar systems, particularly with those in other parts of government departments and in the media;
- be expandable.

4.2 A system which did not meet these criteria could cause more trouble than it was worth. During this survey I have seen and heard of examples of experimental information technology schemes which have not been as successful as expected, largely because the equipment used was not capable of handling a substantial part of the workload. Unless new technology is able to do this and to offer practical advantages over existing methods of working - as against simply doing the same job in a different way - it is difficult to see that it has a role.

4.3 Experts will advise on the type of hardware and software to be used to meet the operational requirements outlined in this report, but from general discussions with the CCTA and others there appear to be a range of possible components.

Viewdata

The main advantages of viewdata are that it is relatively inexpensive, it operates over public or private telephone systems, is simple to operate, widely available and can handle colour graphics as well as text. Its disadvantages stem mainly from the limitations of the domestic television set. Each frame can only accommodate 40 characters across the screen and 15 lines deep (about 100 words), so its capacity to handle volume text is not very good and it lacks high

resolution. Its access system can be laborious, and it would not be capable of dealing with many of the operations envisaged. Word processing and other facilities would have to be linked to any viewdata system.

4.4 Communicating word processors and other components

One of the most important advantages of a word processor with full size VDU is that it can display the equivalent of an A4 page on screen. There can be 80 characters across the screen and, by using a "scrolling" facility, up to 160 characters can be accommodated. Vertically, the screen can take 24 lines or more, and continuous vertical "scroll" is possible. This makes the word processor ideal for handling volume text. Viewdata-compatible word processors, linked on a local area network to a microcomputer, with off-screen image printers, high speed, high quality line printers and portable terminals could present a substantial package. Such a system of course would be much more expensive than viewdata. It would need to be wired into each building and departments would probably need to be linked by private wires. Staff might also take longer to learn how to operate the system. However, I believe these drawbacks are relatively minor when set against the services that could be provided by such a system. So this, very broadly, is the sort of equipment which I have in mind when looking at the system in detail. It is in fact very similar to the Xionics office-of-the-future now on trial in the Cabinet Office.

4.5 Several experimental schemes, using computer bureaux facilities, have - mainly for reasons of cost - involved a handful of terminals (screens and keyboards) spread between a large number of staff. One result is that the new technology enthusiasts monopolise the terminals and the rest

continue to rely on the old methods. I believe it is vital that everyone involved with a computer system should have their own terminal. It should be as accessible as the telephone. Imagine what would happen if six press officers had to share three telephones! And I feel sure the same problem will arise if there is a shortage of terminals. If people have to queue to enter the system - they will by-pass it.

- 4.6 The number of people on-line will vary from department to department, but I think it must include the Head of Information, his deputy, their secretaries, the Chief Press Officer, press officers, allocated typists and the office manager. Some information divisions would like outstations in London to be part of the network. For example, the Home Office in Queen Anne's Gate would want its Prisons Unit in Eccleston Square to be connected. Regional press offices should also be linked, and a case can be made for including sections like writing units, but these should take lower priority. On this basis, the total network might consist of about 300 terminals, along with the ancillary equipment mentioned in 4.4. The figures relate to the UK only. I have not seen it part of the brief to consider overseas links, although MOD, for example, would very much like to have computer contact with information staff abroad, particularly in Germany, Cyprus and Hong Kong, and MAFF have suggested a link with UKREP in Brussels. Apart from any other considerations, the security problems would be considerable. However, the system proposed should be capable of accommodating such links at some time in the future. Although this is a large amount of equipment, it would be serving every major department and giving them very advanced networking facilities. Compared to some private installations it would not be particularly large.

4.7 With each information division having the sort of system outlined, and with each department linked to each other in a network, the system could be used for:

- Press notices
- Ministerial speeches/statements
- Press Office briefing notes
- Storing and updating lists of specialist journals and correspondents
- Internal lists of all kinds
- MIO diary and other diaries
- News summaries (including in particular the No 10 press digest)
- Passing text and messages of all kinds between departments
- Transmitting releases to COI regions for onward distribution
- Filing/retrieval
- Receiving Lobby briefing notes
- Receiving press digests and other information on screen during emergencies
- Preparing text for articles/leaflets
- Establishing a temporary, separate database in emergencies
- General correspondence
- Linking up with departmental databases
- Transmitting press notices to the media
- Offering the public access to press notice details etc, possibly for a fee

These tasks, which are not necessarily listed in order of importance, are examined in detail in section 5.

4.8 It is by no means an exhaustive list. Individual departments would have their own special uses for the system. No 10, for instance, would want to be able to compile the White Paper list on screen and transfer it to

COI headquarters or to regional offices for distribution to provincial editors. The list could also be made available to all departments. The Scottish Information Office would see royal visit schedules, tours information and ministerial biographies being included in the system. Some departments might welcome the ability to access directly the Parliamentary On-line Information System (POLIS). And no doubt there would be many more ways in which the equipment could be used. Some departments might make use of all the options available, while others would be likely to use some functions regularly but others sporadically, or not at all. The key point is that the system should have the capacity and flexibility to cope with varying demands.

- 4.9 Some items would be on a "broadcast" basis. For instance, any department would be able to call up the MIO diary on screen at any time. Other items would be in a "closed user group" - only available to an individual department, unless it wished to make the information available to other departments. For instance, one information division could not automatically "look" at another press office's briefing notes.
- 4.10 Although it would be technically possible for all information staff to have terminals at home, from which they could access the database, it would mean nearly doubling the number of units, and the cost seems out of proportion to the likely benefit, particularly when, as we shall see later, there are limitations on the system's usefulness as a simple filing system. An alternative would be to supply one or two key people with this facility.
- 4.11 A more viable extension to the system would be for each information division to have one portable terminal, which could be useful on ministerial visits to the regions and in emergencies. For example, if there was an oil rig disaster, the press officer dispatched to the

emergency control point could take the portable terminal with him. By connecting it to a power point and a normal telephone he would be able to feed back information directly into the department's computer, where it could be called up on screen for press briefings etc.

4.12 The Welsh, Scottish and Northern Ireland Offices would be anxious to have a system which did not prove too expensive in terms of long distance telephone or data transmission links. At the same time these departments could benefit from the fact that press notices which are at present sent on facsimile to London and have to be retyped could be transmitted on screen and produced automatically on the word processor.

4.13 The system, it should be stressed, would not replace the telephone. There would also obviously still be a need for press conferences and briefing of individual journalists. Information officers who prefer to prepare their drafts in longhand or dictate them to a typist would still be able to do so. The computer can provide more effective ways of assisting with many tasks, but for some things the traditional methods will be preferred and may be more efficient.

4.14 The size and sophistication of the network would mean that it would require regular maintenance and a systems supervisor would need to be appointed. He would have overall responsibility for the system, for training advice and for keeping MIO up to date on new developments.

4.15 I believe it is important that careful thought is given to the screen colour and text. Some experts suggest that green on black, or gold on dark brown are best because they cause less eye strain. This may be so, but I believe a strong case can also be made out for black text on a white background. For somebody used to a paper-based system, coloured background and text can look slightly unreal, whereas black on white

looks exactly the same as the printed page the user has left behind. People might adapt much more easily to a new system if it looked similar to what they had been using for years. However, the question of possible increased eye-strain would need to be considered.

- 4.16 In addition to the equipment mentioned earlier in this section I think each press office should have its own Group 3 facsimile machine. Most offices at present have access to a facsimile, but they have no priority over its use and often it is in a distant part of the building. Also, too many facsimile machines in government departments are Groups 1 and 2. While these machines were good when they were introduced they no longer offer the speed, quality of transmission and other facilities of a Group 3.
- 4.17 Departments' current methods of monitoring and recording television and radio programmes were summarised at 3.3. Several information divisions have asked about the possibility of establishing a central monitoring and recording unit, which might be able to transmit recordings onto tapes in individual divisions. Technically, this is feasible, but there are several reasons why it is difficult to see such a system being set up. Firstly, not all departments see the need for a central unit, particularly those which have efficient recording units of their own. Secondly, departments have already invested in a lot of equipment and several are now expanding their systems quite considerably. It is difficult to see this equipment not being used if a central unit was established, in which case there would be duplication. Thirdly, although some of the private firms which are used give a reasonable service, they do miss many items which would be of interest to departments - and there is no reason to think that a central unit would fare any better. The fact is that it is extremely difficult - if not impossible - for anyone not involved with the day-to-day work of a department to be aware of all

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the things which are of interest to it. But in any event a central unit would probably have to be a private concern because of staff constraints within the civil service. I understand there are a number of firms which are now considering more comprehensive monitoring and recording services and it will be worthwhile to keep in touch with these developments.

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5. THE SYSTEM IN OPERATION

5.1 This section looks at the way in which different tasks could be carried out in practice. It describes the main possibilities, which are concerned both with increasing efficiency within information divisions and improving the flow of information between divisions.

5.2 Press notices

Press notices are prepared in various ways. Working from material provided by a policy division a press officer may write or type the notice himself and then send it to a minister or official for approval. Or he may give his original to a professional typist, so that a better quality draft can be prepared. On other occasions a press officer edits a divisional draft, ready for typing. And in some cases the policy division passes a completed notice to the press office purely for their information before dispatch.

5.3 Where and how press notices are prepared would be very relevant to the proposed new system. If a notice was entered into a terminal by a press officer or by a professional typist in the press office, it would be automatically in the system and capable of being manipulated. But if it was handled in another part of the department which was not on the network, the flexibility and potential of the system would be reduced. For this reason it would be desirable for the final preparation of all press notices to be handled in the press office or - if this was impossible - for any central typing pool which was used to have one terminal specially for press notices.

5.4 When a press officer switched on his terminal the main index would appear on screen. On his keyboard he would select the press notice mode (which might be listed as 'Text input' because it would be available for a number of similar functions). He would then have a blank screen on which

he could construct his notice, as with a normal typewriter. Regardless of whether he was an expert, or two-finger typist, there should be no difficulty. Indeed, the fact that text can be corrected and moved around at will can be very satisfying and means that even a moderately competent typist can often produce a perfect draft.

5.5 When the draft notice was completed, a hard copy could be taken off screen on one of the image printers in the press office and be sent for approval. When it was returned, the press officer would call up the draft on screen again and make any necessary alterations. There would be no need to use 'Snopake' or to re-type the entire release. He could then instruct the machine to produce a final hard copy on the office high speed printer, ready for copying and dispatch. Equally, all the above work could be undertaken by a professional typist, or it could be a joint effort.

5.6 There would be several other options. Anyone else on-line in the information division could see the notice by calling it up on their own screens. Another department's agreement might be needed in connection with certain phrases or statistics in the notice - it could be made available to them on screen and changes settled over the telephone and made by the originating department. The No 10 press office might ask to see it urgently for a Lobby briefing - they could retrieve it on screen and take a hard copy. The notice could also be entered into the computer file, with the heading being automatically added to a central press notice index. (Filing in general is looked at in more detail later). And it could be transmitted electronically to the media via COI's computerised switching system and made available to organisations authorised to access the database (see section 6 and 7).

5.7 Ministerial speeches/parliamentary statements

With speech-extract press notices all the procedures and options mentioned above would apply. However, the system would also be able to deal with problems caused by the fact that some private offices have to prepare speeches and ministerial statements in "jumbo" type, with lots of white space. To copy and distribute the full text of such a speech takes a lot of time and paper and it can be unpopular with correspondents and sub-editors. If the speech was typed on a word processor (in whatever type size the minister requires) and simultaneously recorded on cassette, the cassette could be fed through the press office system and the speech printed out in smaller type and single spacing. This assumes of course that the private office either has a compatible machine or is prepared to use press office equipment for preparing some speeches. Speech writing units would find the system very useful because they would be able to store "standard" speeches and "tailor" them on screen for particular events or audiences.

5.8 Press office briefing notes

The same system would be used as for press notices, and all those on-line in the division would be able to call up on screen briefing notes by - for example - day, week, month, year, or make items available to other departments.

5.9 MIO Diary

Compilation of the MIO diary is not onerous as far as individual departments are concerned, but it does take up a good deal of time in the No 10 press office. At present, each department fills in its entries on a diary proforma and sends it to No 10. When all the information is in - normally on a Thursday - a No 10 press officer collates the entries and makes various style and other changes. The diary then goes to the

Cabinet Office typing pool for preparation on a word processor, comes back for checking and corrections and goes back again. When the final version is returned to No 10 copies are run off and distributed, sometimes being received by heads of information only just in time for the Monday meeting of MIO.

- 5.10 With the new system, each press office would call up the diary proforma on screen, input their entries and clear the screen. On Thursday, No 10 would call up the diary and all entries would have been collated in the correct sections by the computer. If some departments had not filed their information they could be telephoned and asked to input it. No 10 could then make style changes on screen (there should be far fewer because a common system would be in use) and run off a perfect copy on their high speed printer. There would be no need to distribute the diary because each department could retrieve it on screen and take its own copies. Another advantage would be that the diary could be permanently on the system, be updated daily and accessed whenever necessary. Other diaries, such as the long term diary produced by No.10 could be handled in broadly the same way.

5.11 News summaries

News summaries prepared on the system would probably be available earlier and more clearly presented. There could also be an arrangement for giving departments earlier warning of No 10 interest in particular subjects. The No 10 press digest could be broadcast and available on screens in all departments by about 9.30 am. Starred items in the digest could indicate that No 10 would be looking for guidance on these stories for the 11 am Lobby briefing. Responses could be put on screen (particularly if statistics were involved), although press officers would probably still want to discuss the matter on the telephone because it might be difficult to express the nuances of a position on screen.

5.12. Lobby briefing notes

After the morning Lobby, No 10 tries to let departments know of anything which arose concerning them, but because of pressure of work this is not always possible. However, this problem could be eased if a note of the Lobby briefing was prepared on the system and broadcast to all departments. No 10 could retain the notes in the computer file.

5.13 Store/update lists of specialist journals and correspondents

Most information divisions maintain lists of specialist journals and correspondents, which require constant updating as people move, magazines close or new titles appear. To keep such lists on computer (some departments are already handling them on word processors) would be much more efficient. The lists could be altered more easily and perfect, up-to-date hard copies could be run off at any time. Labels could also be printed and the home addresses and telephone numbers of contacts and similar information stored.

5.14 Transmit press notices to regional offices

At present, if a press notice is to be given a regional distribution, most departments post bulk supplies to COI regional offices. With luck, the material will arrive the next day, but, because of deficiencies in the postal service, it is often several days before it gets through.

Ideally, notices should be dispatched at least three working days ahead of the date when the announcement is to be issued in London, but this is not always possible because of the processes through which the notice has to pass. The result is that the regions cannot be provided with the same service which is available to the London media. However, with the new system material could either be transmitted direct to those media capable of receiving it or to COI for printing in the regions. It would also

make it easier to give the notice a regional "nose". COI would be able to do this on screen. At present the notices would still need to be posted to most of the regional media, but over the next few years more and more newspapers and broadcasting organisations will be geared up to receive material directly into their computers.

5.15 Use in emergencies

The system could be an extremely powerful tool in emergencies. In what could be a fast-changing situation it would enable the key departments involved to exchange information rapidly; COI regional offices could provide press reaction reports and other details on-line; it would be possible to establish a separate database covering the emergency, which could be dispensed with once the difficulties were resolved, and as mentioned in the previous section, situation reports could be fed in via a portable terminal. [The Civil Contingencies Unit's participation in a planned viewdata experiment involving two regions is likely to provide interesting feedback about the potential for electronic systems in this kind of situation.]

5.16 Filing/retrieval

Although this is potentially one of the most valuable aspects of a computerised information system, it is generally agreed to be one of the most difficult to handle satisfactorily. The ability to retrieve rapidly an item of information usually depends on having a "key word" system so that the same information will be displayed using different, but related key words. For an expert - a trained librarian for example - this poses few problems, but it is doubtful if many information divisions have the staff to set up and maintain a reliable, comprehensive filing system on computer. One can only get out what is put in, continuous updating is required, and not only has the information to be input correctly but press officers and others who need to access it must know how to search the database. In any event, it would be extremely difficult - if not

impossible - for any division to transfer its existing files to computer. At best we are talking about filing information received from the day the computer is installed. If all original material was in data form or capable of being transferred into data form by Optical Character Reader/Recognition (OCR), which requires a common type-face, the situation would be different. But given the fact that an information division in the main "processes" material received from all parts of the department, such a co-ordinated approach is probably many years away.

5.17 However, there is a great deal of information which, in my view, could be filed and kept up to date very simply and retrieved easily. Filing would mainly be concerned with indexing such things as:

- press notices, by heading, by day, week, month, year
- press office briefing notes, as above
- ministers speeches, by name of minister, by week, month, year
- lists of specialist journals and correspondents
- internal lists, such as staff names, addresses and home telephone numbers
- statistical indicators
- information filed during an emergency

There are probably similar things which could be handled. The first three items in the above list could be filed automatically by the computer, or at least with very little effort by the press officer. Other items could be input by clerical staff. It would be important to show on screen the date when the information was last updated and it would be for each department to decide how long items remained in the database.

5.18 At present, other material will probably need to be filed manually, but in the future electronic filing seems certain to become easier. And if there was a central departmental database containing statistics and other information which the press office required it would be technically possible to access this from press office terminals. It would also be useful if one department could authorise another to access its database.

5.19 Other uses

There are a large number of other tasks which could be undertaken on the system. It would be used for general correspondence (replacing existing typewriters) and would be particularly suitable for "personalising" standard letters; it could handle any major exercise involving contributions from all, or a large number, of departments. For example, non-attributable background notes for the Queen's Speech could be compiled on the system, producing a more uniform style; texts of all kinds could be passed between information divisions, including urgent messages which needed "broadcasting"; there could be an interface between the PA/Reuters printer - which many press offices possess - and the computer so that story headlines could be looked at on screen and full text called up only if required; the Parliamentary On-Line Information System operated by the House of Commons Library could be accessed directly (POLIS contains details of 120,000 documents such as ministerial statements, debates, PQs, details of new legislation etc dating back to 1980); it could be used to prepare text for leaflets, factsheets and articles, and the "White Book" (public relations, information and press officers in government departments, public corporations etc.) might be maintained on the system and kept right up to date.

6. ELECTRONIC TRANSMISSION OF PRESS NOTICES TO THE MEDIA
- 6.1 Part of the brief was to look at the possibility of departments being able to transmit press notices and other material electronically to newspapers, agencies, radio and television. This is a vast subject, which would really require a separate survey to do it justice, but I have tried to at least gather together some key points.
- 6.2 Most agency copy (eg PA, Reuters) is wired to subscribers, and Reuters offers a number of electronic news services. Universal News Services (UNS) which has been in the telex field for many years, launched its Unitel service in 1981. Via Prestel, this feeds provincial papers and broadcasting stations with news of local interest. Information divisions on the other hand rely very heavily on hand delivery, although some departments now have press notices on Prestel and the Department of Industry (as mentioned in section 3) has been considering putting Teletex machines into newspaper offices.
- 6.3 Notices are handed out at press conferences, collected by individual journalists or made available in the press gallery of the House of Commons. But the bulk of the traffic between departments and the media is carried by COI's News Distribution Service (NDS) which delivers by car over 7,000 notices a year in London (a further 3,000 are distributed in the regions). NDS "runs" take in the offices of all the main media in central London. Increasing use is being made of COI's Fast News Service, which is a telex service to the major press outlets, but at present it accounts for only a tiny proportion of total output.
- 6.4 It seems highly likely that, for the foreseeable future, some material will always need to be delivered by hand. Bulky reports, tables of statistics, diagrams and photographs for instance, which may accompany press notices, do not lend themselves to electronic transmission under the system envisaged (although technically it is all possible). But the

vast majority of NDS traffic is not of this kind; most press notices are only a few hundred words long and can be handled very easily electronically. And there would be several advantages in distributing material in this way: over the years, the number of names on the NDS distribution lists have increased, traffic conditions have worsened, printing deadlines are earlier and new media organisations (eg BBC Breakfast TV, Channel 4, TV AM) tend to be based further out of the city centre, which often makes it difficult to reach them in the time available. To an electronic transmission system, traffic jams, distant locations and numbers involved present no problems.

6.5 Whereas until recently the media did not seem to be making much progress towards being able to receive press notices electronically (leaving aside standard telex), there is now significant movement in a number of areas.

6.6 I had discussions with the Newspaper Society (for the regional press), the BBC, Times Newspapers Ltd and the Press Association, which together are reasonably representative of the industry.

6.7 Broadcasting

Perhaps not surprisingly the broadcasting media is well advanced with computerisation. The installation I saw (along with representatives from the No 10 press office and from CCTA) was at BBC Breakfast Television, but similar systems are also operated by Channel 4 and by TV AM. The BBC's Electronic Newsroom System (ENS) which was part-funded by DTI is very impressive, and in fact does many of the things the information service system would be expected to do. There is a diary, which can hold information 365 days prior to transmission. It is sub-divided into 30 categories and by keying in the subject and date the system feeds the information required within seconds. There is also an electronic store in which any story ready for transmission can be filed and extracted for use on the show, and a facility which enables technical information (such as running order and shot list) to be displayed alongside the story.

Producers now type their own camera script, and executives can move, exchange or drop items on screen until they are satisfied that they have the right "mix" for transmission. The BBC have estimated the saving in typing time and paper alone at £90,000 a year.

6.8 But the most interesting aspect of the system as far as the information service is concerned is the method of handling agency copy. There is a bank of teleprinters - one for each of the main agencies - and an interface between the teleprinter and the computer. This means that the news editor can key up on screen story headlines from PA, for example, and full text if he wants it. The story can be subbed on screen, looked at by other sections or entered into a script. The BBC would be prepared to consider receiving press notices from government departments in the same way. Indeed, if the information service had the sort of system proposed the material could be received by the BBC computer directly rather than via a teleprinter.

6.9 However, agency copy is generally short in length and fits easily into a screen-based system. Material from departments (which is, of course, source material from which many of the agency stories are prepared) is generally much longer. The BBC (and this applies to all the media representatives I met) would not want their system to become "jammed" with official press notices. Instead, they would like to be able to key up on screen (as with agency copy) a list of press notices available from government departments. The list would probably consist of the heading of the notice and a very short (30 words?) summary of its contents. If the news desk wanted to see the full text of any notice they would "lift" it (at a rate of 500 words in 6-10 seconds) from the department's database.

- 6.10 In order for the BBC and other media to be able to do this, some form of central switching system would be required, because it would not be feasible for each department to have a separate channel to every newspaper, agency, and broadcasting company (although direct links could be made occasionally by arrangement). Fortunately the fact that COI has already decided to install in the near future a computerised message switching system means that this would not be a problem. The equipment could be expanded to cope with all electronic transmission of text to the media, as well as being able straight away to handle a big increase in traditional telexing.
- 6.11 With the suggested system, when a press officer had completed a notice he would need to prepare separately on screen a short summary and then commit both to the central store in the message switch, via which the media would receive the information as described above. Unless the story was so important that full text was bound to be taken, the wording of the synopsis would play a big part in the exercise because in a sense it would have to "sell" the notice to news desks. If the synopsis undersold the contents of the notice, full text might not be taken; if it oversold the announcement, it would damage the press office's credibility with the media. There would also be questions about the timing of releases. Would a notice be entered into the system the moment it was ready for "publication"? Or would there be specific times in the day (as there are now with the NDS "runs") when all releases available would be displayed on screen simultaneously? There are advantages and disadvantages with these and other systems and it is an area which would need to be examined carefully.
- 6.12 There are also implications for the media. At present, they receive a complete press notice and can either throw it away without looking at it or read it through and decide on its news value. The intro (particularly

if it is a summary of a long report) may not - in the view of a particular newspaper - cover the most important points. A media organisation that relied on a synopsis on screen alone would be limiting any role it may consider it has as a "watchdog". Of course, as mentioned earlier, press notices will continue to be handed out at press conferences etc. In fact there is likely to be a changeover period of several years during which three kinds of delivery system will be required. Some parts of the media will be able to receive releases directly into their computers, some will use an interface between existing teleprinters and computers and others will continue to require hard copy deliveries by hand.

6.13 Agencies

By the time this report is completed the Press Association may have announced a new service to subscribers. Called Newsfile it will offer an alternative to what has been dubbed PA's "all-or-nothing" service which results in many subscribers (including a number of press offices) receiving thousands of words they don't want in order to be certain of getting the occasional item that is of interest to them. The new system will use viewdata. Subscribers will key up PA catchlines, bulletins (the first paragraph of the story) and then order full text only if required.

6.14 PA would like to interest government departments in a parallel service covering official press notices. Subscribers would receive this service free of charge (PA realise that the media cannot be charged for government announcements) but departments would pay a fee based on the extent to which their material was accessed. In fact at least two other organisations are currently interested in offering roughly the same service -BL Systems Ltd (whose viewdata bureau PA is using) and Public Affairs Information Retrieval Systems Ltd (who sent a circular letter to all heads of

information at the end of July). There was also an approach in December 1981 by Universal News Services, who offered to distribute all departmental press notices.

However, information service policy towards such proposals was established many years ago and has been reaffirmed on several occasions. Reviews of the methods of distributing government material were carried out in 1974 and 1978 by an MIO working party, and on both occasions the same conclusions were reached: that the major consideration was the need to retain an official news distribution service wholly staffed, equipped and controlled within the government structure. It was unacceptable that the government, especially in a time of national emergency, should be dependent upon a commercial agency for its channel of communication with the media and the public. Attention was also drawn to other disadvantages of using outside firms, including restrictions on working hours, the lack of guaranteed priority access to the service and the likely cost.

On the other hand, departments may wish to consider whether a private firm might by given permission - on payment of a fee - to market selected departmental press notices to non-media outlets, and this possibility is looked at in more detail in Section 9.

6.15 The regional press

Regional newspapers have been going through difficult times. According to the Newspaper Society over the period 1978-80 costs increased by 42 per cent, revenue by only 29 per cent and profits fell by 36 per cent. The total circulation of regional evenings has fallen by around 17 per cent since 1970 and in the last two years sales of regional mornings are down 8 per cent. Regional newspapers' percentage share of advertising expenditure has also declined. Free newspapers, on the other hand, are growing apace. There are now over 400 and they are rapidly gaining readers and advertising.

- 6.16 In response to the state of the regional press the Society recently launched 'Project Breakthrough'. Its primary goal is acceptance of single keyboarding by December 1984 and it involves an information campaign directed at managements and employees "aimed at producing a fundamental alteration in their thinking on the introduction of new technology."
- 6.17 However, several newspapers are already well advanced with computerisation - among them the Portsmouth and Sunderland group, the Wolverhampton Express and Star, the Oxford Mail, the Nottingham Evening Post and the Birmingham Post and Mail. The level of sophistication employed varies, but in most cases district offices can file copy by VDU to head office where it can be sub-edited on screen and in some cases (the Nottingham Evening Post) transferred directly to the composing room. The Lobby Correspondent of Portsmouth and Sunderland Newspapers uses a Teleram Portabubble terminal to write and transmit his stories direct to a computer in The News at Portsmouth. Such newspapers could clearly receive press notices electronically from departments in London.
- 6.18 National newspapers
On this front - as is well known - the picture is far from bright as far as new technology is concerned. Although several papers have had computers and VDUs for a number of years (in composing rooms for example) managements are limited in the use they can make of them and in the sort of expansion that can be envisaged. It could be years before there is any real progress.
- 6.19 Videodiscs
There is one other area of new technology which is worth mentioning - the Videodisc. This seems certain to have a considerable impact on the way in which information (including paid publicity) is handled. The videodisc is a means of storing moving or still pictures with appropriate

sound tracks. About the same size as a conventional long-playing audio record, it stores about 40-45 minutes of moving pictures or some 54,000 still frames, together with audio tracks. One of the main advantages of the disc is that it offers rapid and random access to specific frames. It is suggested that with the videodisc departments could offer the media - in particular television - an electronic photo library. Film or photographs of new installations, pictures of ministers, stills from audio visuals dealing with subjects like safety, and a wide range of other items could be stored on the disc. BBC and ITN, for instance, could dial a code to gain access to the store and - from an index on screen - could turn to any "page" of the disc and if necessary recover the item in their studio for use on a programme. There are clearly other ways in which information divisions can make use of the videodisc, which can accommodate so much data that computer makers are starting to use it as a memory device.

7. SECURITY

7.1 There are three types of security to be considered:

- the security of the information on the system against an unauthorised receiver;
- internal security;
- security of supply;

7.2 Security of information against unauthorised receivers

Certain types of electrical and electronic equipment emit incidental electromagnetic signals which can be received and interpreted, sometimes at surprising distances. The systems discussed here are potentially vulnerable and the risk would have to be assessed by the proper authorities, together with the counter measures required.

7.3 Classified material can only be put onto the kind of system envisaged if the security authorities agree. But in any case, the problem is not so much whether material is classified or not but whether any information is likely to be accessed by an authorised outsider. A press notice is not a classified document, but premature publication would cause problems and much of the information which would pass over the system would be sensitive at some point in time.

7.4 However, cryptographic and other protection is expensive, perhaps as much as £8,000 a terminal, with substantial follow-on costs. This would make the price of security higher than the cost of the system itself and such expenditure might be difficult to justify. Therefore, one has to consider the level of risk involved and decide whether or not this is acceptable, given the benefits of having the system.

7.5 The first point to make is that someone who wished to link into the system would need to be both technically competent and very determined. A van with an antenna (which could, admittedly, be internal) and other sophisticated equipment would be required. The person concerned would be

breaking the law and would be open to prosecution if discovered. But even if someone had the technical ability and was prepared to break the law, I am advised that in central London it would still be extremely difficult for them to break into the system mainly because of the sheer volume of electronic "traffic". To attempt to isolate one particular signal would be like trying to find a needle in a haystack.

7.6 However, outside a radius of 50 miles or so from the capital the task for the interceptor becomes easier, mainly because on long distance routes such signals would normally go via microwave and would be easier to isolate. This problem might be overcome by asking British Telecom to use a radiosensitive system, which would mean the signals taking an underground route. Given the important role that COI's regional offices could have, particularly in emergencies, it would be important for the system to be at least as secure on these long links as on the short.

7.7 It is of course a fact that VDUs have been in use in government departments for some time and carry sensitive information. For example, ECGD are putting 'Restricted' and 'Commercial in Confidence' items on their viewdata system, the Cabinet Office system handles correspondence and other material and there are many other departments in a similar position. On balance, it appears that the security risk is slight, and is seen as acceptable by many.

7.8 Internal security

To some extent press offices would need to be physically reorganised around the new equipment. For instance, it would be important for screens to be sited so that they could not be overlooked from an adjoining building. It would also be necessary to establish procedures for seeing that each workstation on the system was protected against possible tampering, by office cleaners for instance, and that the authenticity of users and information could be verified. A series of passwords

would be needed so that, even if an unauthorised person was able to activate a terminal, they would not be able to access the database. These passwords would be classified information and individuals would be responsible for seeing they did not accidentally come into the hands of outsiders.

- 7.9 Press officers would also need to bear in mind that when information was on screen it could be in view of anyone else in the room at the time. For example, groups of reporters sometimes mingle with press officers in the press office before or after a press conference and there would clearly be a risk if terminals were in use at the time.

7.10 Security of supply

If the electricity supply failed the information in the system would not be lost, but press office operations would be disrupted, unless there was an emergency generator which cut in automatically. It may be argued that the cost of installing and maintaining a back-up system would not be justified, given the fact that power failures are rare and that in any case the information service could continue to function with telephones and messengers. On the other hand, one of the important tasks envisaged for the system is its ability to keep departments in touch in emergencies - which could include a strike by power workers!

- 7.11 Finally, several press officers to whom I spoke suggested that there might be implications for them personally if they put briefing on screen rather than over the telephone. If there is a crossed line and someone happens to listen into a telephone conversation the best they have is a note of the conversation and only their word that it actually took place. But if someone intercepted - accidentally or otherwise - a message from one department to another on screen they might be able to take a hard copy. And this possibility could make some press officers wary about committing too much into the VDU.

8. TRAINING

- 8.1 Some people expressed concern at the amount of training which might be required to introduce new technology into information divisions on the scale envisaged. However, all those with experience of operating such systems to whom I spoke said that training was not a problem, particularly as everyone has their own VDU. In many cases it seems that only one day's training is needed, ideally being carried out with small groups. As with any new system, some people will pick it up very quickly while others will take longer, but the general view is that within about two weeks most people will be at home with their keyboard and screen and reasonably proficient at operating the system. Indeed, several people who started off with considerable misgivings about using a VDU have ended up wondering how they managed without it.
- 8.2 This was the training scenario at BBC Breakfast Television for example, whose Electronic Newsroom System was described earlier. Staff attended one-day training courses in groups of three, and I was told that of all those trained only one person had failed to adapt to the system. Of course, Breakfast TV was in a fortunate position. Being a completely new unit it was able to go straight to a screen-based method of working. When the same system is introduced into other parts of the BBC, which currently have paper-based systems, the one-day courses are likely to be supplemented with "dummy" exercises before the units go live. This might need to be the pattern for the information service.
- 8.3 Initial training would probably be carried out by whichever company installed the system. Afterwards, training of new staff might reasonably be expected to be carried out by existing staff, in the same way that working methods are explained now to newcomers.

- 8.4 However, on the assumption that in future information staff are going to need to be much more familiar with new technology - regardless of whether the recommendations in this report are accepted or not - it may be sensible to see whether the Civil Service College, which has an Information Technology Demonstration Suite where a range of Microelectronic systems can be demonstrated, might be prepared to arrange short courses specifically for information officers.
- 8.5 In the longer term, the information service, like the rest of the civil service, should find that new recruits are already acquainted with computers, because of the teaching programme now underway in schools and familiarity with systems in use in industry and commerce generally.

9. PUBLIC ACCESS TO DEPARTMENTAL DATA

9.1 This is another vast subject, which cannot be dealt with adequately in a wide-ranging survey such as this, but it is possible to examine a few key areas. I began by thinking simply in terms of the mechanics of "the public" having access via their TV screens to certain data on some government computers, but although this is an important field it is only one of many ways in which new technology could be used to disseminate information.

9.2 It is unlikely that databases in information divisions (assuming the suggested system was installed) would by themselves be of any real benefit to the public. If departments accept that it will not be possible to file everything in the computer, the only information in the database which might be of use would be things like the index of press notices. There are a number of private firms who are very interested in marketing such an index to non-media outlets (after the press notices had been issued to the media). These subscribers would be charged a fee for being allowed access to the information. Departments in turn could charge the firm a fee and royalties, depending on the use made of the database. A good example of collaboration between a computer agency and an organisation with text of potential interest to a wide range of people is 'World Reporter', a computer-based information service developed by the BBC and Datasolve Ltd. Using a key-word search system subscribers can receive on-line any text from the BBC's summary of world broadcasts and information gathered by its monitoring service covering 120 countries. It costs about £200 to register and £30 - £60 an hour for on-line connection, depending on the level of annual use. One computer agency has a contract with CSO for the release of computer-based data issued in press releases, and print-outs of statistical information can

be obtained from the DES computer by educational organisations, researchers and others. Also, HMSO has drawn up a contract to be used with firms interested in offering Hansard on computer. Several departments also supply copies of press notices (by post) on payment of an annual subscription. The Inland Revenue, for instance, has about 3,000 subscribers to its service and COI's Daily Index of all departmental notices issued is made available for a quarterly fee to a wide range of organisations. There is clearly scope for expanding such services, whether by computer or by traditional methods.

However, access to a list of press notices is unlikely to have much appeal to the public at large - even if they were in a position to access it. It is necessary to look beyond this and consider possible changes in the role of the information service brought about by new technology.

9.3 The general public currently receives its information about government matters via newspapers, television and radio (in editorial and advertising); through posters and leaflets; by attending exhibitions or watching films. Information divisions play an active role in getting details to the public. The publicity is targetted and presented to people physically. Even if someone is not interested in the message, they may find it difficult to avoid seeing it somewhere, because in a sense it seeks them out. This active system seems likely to continue to be the main way in which most people receive official information because it has been proved to be effective and can be seen to be working.

9.4 However, departments also deal with what might be called passive information, mainly at present in terms of documents of all kinds in libraries, citizens advice bureaux and other places. But there are also the frames which are maintained on Prestel either directly or under the COI Information Provider (IP) "umbrella". Like the material in libraries, the public has to make a conscious effort to obtain this

information. Unless they dial up the computer, the facts and figures remain hidden from view. Prestel was launched in 1979 and there are now about 15,000 departmental frames on the system (some 5,000 less than two years ago), of which 3,500 come under the COI "umbrella". In May, 1983, the "umbrella" database was accessed 55,300 times, an annualised rate of 665,000, which is nearly double the figure for 1982. There was good access to the index of 'Government Press Releases'. In terms of popularity the database is in 40th position, out of 150 main information providers.

9.5 Prestel, of course, has its critics. They point to the fact that after nearly four years there are only about 30,000 sets in use, mainly in the business sector; there has been little real impact on the domestic front. They are also unimpressed with the Prestel database and find the "search" procedures time-consuming and frustrating. Prestel, they say, has more questions than answers.

9.6 In response to this criticism a number of changes have been made or are planned: the indexing system has been improved; there has been an attempt to serve the needs of particular markets, including a trial scheme for domestic consumers in the Birmingham area and link-ups with the Nottingham Building Society and the Bank of Scotland in a "homebanking" experiment; a database of software packages and other options for Prestel users with microcomputers has been established ('Micronet'); and external computers can be linked to the Prestel network via "Gateways".

9.7 Prestel's supporters say that these developments, coupled with the natural tendency for convergence produced by the current electronics revolution and the coming of satellite and cable TV will inevitably lead to a situation where the majority of the population will have access to some form of interactive videotex within the next ten years. And if this was to happen there would clearly be enormous potential for making a wider range of government information available.

- 9.8 Changes on this scale are envisaged - and encouraged - in the Information Technology Advisory Panel's report "Making a Business of Information," which is unpublished at the time of writing but which is circulating in a number of departments. The report says that both private and public sectors in the UK need to pay much more attention to information as a commercial commodity. Those active in information supply - in publishing, broadcasting, film-making etc - should closely examine their present activities "to identify how new technology is eroding the previous distinctions between their particular interests and others with which they previously have had no contact, and should prepare business strategies accordingly." It adds: "Government holds for its own purposes huge stores of information - company records, statistics of all kinds, patents and trademarks among others. It also supplies vast quantities of news and current affairs information to the media generally. We believe that the appropriate exploitation of these information sources for the benefit of the UK information business should be an explicit policy objective." Anyone reading the report of my colleague, John Hall, Director of COI's Films and Television Division, which was prepared following his extensive investigation of the situation in North America and Japan (Nuffield and Liverhulme Travelling Fellowship) will realise that this kind of exploitation is already underway.
- 9.9 In the introduction to my report I suggested that if the dissemination of information was handled on the scale implied in the Advisory Panel's report there would be considerable implications for the information service and for the media. All the signs are that the way in which official information reaches the public is bound to change dramatically over the next few years.

10. DEPARTMENTS AND OTHER ORGANISATIONS CONSULTED DURING THE SURVEY:

Prime Minister's Office
HM Treasury
Department of the Environment
Home Office
Department of Employment
Ministry of Defence
Department of Trade and Industry
Welsh Office
Department of Energy
Department of Education and Science
Management and Personnel Office
Central Statistical Office
Department of Health and Social Security
Scottish Office
Central Office of Information
Ministry of Agriculture, Fisheries and Food
Foreign and Commonwealth Office
Inland Revenue
Northern Ireland Office
Department of Transport
Overseas Development Administration

Central Computer and Telecommunications Agency
Cabinet Office
House of Commons Library
Export Credits Guarantee Department
Central Statistical Office

BBC Breakfast Television
Newspaper Society
Times Newspapers Ltd
Press Association

GEC Viewdata Systems Ltd
Scicon Ltd
British Telecom

Central Office of Information,
August 1983

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