MT

A

Confidential Filing

Prime Minister's reception/Seminar on 2nd November 1981 for representatives of the Computer Industry

S 807

SCIENCE AND TECHNOLOGY

~~OCTOBER~~ MARCH 1981

Referred to	Date	Referred to	Date	Referred to	Date	Referred to	Date
~~27-10-81~~							
~~2.11.81~~							
~~5.11.81~~							
~~4.11.81~~							
10.11.81							
15.2.82							

PREM 19/902

Dd 533270 5M 2/78 8362633 JET

CONFIDENTIAL

VB

MR. WRIGHT

CABINET OFFICE

Government Procurement of Computers and Computer Related Equipment

The Prime Minister has seen Sir Robert Armstrong's minute of 11 February, reference A07478, covering a report on this subject by the Information Technology Secretariat. She is content with the recommendations set out in paragraph 5 of the summary of the report.

I should add that the Prime Minister commented in passing that she is surprised that there is not already a unit within the CCTA charged with the positive task of helping departments to identify possible new computer applications.

WFSR

5

15 February 1982

CONFIDENTIAL

4.

Yes - although I am amazed that such a unit does not already exist. Agree recommendations summarised in para 5 especially after so many reviews! Of report? MTD 12/2

Ref. A07478

PRIME MINISTER

Government Procurement of Computers and Computer Related Equipment

Following the reception you held at No 10 last November for representatives of the computer industry, the Information Technology (IT) Secretariat in the Cabinet Office were asked to prepare a report on present Government computer procurement policy and procedures, and on ways in which they might be improved.

2. The IT Secretariat have duly prepared a report, of which a copy is attached. This was prepared in close consultation with the Treasury and the Department of Industry and the substance of the conclusions and recommendations agreed with them.

3. The recommendations are conveniently set out in paragraph 5 of the summary at the beginning of the report. They include a number of recommendations for new action, or acceleration of previously agreed action, to simplify and speed up current procurement procedures; and they also make a recommendation for establishing a small experimental unit within the CCTA charged with the positive task of helping Departments identify possible new computer applications. This could help both to expand the use of new technology within Government and provide more opportunities for United Kingdom firms to win government business. The report also recommends early discussion with the Computer Services Association and the IT Advisory Panel of the question of use by the Government of external computer services.

4. The recommendations are sensible and, if implemented vigorously, would make a useful contribution both to more extensive use of IT within Government and to improving the opportunities for computer firms manufacturing in the United Kingdom. Accordingly, both Sir Douglas Wass, with whom I have discussed the report, and I commend the report's conclusions and recommendations to you and I should be

grateful to have your approval for them. I will then arrange for them to be implemented and for the IT Secretariat to monitor progress.

5. These recommendations, though sensible and worth bringing into effect without delay, are modest in scope, and leave room for the possibility that more far-reaching changes may be called for. I have discussed with Sir Douglas Wass the possibility of setting in hand a more fundamental review of the role and functions of the CCTA. The transfer of responsibility for the CCTA to the Treasury makes an occasion for this, but it is complicated by the number of reviews in which CCTA have already been involved in recent years, and by the fact that the present Head of the CCTA is due to leave his post later this year. Sir Douglas Wass is pursuing this as a matter of importance and urgency and has in mind that, on the basis that a successor can be identified in good time, which would mean quite soon, he should be asked before taking up the post to undertake a general review of the work and role of the Agency.

6. In the meantime there is no need to postpone action on what is already proposed and accepted, and I should welcome your approval of the recommendations in the attached report.

RHA

ROBERT ARMSTRONG

11th February 1982

12 FEB 1982

GOVERNMENT PROCUREMENT OF COMPUTERS AND COMPUTER-RELATED EQUIPMENT

(Report by Cabinet Office Information Technology Secretariat)

SUMMARY

1. Central Government spends about £90 million annually on administrative and scientific computers; the rest of the public sector spends about £140 million and MOD probably a much larger sum on computers in operational equipment. Current central Government policy is constrained by EC and GATT Agreements, under which an overt 'Buy British' policy is not possible. Current policy therefore places emphasis on the forging of close links with United Kingdom suppliers, providing advance notice of requirements etc. Outside central Government, international constraints are in general less severe; although not absent, and DOI are attempting to promote - informally - the same kind of policy. The decentralisation of much public sector decision making makes co-ordination difficult.

2. CCTA are responsible for the procurement and effective utilisation of central Government's existing and future investment in computers and related equipment. Major Departments have substantial delegated authority for developing and approving computer projects, with CCTA concentrating on major projects (eg PAYE). Following a recent review of CCTA's procurement procedures changes designed to speed up procurement and offer firms more scope for innovative proposals are to be introduced experimentally at the start of 1982.

3. Complaints from the supplying industry for both equipment and services centre on the inadequate volume and apparent lack of 'buy British' preference in Government orders. Although there is no operational justification for buying equipment in advance of true need, and financial and technological risks in doing so, the use of 'running contracts' may assist firms and the number of products so covered may be extended. Financial support from DOI under PPDS or other schemes can also

be of more direct help in the development of new products. The volume of Government orders would, though, be raised (subject to financial constraints) by more positive promotion of computer applications within Departments. The greater use of outside computer services is inhibited by such factors as the higher cost of external firms and union reaction, but there should be greater scope as the use of IT by non specialist staff increases.

4. Whether the civil benefits obtained from MOD expenditure on computers are as great as they might be is part of a much larger question, ie whether the United Kingdom gets the best value from defence procurement as a whole. Time has not permitted enquiry into this but, among others, the NEDO Electronics EDC is preparing to examine those aspects of MOD procurement that relate to electronics and IT.

5. The IT Secretariat therefore:

i. commend the forthcoming experimental changes in CCTA procurement procedures and look to their permanent implementation as soon as practicable;

ii. recommend that the DOI should pursue vigourously their discussions with other public sector bodies on procurement policy and report the outcome to Ministers, with any recommendations, as soon as possible next year;

iii. recommend that CCTA should establish within the Agency a small unit on an experimental basis with the positive task of helping departments (particularly the backward a less experienced ones) identify possible new computer applications;

iv. support the proposed issue of a new code of conduct for purchasing officers in both private and public sectors, to be prepared by DOI, and the issue of a Suppliers Guide by CCTA;

v. recommend that CCTA should discuss the use of external computer services as soon as possible with the IT Advisory Panel and the Computer Services Association and report on these discussions, with recommendations, to Ministers early next year;

vi. support an examination by the Electronics EDC of the civil benefits obtained from MOD procurement of electronics equipment and intend to pursue the implications for United Kingdom computer interests when the EDC has reported.

Cabinet Office

December 1981

GOVERNMENT PROCUREMENT OF COMPUTERS AND COMPUTER-RELATED EQUIPMENT

1 BACKGROUND

1.1 The Prime Minister expressed concern at points made by speakers at the reception for representatives of the computer industry on 2 November about the Government's procurement of computers and computer-related equipment. She asked for a short report on present policy and procedures and on ways in which they might be improved.

1.2 This report has been prepared by the Cabinet Office IT Unit in consultation with the Minister for Information Technology and his officials, as requested, and also with the Treasury, by virtue of their responsibility for the Central Computer and Telecommunications Agency (CCTA) and their wider responsibilities for Government procurement policy generally. The help of other departments has been sought in obtaining relevant information but the report and its conclusions have not been discussed with them.

Scope of the Report

1.3 The report is concerned with procurement for which the CCTA are directly responsible (ie administrative and scientific computers for central Government). In the time available defence operational procurement has not ben examined with the Ministry of Defence, though this is an important area, to which reference is made. Computer procurement is only part of a wider set of issues here. Nor does the report deal in detail with the public sector outside central Government (local authorities, NHS, Universities, nationalised industries etc) though the broad arrangements are summarised and a recommendation made for further action.

1.4 The report is accordingly structured as follows -

- Present procurement policy and objectives (Section 2);

- The current scale of procurement of administrative and scientific computers by the public sector (Section 3);

- The role of the CCTA and other Government Departments (Section 4);

- Summary discussion of the arrangements in the public sector outside central Government (Section 5);

- Analysis and discussion of criticisms by industry (Section 6);

- Defence procurement (Section 7);

2. PRESENT PROCUREMENT POLICY AND OBJECTIVES

2.1 Overall public procurement policy was reviewed in 1980, when Ministers concluded that the aim was not a "Buy British regardless" policy, but one that would stimulate British industry to be more efficient and competitive. New guidelines were issued by the Treasury in March 1981, the essence of which were -

- a new "value for money" criterion not judged solely on the basis of lowest initial cost but seeking to take into account the long-term costs and savings. Promotion of the viability and competitiveness of suppliers can thus justify additional initial cost or greater technological risk if improved value for money is expected over the longer term;

- the encouragement of "enlightened" practices (eg early notification to suppliers of possible requirements, encouragement of innovation, specifying requirements in broad performance terms taking into account their wider marketability, and informing unsuccessful tenderers of the deficiencies in their bids);

- dissemination of these instructions to all public sector purchasers.

2.2 Ministers also concluded in 1980 that the aim was to help equipment produced in the United Kingdom, not solely that produced by UK-owned companies.

2.3 CCTA seek to meet these overall policy objectives in relation to the procurement of computers by -

i. establishing a well-defined user requirement, discussing it with potential suppliers, inviting tenders from a short list, and selecting the supplier whose proposal offers the best value for money taking account of the full range of costs over the life of the equipment;

ii. liaising with the Department of Industry (DOI) and suppliers with the aims of identifying areas appropriate to development funding by the DOI, informing the suppliers in good time of forthcoming Government requirements, and enabling Government users to take into account in formulating their requirements products likely to be available from suppliers.

EC and GATT Regulations

2.4 Up to the end of 1980, HMG had a publicly acknowledged preferential policy under which large computer systems for the administrative and scientific requirements of central Government were procured from ICL on a single tender basis, subject to satisfactory price, performance and delivery. For smaller computers, the policy was to ensure that at least one system manufactured in the United Kingdom was included in the short list for competitive tenders. For defence operational requirements, MOD sought to purchase computer equipment of manufacture as far as this was practicable.

2.5 This policy could in theory have been challenged under the general articles of the Treaty of Rome which prohibit discrimination on national grounds. But computers were specifically exempted from the 1977 EC Supplies Directive which deals with the Treaty's detailed implementation, and in practice the existence of various Member States' preference schemes was accepted. However, from 1 January 1981 the exemption lapsed, and computer contracts have also had to comply with the GATT Agreement on Procurement which covers the USA, Japan and other countries as well as the EC. The new arrangements thus oblige us to procure by international competitive tender computers above a stated threshold value needed by central Government departments (and also some other parts of the public sector). Both agreements, however provide for certain exemptions eg on grounds of extreme urgency, proto-types, compatibility with existing installations, and protection of vital security interests.

2.6 The overall procurement policy set out in the Treasury guidelines has been made public, and is believed to be defensible against challenge under the EC/GATT rules. This is because the policy is directed towards "suppliers" rather than "UK suppliers", although because the vast majority of existing suppliers are UK firms the policy will mainly benefit indigenous companies. Any public indication of a deliberate preference towards UK firms would risk infraction proceedings under Article 30 of the Treaty of Rome, which outlaws discrimination on national grounds.

2.7 In these circumstances, the way to help UK firms in the computer field is to forge even closer links between them and purchasing departments, so that these firms are in the best possible position to compete for orders. UK firms can also be helped where the exemptions to the EC and GATT agreements can be applied and it is current policy to use these exemptions as fully as is judged legally defensible and practicable

3. PRESENT SCALE OF CENTRAL GOVERNMENT AND OTHER PUBLIC SECTOR PROCUREMENT OF COMPUTERS AND COMPUTER-RELATED EQUIPMENT

3.1 Reliable figures for the whole public sector are not available. Apart from problems of definition, there is no established mechanism for collating the figures for purchases outside central Government. The following table, compiled by DOI last February, gives a rough guide to the current size of the purchases of computers and computer related equipment by the public sector -

Table 1

Market Sector	Approximate Annual Expenditure on Computer Equipment at Current Prices (1) (£M)
Electricity and Gas Industries	15
Coal and Steel Industries	12
Water Industry	6
Transport Industry(2)	6
Post Office - Postal	5
- Giro	5
- Telecoms(3)	15
TOTAL NATIONALISED INDUSTRY	64
Local Government	50
Universities (and research councils)	15-20
Colleges and Polytechnics	4
National Health Service	5
TOTAL NON-CENTRAL GOVERNMENT	138-143
Central Government	90
TOTAL PUBLIC SECTOR	228-233

Notes: (1) The figures exclude expenditure on hire, maintenance and procurement of external computing services, which in the case of central Government is about half the value of actual purchases. Nor is defence operational procurement included. It has not been possible to obtain figures on this - see Section 7 below - but it is likely to be substantially larger than procurement by central Government for administrative and scientific purposes.

(2) Figure excludes British Airways and Civil Aviation Authority

(3) Figure excludes expenditure by BT on computers forming an integral part of telecommunications systems.

3.2 The figures show clearly the large market for computer equipment in the public sector out-side central Government (some 60 per cent of the total). No reliable information is available on the proportion that public sector computer procurement forms of total computer procurement in the UK but some estimates have put it at around 60 per cent.

4. ROLE OF THE CCTA AND OTHER CENTRAL GOVERNMENT DEPARTMENTS

4.1 The CCTA's role is to help departments with information technology (computers, office systems and telecommunications) in central Government administration with the aim of improving efficiency and widening policy choices. While user departments are themselves responsible for identifying their needs for computers, CCTA advise them on possible applications; exercise overall control over the development and implementation of projects (subject to certain delegation arrangements described below); actually procure the necessary hardware and software; provide specialised technical advice, and advice on computer staffing and training as required; and co-ordinate action within Government on the development of standards.

4.2 Until April 1980, CCTA bought computers and supplied them to most Departments on an allied service basis. Since then, however, repayment financing has been introduced so that Departments reimburse CCTA for the computers they procure.

4.3 In practice, the CCTA's role has developed as departments have built up expertise of their own. Since 1 April 1980, a system of delegation has operated under which certain departments, with the necessary experience and expertise, are granted delegated authority to approve a particular computer application and the arrangements for its implementation and to give financial approval within certain limits. In all other cases, departments must seek financial approval from the Treasury. A number of projects - novel or contentious projects, pilot projects, rental or leasing decisions - are excluded from the delegation scheme. The arrangements are intended to ensure that CCTA's resources are concentrated on departments' plans for large, complex or novel schemes, rather than on a large number of purchases of small value. In general, smaller departments require more advice and assistance than larger ones.

Procedures Review

4.4 A major review of present arrangements was carried out earlier this year by a consultant and a senior member of CCTA, supervised by an inter-departmental steering committee. The review's most important recommendations were for:

(i) procedural changes to improve the analysis and definition of the user problem, the examination of possible solutions and preparation of the formal case on which decisions are based; and

(ii) the experimental introduction of a fundamental change in the CCTA's procurement method, particularly for comparatively low value purchases.

4.5 Suppliers had criticised the current approach to procurement, under which departments are required to produce a formal Operational Requirement (OR) as the basis for inviting suppiers to propose solutions. They alleged that OR's were of variable quality and too often expressed in defined equipment terms rather than in terms of a user problem. This, coupled with the need to reduce the overall procurement time, led to a recommendation that in future a limited number of suppliers, settled in advance, should be sent instead a document stating the user problem and the draft contract conditions and inviting proposals. The review recommended that controlled trials should be conducted to test the effectiveness of the new procedures for lower value systems.

4.6 Departments have generally welcomed the report and endorsed the need for trialling and evaluation. Priority is being given to implementation in the procurement of small systems. This offers the greatest immediate benefits and the new procedures will be tested on a number of MOD projects from the beginning of 1982. It will not be possible to complete the trials and evaluate their results before the end of 1982, but if the preliminary findings support the case for change, CCTA intend to extend the new procedures to other departments on a selective basis during the course of the year. The MOD trial will also test the review's other recommendations

for improving performance in the initial stages of a project; the value of those recommendations is already being assessed separately on a limited number of existing projects and this work will be extended further during 1982.

4.7 An abridged version of the report, together with a CCTA commentary on the recommendations, is being prepared for early publication and distribution to interested parties outside Government. In the longer term, when the process of trialling and evaluation has been completed, the CCTA will prepare a Suppliers Guide to their procedures for the procurement of computer products and services.

4.8 It is too early to evaluate the effects of these changes on suppliers. There could, however, be substantial benefits and we strongly endorse CCTA's intention to carry out the process of trialling and evaluation as quickly as possible.

CCTA and HMSO

4.9 There is an overlap between the responsibilities of CCTA and HMSO. In brief, HMSO are responsible for buying office machinery; but this increasingly includes equipment incorporating microprocessors, and so CCTA and HMSO can become involved in purchasing the same machine for departments, depending on the use for which it is required. This is confusing to users and suppliers, and wasteful of effort and money. The problem needs to be resolved quickly and we understand that the Treasury now have this in hand.

5. COMPUTER PURCHASING POLICY FOR THE PUBLIC SECTOR OUTSIDE CENTRAL GOVERNMENT

5.1 Table 1 shows that computer procurement by the rest of the public sector is substantially greater than that by central Government itself. The main bodies concerned are local authorities, the nationalised industries, the universities and research councils, colleges and polytechnics, and the National Health Service (NHS). As a broad rule the bodies concerned are responsible for their own procurement decisions and purchases, although in some cases CCTA services are used on an agency basis to carry out the contractual work.

5.2 The precise arrangements vary. In some cases there is already a mechanism for centralised procurement. In others decision making is decentralised (eg NHS and local autorities) which makes the provision of information and the ability to influence decisions harder to achieve. Summary details of the arrangements applying to the main public sector bodies are at Annex A.

5.3 Departments were asked to bring the new policy guidelines informally to the attention of the bodies for which they were responsible and to encourage them to co-operate in pursuit of the Government's objectives. It was hoped that this would provide opportunities for co-ordinating the purchasing power of public sector bodies with similar requirements, giving informal advice to firms manufacturing in the United Kingdom that would benefit from "early discussions", identifying potential difficulties in obtaining future systems from a United Kingdom source, and so on.

5.4 Co-ordination is not, however, easy. Although Ministers are in a position, if they wish, to influence the majority of public sector purchasers - many of whom show genuine goodwill towards the policy - the organisational arrangements referred to above make it cumbersome. Moreover, there are the legal difficulties arising from Article 30 of the Treaty of Rome. Although some parts of the public sector - universities and research councils (with certain exceptions) and nationalised industries, apart from the postal business of the Post Office - are not specifically covered by the EC Supplies Directive, Article 30 would be contravened if the Government urged on these bodies a "Buy British" policy.

5.5 We have not examined in detail that part of the public sector which falls outside central government, nor have we discussed the issues in detail with departments other than the DoI and Treasury. We think, however, that with proper caution in the light of Article 30, the possibilities for more effective co-ordination of purchasing should be considered further. The DoI have already been discussing the Government's policy informally with a number of other public sector bodies. We recommend that the Department should continue to pursue this vigorously, while bearing in mind the need not to expose the Government to legal challenge, and that they should report the outcome of their discussions, with any further recommendations, as soon as possible next year.

6. CRITICISMS BY INDUSTRY OF PRESENT POLICY AND PROCEDURES

6.1 The specific criticisms of Government policy made by industrialists at the reception on 2 November may be summarised as -

- industry needs "more trade and less aid" from the Government if successful British products are to be encouraged;

- the Government should be more progressive in promoting uses and applications;

- the Government should contract out to the computer services industry a greater proportion of its requirements for computer services and systems;

- more Government contracts should be placed directly with small firms.

6.2 Some of these criticisms are linked to the more general assertion that the Government should do more to "buy British". They are discussed, with related points, in the following paragraphs.

UK industry needs "more trade and less aid"

6.3 This reflects the view that the Govenment should place more large orders by single tender to help new products get off the ground. Recent examples have been pressure from Nexos for bulk orders for word processors; and from ICL for purchases of their new Perq micro computer. It is an area in which Government are likely to continue to have problems. These include -

- bulk orders can only be placed if a need for a sufficient quantity can be identified at an early and appropriate time;

- funds are not available for purely speculative purchases against future demand;

- the earlier and larger the purchase, the greater the risk of wrong decisions that could commit Government to the acquisition of unsatisfactory equipment which is burdensome to users;

- the risk of contravening the EC/GATT rules.

6.4 Attempts have been made to solve these problems. For example, in some cases the CCTA are using running contracts from which purchases can be made as they are needed. These cover a limited range of products to meet varying needs; and they provide the accolade of Government approval and purchase, while avoiding actual expenditure before there is a need and an exclusive commitment to one supplier. Extension of this approach is being considered. Limited possibilities also exist under the DOI's Product and Process Development Scheme (PPDS) which has provided a swifter and more flexible means of assisting IT companies to bring new products to the market outside the normal purchasing rules. The DOI "micros in schools" scheme has also generated large orders for micro computers from the two British companies nominated. DOI also sponsor pilot projects designed to enable UK suppliers to gain operational experience with advanced IT systems (eg the "office of the future" projects).

6.5 Within current financial constraints, however, there is a limit to what more can be done in this way to encourage the development of new projects. An alternative approach is to consider whether more business can be generated for UK suppliers by identifying and promoting additional public sector applications. This relates to the second criticism at paragraph 6.2 above and is discussed below.

<u>More promotion of computer uses and applications in the public sector</u>

6.6 Government are criticised for being several years behind the private sector in their promotion of computer uses and applications. Comparisons are difficult but the Xerox Corporation, for example, stated recently that 1 in 4 of new employees at present had a personal computer work station and that by 1990 the Figure would be 9 out of 10. How much truth is there in the criticism?

6.7 Administrative computing in government departments has been characterised by large centralised mainframe computers handling huge files and enormous input and output volumes. Some of these installations are among the largest of their kind in the world and many were among the first. The investment required is enormous, and the implementation timescale long; they are usually of vital importance to the operations concerned. The approach is therefore based on a low-risk strategy and, because of the high costs, change is only normally feasible when economic replacement of existing systems is justified. Government installations of this scale are thus generally not in the forefront of technological development, but planning for replacement seeks to encompass up to date techniques.

6.8. These constraints apply less to medium-sized systems. The current trend is away from large centralised systems towards distributed systems, whereby staff in their own offices are linked to a computer facility elsewhere. The Government have gained considerable experience of such systems, through projects such as the Land Registry scheme, which enables staff there to deal directly with the legal profession throughout the country.

6.9 On small systems, Government departments were early experimental users of microcomputers and word processors. Initial union problems are being overcome and more equipment is being purchased as financial resources permit. More advanced office systems are not yet available for purchase from many manufacturers, but some experimental systems are in place and others are on order.

6.10 However, performance across Government remains distincly patchy, particularly in small departments with limited experience and expertise. A number of areas still operate on an outmoded basis and, finance permitting, could benefit (in terms of efficiency and service to the public) from the introduction of new technology. The Patent Office and the Companies Registration Office are cases in point.

6.11 The prime responsibility for identifying where computers should be used, and deciding to use them, must rest with departments; to centralise this entirely in CCTA would require a large increase in CCTA's resources, and go against trends towards greater delegation. CCTA have, however, taken a number of recent steps to help promote more and better use in departments.

For example :

a. Departments have been encouraged to formulate and implement speedily IT strategies;

b. CCTA have developed, with consultants, a methodology to identify work which is suitable for computers, can be converted quickly, and show early savings.

c. CCTA and the Civil Service College have considerably increased awareness training for staff at all levels from Permanent Secretary downwards.

d. CCTA are carrying out trials of advanced office systems which will provide guidance to departments in identifying suitable uses and in implementation, and also expanding their microprocessor workshop.

6.13 We recommend that CCTA should continue to develop these and related initiatives as far as their resources permit. At the same time we accept that the initiatives also depend on the availability of sufficient finance and manpower in departments to implement new systems at a time when there is a demanding programme of replacement of existing systems.

6.14 As stated in paragraph 6.11 above, however, it is not CCTA's responsibility to take the initiative in identifying where computers should be used in departments. The prime responsibility here rests with departments themselves. Although there is a risk that any change in procedures would go against the trend towards greater delegation, we think there would be advantage, particularly in IT Year, in CCTA being given a more positive role in helping departments identify possible new computer applications.

6.15 We therefore recommend that the CCTA should establish a small unit on an experimental basis for this purpose, to work closely with the IT Division of DOI. It should direct its attention particularly to those departments which have made least progress and have least experience in introducing new technology.

6.16 If the new unit is successful there will, of course, be expenditure consequences that will need to be considered in the usual way. But departments themselves will need to weigh short term financial implications against the savings that will accrue in the longer term.

6.17 Greater success in promoting applications and getting the public sector's purchasing act together should, also be seen as complementary to, and not a substitute for, continuing direct support through R&D and product development. Not all products will be susceptible to public purchasing 'trade' support and in some cases schemes such as the DOIs 25 per cent PPDS grant can provide critical help to companies in bringing new products to the market.

The Government do not show sufficient preference for British products

6.18 This criticism was not made in terms at the recent seminar but is commonly expressed in one form or another. The underlying issue has, for example, arisen in such recent major Government Computer systems decisions as the Inland Revenue PAYE system, settled in favour of ICL at the end of last year, and the current consideration of the Swansea DVLC replacement system.

6.19 It is not always clear, what is meant by "buy British". Many foreign owned companies, while remitting profits overseas, contribute substantially to jobs in the UK and to the balance of payments. In 1980, Ministers concluded that their aim was to help goods produced in the UK and not solely those produced by UK companies.

6.20 Within the constraints of the EC/GATT agreements, however, every possible effort should be made to ensure that firms manufacturing in the UK can compete as strongly as possible. We must not be less clever or assiduous in this than the French or other competitors. The EC/GATT rules still leave scope for public purchasers to develop helpful standards and specifications for their suppliers; and development projects can be promoted with help to firms from DOI funds where appropriate. These possibilities should continue to be exploited. In addition CCTA try to ensure that every opportunity is given to UK firms when shortlists of potential supliers are drawn up in procurements exempt from, or below the financial limits for, the EC/GATT regulations; and where procurements are advertised help is given to UK firms to ensure that they present their proposals in the best possible way.

6.21 It would be foolish to claim, however, that the Government could not do more to help firms manufacturing in the UK. One further way for Government to help is by more rapid and accurate dissemination of information. While firms must appreciate the realities of the constraints that apply, Government must also take more vigorous steps to ensure that they are better -and earlier - informed on the opportunities that are likely to arise and on the relevant procurement procedures that apply to them. DOI

are already considering the issue of a new code of conduct, perhaps to be published by the Institute of Purchasing Officers. We recommend that this should be pursued by DOI, in consultation with the Treasury, as quickly as possible.

More contracts should be placed direct with small firms

6.22 Part of the Government's initiative on public purchasing policy involves paying special attention to small firms. DOI are reviewing the position in the light of a recent CBI report on small firms' access to Government contracts generally. This was not specifically related to computers, but it raised a number of points relevant to the computer field. The CBI's general conclusion was that there was little evidence of positive discrimination against smaller firms and that, given the will of most departments to involve smaller firms, the responsibility for increasing their share of contracts lay as much with small firms themselves as with the Government.

6.23 No arrangements exist in central Government procurement for a set-aside programme for small firms (under 200 employees). Such a programme would contravene the EC and GATT Agreements and DOI do not advocate it. But in the computer field some activities are dominated by such companies and CCTA are taking a variety of specific steps to help them for example, about 82 per cent by value of all orders for software packages and consultancy services during the year ended 30 September 1981 were with 66 small firms; the aggregate value of those orders was £3.4 million). In addition, CCTA intend to produce a suppliers guide with details of contracts in CCTA, the range of procurement activities, and an outline of current purchasing procedures. This should be of particular value to small firms.

6.24 We therefore see no reason to recommend further action at present in this area.

Greater contracting out of Government requirements for services and systems

6.24 Government are criticised for not doing enough to give work to the computer services industry in support of its efforts to break into overseas markets. Since the main overseas purchasers of computer systems are Governments, HMG's policy is said to prevent the industry in this country gaining the experience necessary to compete for overseas markets. The position in the United Kingdom is contrasted with that in some other countries where a higher proportion of work is contracted out (in the United States, for example, the general rule is that services are contracted out unless departments can demonstrate they can do them at least 10 per cent more cheaply).

6.26 Table 2 below shows expenditure over the period 1971-81. The figures relate to expenditure by central Government departments on administrative and scientific functions, and exclude expenditure by the Ministry of Defence on operational applications. The figures show that, although expenditure on bureau type services increased in real terms over the decade (though not over the past 4-5 years), expenditure on consultancy and software house services increased only modestly in cash terms and fell substantially in real terms.

Table 2

Financial Year	Expenditure on bureau type services £M	Expenditure on consultancy and software house services £M	Total expenditure
1971/72	1.03	2.8	43.87
1972/73	1.14	2.23	3.37
1973/74	2.06	2.77	4.83
1974/75	2.64	4.29	6.93
1975/76	3.30	3.22	6.52
1976/77	4.15	2.67	6.82
1977/78	5.7	3.16	8.86
1978/79	5.18	3.12	8.30
1979/80	6.47	2.71	9.18
1980/81	7.0	3.50	10.50

These figures do not, however, include expenditure on projects where the software industry has been employed directly to provide total systems, or where one firm has sub-contracted to the software industry an element of the total requirement. It is difficult to disaggregate figures for work such as this, but a rough estimate for 1980-1 suggests it is in the order of £1m. Such expenditure is likely to increase substantially, particularly if departments are able to develop an increasing number of small cost-effective computer applications.

6.27 The use of the software industry has shown a marked change over the 10 years covered by the table, the trend being away from the large scale use of programmers and junior systems analysts on a small number of projects and towards the hire of senior and more experienced consultants on a larger number of projects.

6.28 The last review of this issue within Government (part of a 1980 CPRS study on contracting out) concluded that the balance between in-house work and contracted out work was about right. But criticism has persisted and in a recent discussion the Official Committee on Information Technology noted a continuing view that Government were not doing all they could to support the export effort of the computer services industry.

6.29 CCTA have no powers of direction over departments. The latter, like many large organisations outside, normally start from the position that they should try to meet their computing requirements from their own resources.

6.30 A policy of deliberately encouraging departments to contract out a greater proportion of their requirements would face the following main problems -

(i) Cost: The CCTA have estimated that at programmer level commercial staff are 70 per cent - 100 per cent more expensive than in-house staff, with at least as great as discrepancy at higher consultancy levels. However, valid comparisons are not easy to make and a careful re-appraisal of the present financial criteria would be

necessary. CCTA's own view, based on their experience of use of the services industry, is that they do not offer increased effectiveness, sufficient to offset the increased costs.

(ii) Unions: Any substantial increase in the use of external services could attract opposition from the unions, both nationally and departmentally.

(iii) It would need to be clear that the services industry could meet the additional requirements (particularly in view of the shortage of skilled computer personnel) and arrangements would have to be made to provide qualified supervision.

6.31 There are thus genuine problems for government which cannot be ignored simply because of lobbying by the industry. But we think there is a sufficient case for exploring the options further. With the increasing use of IT by non-specialist staff in the office, there will be a lack internally of the skills and resources necessary to implement small systems projects; this will provide scope for greater use of the services industry provided there are adequate resources within departments to supervise the work. The CCTA are in fact due soon to discuss the issue with the Prime Minister's IT Advisors and (in a joint working party) with the Computer Services Association (CSA), though there are differing views within CSA on the line to be adopted. Consideration is also being given within CCTA to changes in their own organisational structure for dealing with the services industry.

6.32 We therefore recommend that CCTA should pursue the discussions with the IT Advisors and with the CSA as quickly as possible and report the outcome of these discussions, with recommendations, to Ministers early next year.

7. DEFENCE PROCUREMENT

7.1 Procurement of computers and related equipment for the Ministry of Defence for administrative and scientific purposes falls to the CCTA under the general procedures described above and currently amounts to £60-70 million annually, including consultancy services. . However, procurement for R and D and defence operational purposes is the responsibility of MOD itself, through the Procurement Executive. Precise figures are difficult to obtain, since it is not easy to disaggregate the computing or information technology elements within defence operational systems. But MOD's total annual procurement of electronic products, which extend far beyond computers, is probably now in the region of £1 billion.

7.2 It is frequently asserted that the United Kingdom does not derive adequate industrial benefits from defence procurement and technology. This criticism was made in relation to computers by several speakers at the Prime Minister's seminar on 2 November and, in its general application, is currently being considered by the Select Committee on Defence. It is also an important theme in the recent strategy report on the United Kingdom electronics industry by the Electronics EDC and may be raised at the next February's NEDC meeting which the Prime Minister is to chair. ACARD are also taking an interest in the subject. In addition, the Electronics EDC are considering a proposal to employ independent consultants to help investigate what changes in the relationship between Government and the industry are required if United Kingdom firms aim to benefit more from the United Kingdom's defence technology base.

7.3 Although procurement of computers and computer-related equipment is an important part of this problem, the issue is a much broader one and, in the time available, we have not attempted to examine it. We believe, however, that the ways in which MOD (PE) relates to its computer suppliers plays a major part in determining the international competitiveness of the companies and their ability to convert the advantages gained from defence contracting into civil business and exports. We therefore support the proposed EDC study and will want to consider its implications for computer procurement with MOD, DOI and the other Departments concerned when the results of the study are available.

ANNEX A

ARRANGEMENTS FOR COMPUTER PURCHASING BY PUBLIC SECTOR BODIES OUTSIDE CENTRAL GOVERNMENT

National Health Service

Since 1971 the Government's broad computer procurement policy has been applied in the NHS and a policy for standardisation of equipment and systems at the regional computer bureaux led to the installation of ICL 1903T/1904S equipment at 13 of the 14 regional centres. All regional centres now use ICL computers, several having bought ICL 2966's. CCTA is infrequently used on an agency basis, to give advice on technical and contracting matters connected with the procurement of regional bureaux computers and for other significant orders. However, procurement of computers and related equipment other than large regional configurations is subject to normal competitive tendering procedures. Such procurements are the responsibility of health service managers, their authorities and independent practitioners (eg GPs) and have been made from a wide range of manufacturers.

2. Under the new arrangements now coming into force, each Regional Health Authority (RHA) and its associated District Health Authorities (DHAs) will be required to produce together computing plans of their future requirements, the plans being reviewed on a periodic basis. The Authorities will allocate finance annually from their normal allocations against the expenditure forecast in the plans; each RHA and DHA will be free to determine their own scheme of priorities within their respective financial ceilings. A new NHS Computer Policy Committee (including a DHSS representative) will provide overall guidance on computer procurement, subject to national policy requirements. This Committee has been established to continue the present regional programme of standardisation based on ICL equipment, to seek rationalisation in other areas and to encourage Regions to develop forward-looking computer plans to accord with managerial and operational needs. It is expected to communicate with the NHS through RHAs. But final decisions will rest with the RHAs and DHAs themselves and direct DHSS influence on procurement decisions will remain limited (this accords with the present general thrust of policy towards greater devolution of responsibility to the individual health authorities).

Local Government

3. In general local authorities have developed their own computing independently of each other. This is in part a function of their independent status, and in part

because they have wished to develop a system compatible with their existing organisation and management framework and to tailor the system to meet their own specific requirements. A number of successful consortia have been developed which has allowed a pooling of resources, but also a degree of compromise in the systems developed. A survey in 1979 showed that most of the larger local authorities had a mainframe computer; some smaller non-metropolitan districts shared or took a service from the county council. ICL provided most of these (45%), IBM 14%, and the remainder were from Honeywell, Univac and Burroughs. The survey showed that most computer time (63%) was used for financial applications, 11% for housing and the rest for a wide variety of applications, including administration, highways, education. personnel, libraries, social services and environmental health. Local Government expenditure on computer purchasing represents about 1/5th of total public sector purchasing of computers.

4. The DOE have supported applications in local authorities through its support for the Local Authorities Management Services and Computer Committee (LAMSAC) (DOE has provided an annual grant (£400,000 in 1981-82) which is matched by a similar sum from the Rate Support Grant from local authority associations). LAMSAC is the appropriate body to co-ordinate local government activity in this area and DOE intend soon to discuss future developments with them when a current study of micro-computers in local government by them is available. But LAMSAC has no formal powers and can only offer guidance to individual authorities.

5. In general local authorities are anxious to buy British where they can but are also properly concerned to obtain value for money in procurement and they are bound, like central Government by EC regulations (though not by the GATT). The significant reduction in hardware costs and the increasing versatility of micros and mini-computers provides for a significant potential expansion of computing applications within local government. There is thus a considerable opportunity for the UK computing industry within the local government market.

Nationalised Industries

6. The procurement of computers and related equipment by the nationalised industries, which is not subject to the EC/GATT procurement codes, is not co-ordinated, as each industry is responsible for its own purchasing arrangements. There is, however, a Nationalised Industries Computing Committee on which most industries and the DI are represented and which discusses matters of common interest. It is purely an advisory

body and plays no part in purchasing; it is also a useful forum through which the Government can seek the nationalised industries view on particular computing issues.

7. As a result of the Ministerial discussions on computer procurement policy earlier this year, the DOI are currently visiting nationalised industries on an individual basis. The purpose of the visits is to obtain a better understanding of the strategies being followed in information technology by the nationalised industries, put over the Government's public purchasing policy to them, and generally create a better relationship at working level. The visits made so far have revealed that there is a disparity in the technological developments being made in the nationalised industries, the more backward tending to be those with inherited organisational problems and severe financial restrictions on investment. However most recognise the advantages of office automation whilst in computing there is a desire to use a standard architecture which British manufacturers need to offer on a competitive basis if they are to succeed in reversing the present tendency to purchase new equipment from the multinationals.

Universities and Research Councils

8. (a) Universities: Universities obtain computers through three main channels - the Research Councils (see below), the grants system, and (for large installations) the Computer Board for Universities and Research Councils. Purchases from grants are made by Universities' own purchasing officers; the Computer Board normally uses the CCTA as an agent and seeks to collaborate closely with UK industry and observe the Government's general procurement guidelines. The Prime Minister in fact agreed in October 1980 to the retention of the Computer Board subject "to an understanding that the Board will operate a firm "Buy British" policy".

(b) Research Councils: The SERC and other Councils normally use CCTA services on an agency basis and seek to follow general Government purchasing policy. They have a good record of close collaboration with industry, a recent example being an agreement with ICL to purchase their new Perq micro computers and to cooperate in a software development programme.

CONFIDENTIAL

VS

Science & Tech

10 DOWNING STREET

From the Private Secretary

SIR ROBERT ARMSTRONG

Computer Procurement

You will be aware that the Prime Minister held a reception on 2 November for representatives of the computer industry. A summary record of the discussion of the more formal part of the proceedings was attached to Mr. Unwin's minute to me of 5 November.

✗ as per recipients below

The Prime Minister was concerned at the points made by several speakers about the Government's procurement of computers and computer-related equipment. She has asked for a short report on our present public procurement policy and procedures, and on the ways in which they might be improved. She would be grateful if the Cabinet Office IT Unit, in close consultation with Mr. Kenneth Baker, would prepare the report. She hopes that it might be ready within three or four weeks.

✗

I am sending copies of this minute to John Halliday (Home Office), Ian Ellison (Department of Industry, Jonathan Hudson (Minister of State's Office, Department of Industry), Jim Buckley (Chancellor of the Duchy of Lancaster's Office) and Adrian Carter (Minister of State's Office, CSD).

MCS

10 November 1981

JS

PRIME MINISTER

INFORMATION TECHNOLOGY

I suggested that you might ask the Cabinet Office Information Technology Unit to do a quick and short report on Government procurement, in the light of the disquiet voiced at last week's reception.

You said that Kenneth Baker would know most about this subject. (Papers attached).

The reason I suggested the IT Unit was that you set them up, with their Panel of private sector advisers, to "ensure the overall coherence of Government policies towards IT, particularly insofar as they span the responsibilities of more than one Department" (Flag A). The risk of one Department, i.e. Mr. Baker's DOI, doing the study is that the Department mainly under scrutiny (in this case the CCTA) would probably be less forthcoming than if an "impartial umpire", like the IT Unit with their Panel, were involved.

Might you ask the IT Unit in close consultation with Kenneth Baker to do the report?

MCS

Yes MT

9 November 1981

File Science & Tech 855

SS

9 November 1981

Many thanks for your letter of 6 November, which I have shown to the Prime Minister.

It is good to hear that there have already been some concrete results from last week's reception. I wish you well in your efforts with Venture Capital Finance.

Best wishes.

M. C. SCHOLAR

David Young, Esq.,
Department of Industry.

010

Mr Rickett

Mr Rickett

CABINET OFFICE

Mr Scholar
Do you want to continue seeing these papers?

With the compliments of

cos
cos

c/f
file!!

J. B. UNWIN No-10

Mr Rickett
Fm now on

70 Whitehall, London SW1A 2AS
Telephone 01 233

Data Recall Limited

Registered Office: DIAMOND HOUSE, 138 SOUTH STREET, DORKING SURREY RH4 2EU
Tel: DORKING (0306) 87777 (10 lines) Telex: 859128 DIAMND G
Cable Address: DARECA DORKING

Please note change of Telephone No. for
DIAMOND HOUSE,
138 South Street,
Dorking, Surrey RH4 2EU
from Dorking (0306) 87777
to Dorking (0306) 887777

Reg. No. 879403 England
VAT No. 312 9625 66

AJS/JEG/8394/15

6 November 1981

CABINET OFFICE
Mn 513
- 9 NOV 1981
FILING INSTRUCTIONS
FILE No.

J B Unwin Esq
Under Secretary
Head of Information Technology Unit
Cabinet Office
70 Whitehall
LONDON
SW1A 2AS

COPY FOR

Copies to Mr Scholar No10
Mr Watson CCTA
Mr Atkinson DTI

Dear Mr. Unwin, 9/x1

Then File.

I was very pleased to have the opportunity of meeting you on Monday evening at the Prime Minister's reception. Although the communications industry specialises in 'protocols', I am not sure who I should thank for the opportunity of taking part in this discussion between the Prime Minister and some of her senior colleagues and the industry. Perhaps you would be kind enough to help me in the circumstances by passing on my thanks to the appropriate people.

May I say how much we at Data Recall appreciate the Prime Minister's interest in our industry and its potential for growth.

For the record, may I try and restate our point of view as in retrospect I may not have made my views as clear at the reception as I should have liked to have done. We all wish to stimulate the success of British Industry and to attack the current unemployment problem. Clearly, we must concentrate upon growth sectors of the market and therefore the development of information technology is a prime target area. I understand it is current Government policy to give support to small companies which general experience has shown provide the largest proportion of new employment opportunities.

Continued . . . Page 2

Directors: R. A. Brooks (Chairman) A. J. Sumner (Managing) C. E. Boyle J. J. Drage BSc. P. J. G. Elwes A. E. Jones
W. S. Harbison H. J. Lewis Ladislas O. Rice Bowman Scott R. D. Waterhouse

The particular sector of the industry with which Data Recall is concerned is word processing. The market for word processing in the UK is currently small particularly compared with the United States. It has been estimated that the United States market for word processors in 1981 will amount to approximately £600 million whereas in the UK it is unlikely to exceed £50 million. The position is particularly black when one takes account of the fact that some 90% of the equipment supplied to the UK market is of North American origin and the remaining 10% contains many US produced components. In their large home market American companies can establish themselves and grow rapidly to larger than a critical mass and once they have achieved this position of strength they can export to the UK and the rest of Europe comparatively cheaply.

There is a second threat to the UK industry which is posed by the development of office equipment by Far Eastern manufacturers. Their philosophy is, of course, totally different to our own and in particular they do not expect a short-term financial return on capital investment preferring to capture in the first instance significant market shares before seeking a commercial return.

Faced with this competitive situation, small companies in the UK which manufacture equipment must either be funded on a longer term investment basis than is usual in this country, have sufficient inherent financial strength to be able to attack overseas markets in depth, be given some reasonable preference in terms of public procurement in the UK, or indeed some combination of these factors.

With reference to public procurement policy in the UK, we find that in order to compete with overseas manufacturers for Government business, we have to offer significantly larger discounts to the public sector than is required in the private sector. We suspect that certain overseas companies are prepared to build their market shares regardless of cost. We recognise that as a large purchaser the Government is entitled to expect substantial discounts. However, in a market in which volumes are small such discounts may be economically impossible for small companies to achieve. To quantify the position, I believe it has been estimated that in the UK Government and Government agencies represent 50% of the total market demand potential. Over the last three years 25% of our output has been supplied to the public sector.

Most of my comments have been related to companies which have a significant involvement in manufacturing. The position is very different for software companies. The UK market represents a sufficient base upon which software companies can reach a critical mass.

I appreciate that the Government's view is that private sector companies must be able to stand on their own feet and this is a policy with which I personally agree. However, if as a country we are to have a worthwhile capability in this industry, and if that capability is to contain any small companies manufacturing equipment, we will need to make some exceptions to the general rules.

Yours sincerely

Dany Sumner.

A J Sumner
Data Recall Limited

10 NOV 198

THE UNIVERSITY OF NEWCASTLE UPON TYNE

Box

COMPUTING LABORATORY

Director:
Professor of Computing
and Data Processing:
H. WHITFIELD, B.Sc., A.R.C.S. D.I.C.

Professor of Computing Science:
B. RANDELL, B.Sc., A.R.C.S.

Telephone Newcastle (0632) 29233 *

N.U.M.A.C.
Executive Director:
Miss E. D. BARRACLOUGH, M.Sc.

6th November, 1981

Dear Prime Minister,

I greatly appreciated the invitation to take part in the seminar/reception for members of the UK information technology industry, and the opportunity to make a brief statement about the outcome of the DoI team's visit to Japan to discuss collaboration with their Fifth Generation Computer R & D project.

Questions concerning university/industry co-operation in information technology are of great interest to myself and my colleagues in this Computing Laboratory, so I was very pleased indeed to hear of your own personal, as well as the Government's, enthusiasm for the idea of setting up a Science Park in the Newcastle area. Such a plan will, of course, be welcomed by many other science and engineering departments in this University. Indeed I have been specifically asked by our Vice-Chancellor, Professor Laurence Martin, whom I believe you know, to indicate that the University is most keen to do what it can to help establish a successful Science Park in Newcastle.

Yours sincerely,

B. Randell

B. Randell
Professor of Computing Science

The Rt. Hon. Mrs. M. Thatcher, P.C., M.P.,
10, Downing Street,
Whitehall,
London.

CLAREMONT TOWER CLAREMONT ROAD
NEWCASTLE UPON TYNE NE1 7RU

*Please note that our telephone number is now (0632) 329233.

010

Prime Minister

It was obviously a good idea to include David Young among the invitees.

MLS 6/11

(2)

David Young
Special Adviser

Department of Industry
Ashdown House
123 Victoria Street
London SW1E 6RB

Telephone: Direct Line 01-212 0440
Switchboard 01-212 7676

6th November, 1981

Michael Scholar, Esq.,
Private Secretary,
10 Downing Street,
London, S.W.1.

Dear Michael,

As you know, I attended the Prime Minister's Reception for the computing industry on Monday night. During the course of the presentation, Professor Brian Randell (Professor of Computing Science, Newcastle University) expressed a view that the Universities should work very closely with the new Science Parks if they were to achieve success. I spoke to Professor Randell during the Reception and obtained his assurance that he was seriously interested.

I then invited him to meet the Board of English Industrial Estates Corporation and we met at lunch yesterday. We have now agreed in principle to work with the Universities of Newcastle and Durham and the local Polytechnic and the Chairman is now issuing an invitation to the Vice-Chancellor to propose the setting up of a joint committee to advance the new Science Park to be created on the Team Valley Estate. Since this Estate is probably one of the finest Industrial Estates in the country with over 100 acres still to be developed, and furthermore is now an Enterprise Zone, the outlook should be favourable.

Another essential ingredient is, of course, venture capital finance and this view was expressed more than once on Monday. I am, therefore, also approaching one or two suitable sources of venture capital finance to join in with us and become part of the consortium. It is also our intention to offer a complete package of services including legal and accounting advice.

I am writing because Professor Randell told me yesterday that the Prime Minister spoke to him at the Reception and expressed a strong interest in the setting up of a Science Park at Team Valley. I thought that you might care to know that this has now begun.

Yours ever

David

T Burns CO

10 DOWNING STREET

From the Private Secretary

5 November 1981

Prime Minister's Reception for the Computer Industry, on 2 November

As you know, the Prime Minister held a reception at 10 Downing Street on 2 November for representatives of the computer industry. I attach a summary record of the discussion which preceded the refreshments and informal conversations later in the evening.

The Prime Minister was concerned at the points made by several speakers about the Government's procurement in the market for computer related equipment. She has asked for a short report on our present public procurement procedures, and on the ways in which they might be improved. She would be grateful if the Cabinet Office IT Unit would take the lead on this. She hopes that this report might be ready before the end of the month.

I am sending copies of this letter and the enclosure to John Halliday (Home Office), Ian Ellison and Jonathan Hudson (Department of Industry), Jim Buckley (Chancellor of the Duchy of Lancaster's Office), John Wakenham (Office of the PUSS, Department of Industry), Adrian Carter (Minister of State's Office, CSD) and David Wright (Cabinet Office).

MS

John Kerr, Esq.,
H.M. Treasury.

SUBJECT

(1)

Prime Minister

Hn 0402

MR SCHOLAR (No 10)

PRIME MINISTER'S RECEPTION FOR THE COMPUTER INDUSTRY ON 2 NOVEMBER

I attach, as promised, a summary record of Monday evening's proceedings. As you will see, I have not attempted to record contributions in detail but have picked out what seemed to me to be the salient points (with specific attribution in a few cases.)

2. I do not think there is anything specific to follow up, but some important general points arose (eg criticism of Government procurement policies) which need further consideration. Perhaps we could have a word about these, and the handling of the record of the discussion, when you have had time to scan the attached draft.

Prime Minister

One thing that troubled me about the comments made on Monday evening was what was said about government purchasing policy — is it really geared to helping the industry (while also minimising public expenditure)? Does the government bring the industry, for example, into its thinking about specifications for new equipment, so as to ensure that British firms actually win the contract where we are forced to an open-tender situation?

If you agree, shall I ask Mr Unwin's unit to write a short report for you by the end of November on what our procurement arrangements are and how they could be improved?

MCS 5/11

J B UNWIN
5 November 1981

IT Unit
Cabinet Office

Record copied to
HO
Ind (S/S)
Ind (M/S)
Cab Off (RTM)
CDL
Min IS (S)
HMT 11.11.81
Ind (Press)

I think Kenneth Baker would know more about.

PRIME MINISTER'S RECEPTION FOR REPRESENTATIVES OF THE COMPUTER INDUSTRY AT 6.30 PM AT NO 10 DOWNING STREET ON 2 NOVEMBER

The Prime Minister briefly welcomed the guests and thanked them for attending. She suggested that discussion should focus on the three topics on which notes had been circulated, each to be introduced by one of the guests.

2. The following is a summary record of the main points that emerged in the ensuing discussion.

Topic 1: How well placed is the computer industry in the UK to take advantage of the opportunities presented by the new technology? What are our major strengths and weaknesses and how should we be exploiting/tackling them?

3. Introducing this topic in place of Mr Robb Wilmot, who was indisposed, Mr Mike Aldrich (Managing Director, Rediffusion Computers) stressed that the problem facing British manufacturers was one of change rather than decline. In other words, the basic problems were of displacement economics. Many new and innovative companies were successfully entering the market and it was wrong to catch "dinosauritis" and try to keep large obsolescent companies alive. Of course Government policies had an influence in the short term and its initiative in promoting awareness of new technologies was welcome; but in the longer term companies would succeed by looking to the future and doing their own thing. His own company's problems related to full order books rather than the reverse.

4. In discussion the following main points arose:-

(i) given the dominant position of the public sector in the market for computer related equipment, enlightened public procurement was very important if successful British products were to be pulled through. Industry needed "more trade and less aid" from the Government.

(ii) Several speakers stressed the importance of maintaining a strong manufacturing capacity in the UK. The UK already had a substantial balance of payments deficit (some £200 million) in computer related products, and the revenue to be obtained from manufacturing was greater than that from software.

(iii) Mr Saar (Managing Director, Newbury Laboratories Ltd) argued for an IT Ministry and referred to the success of the French Government in centralised control and planning. He also called for a stronger marketing approach and a more commercial attitude on the part of Government officials. The Prime Minister expressed opposition to the idea of a new bureaucracy or that problems could be solved by machinery of Government changes; and Mr Baker briefly outlined what he regarded as the Government's co-ordinated strategy for IT.

(iv) There was some discussion of Japanese experience and in particular their success in bringing industry and the universities together. Professor Randall (Newcastle University), who had recently visited Japan with the DOI team to discuss fifth generation computers, counselled against joining with the Japanese now in their ambitious 10 year research and development programme. Although we could match the Japanese with our expertise in softward and systems, we lagged behind them in micro technology and would be unlikely to get commensurate benefit from any contribution to their fifth generation computer project.

(v) Several speakers referred to the need to obtain better industrial spin-off (particularly in terms of exports) from defence procurement and technology.

(vi) The creation of a larger home market would allow UK firms to emulate the production runs of their American competitors. This 'home' market might include other EC countries if non-tariff barriers could be overcome.

Topic 2: <u>What is the best way to ensure that the UK derives the maximum economic and social benefit from the new technology</u>?

5. Introducing this topic, Mr Tony Davies (Chief Executive, Information Technology Ltd) stressed the following points:-

(i) compared with the manufacturing sector, services in Britain, particularly in the office, were under capitalised and there was therefore great scope for achieving greater efficiency and matching our competitors' service industries through the introduction of new technology;

(ii) public procurement (as argued in the preceding discussion) was extremely important, and particularly in the context of telecommunica-

tions liberalisation, the Government had an opportunity to promote more IT uses and applications;

(iii) there was a strong case for liberalising broadcasting as well as telecommunications;

(iv) the most effective way for the Government to help develop the new technology was to promote particular applications - as in the case of the DOI "office of the future" projects.

6. In discussion the following main points arose:-

(i) It was generally agreed that, as a facet of enlightened public procurement, the Government should be progressive in promoting uses and applications. Although the UK population was nearly a quarter of that of the United States, the UK market for IT products was only about a tenth. Take-up in the UK was very slow and Government encouragement and promotion was therefore very important.

(ii) Mr Roger Graham (Chairman, BIS Deltak Ltd) argued for greater contracting out by the Government of requirements for computer services and systems. Only about 10% of the business of the computer services industry at present came from Government.

(iii) Several speakers referred to the poor record of the UK in successful exploitation of technical innovations. Some called for a firmer overall lead from the Government; others referred to the need for more aggression by companies in the market place themselves. Encouragement of small companies was particularly important here. The fiscal regime introduced by the present Government was as helpful as anywhere in the world, but the Government should seek to place a larger proportion of its own contracts directly with small companies and should perhaps have a target for this.

(iv) Mr D Harris (Management Services Director, Tesco) stressed the importance of the distributive trades (which employed 1 in 8 of the working population, and a fifth of school leavers) and referred to the inadequacy of centres and advice on new technology to which small business (which dominated the distributive trades) could turn. He also

emphasised the importance of making IT acceptable to the public and ordinary users (the use of Prestel to provide information to the public was relevant here) but warned that he did not see the distributive services sector providing new jobs to offset those that might be lost in manufacturing and other sectors of industry. There were good examples for the introduction of new technology; the Department of Employment should seek these out and publicise them.

Topic 3: What are the main social and environmental aspects of the new technology to which we must pay attention if its application is to spread in a harmonious and effective way?

7. Introducing this topic, Mr David Fairbairn (Director, National Computing Centre) made the following three main points:-

(i) It was important to proceed as quickly as possible with the Government's proposals for legislating on data protection and privacy. A key issue here was the questions of establishing an independent "watch dog".

(ii) On the question of new technology and employment it was important to distinguish between the direct effects on jobs (eg in the context of manufacturing processes) and the effects in other applications where there could be a very positive impact on employment as a result of improvements in response times, quality of decisions etc. We should, like the Japanese, put more emphasis on the latter.

(iii) As the new technology developed, so did the need for more extensive education and training. Some useful initiatives had been taken, but they were still little more than pilot schemes and a great deal more needed to be done.

8. Commenting on Mr Fairbairn's first point, the Home Secretary endorsed the importance of data protection legislation and said that the Home Office were in close touch on this with the Department of Industry. The Government had declared its general intentions, but problems still remained over their implementation. For example, he did not want as fully developed or extensive an authority as the Lindop Committee had recommended.

9. In discussion the following further main points arose:-

(i) the importance of user acceptability of new technology was stressed. This meant not only promoting greater awareness - in which the Government had been very successful - but also providing practical help and advice on how best to instal and use new technology. Mr Webb (Association of Scientific, Technical and Managerial Staffs) also referred to the importance of consultation with employees and the role of new technology agreements and proper redundancy arrangements.

(ii) A number of speakers in this part of the discussion, and in the preceding discussion, stressed the importance of continuing to encourage small firms, which were the primary source of innovation. Mr Sinclair (Managing Director, Sinclair Research Ltd) in particular emphasised the vital role here of proper education and training so that school and university leavers appreciated the advantages of joining small new companies and small companies themselves were better informed of the tax and other advantages from which they could benefit.

(iii) The role of cable television was cited as a very important development for the future. It would, however, be impeded unless the present "stranglehold" of broadcasting regulation was loosened. The Home Secretary referred to the current Home Office cable TV experiments and the important broadcasting issues that this question raised. He agreed, however, that means had to be found of resolving them.

10. The Prime Minister concluded the discussion by thanking all those who had taken part, and in particular the three speakers who had introduced the individual topics. The meeting then adjourned at 8.15 pm to continue informal discussion over refreshments.

IT Unit
Cabinet Office
5 November 1981

- 5 NOV 1981

Hn 0397

Mr Rickett

For you, I think.

MR SCHOLAR (No 10)

MJS 4/11

PRIME MINISTER'S RECEPTION FOR THE COMPUTER INDUSTRY

Mr Basil de Ferranti has written to me following up Monday evening's reception and asking me to convey the attached letter to the Prime Minister.

2. As you will see, the purpose of this is to reinforce his point about non-tariff barriers to trade in Europe, and I understand he has copied the letter to Mr Rees at the Department of Trade and Mr Hurd at the FCO.

3. I should not have thought that any reply is necessary, but if you wished to follow it up the relevant Departments are clearly those referred to above and the Treasury.

4. I will let you have separately a summary note on Monday evening's proceedings.

J B UNWIN

4 November 1981

IT Unit

Cabinet Office

Duty Clerk

Science & Technology

LIST OF GUESTS ATTENDING THE RECEPTION TO BE GIVEN BY THE PRIME MINISTER FOR REPRESENTATIVES OF THE COMPUTER INDUSTRY ON MONDAY, 2 NOVEMBER 1981 FROM 6.30 PM TO 8.00 PM

The Prime Minister
and Mr. Denis Thatcher

The Rt. Hon. William Whitelaw, MP

The Rt. Hon. Sir Geoffrey Howe, MP

The Rt. Hon. Patrick Jenkin, MP

The Rt. Hon. Baroness Young

Mr. Barney Hayhoe, MP

Mr. Kenneth Baker, MP

Mr. John Wakeham, MP

Mr. John Butcher, MP

Mr. Kenneth Warren, MP

Mr. Robert Atkins, MP

Mr. Keith Wickenden, MP

Mr. Ray Whitney, MP

? Mr. Michael Grylls, MP

Mr. Richard Page, MP

Mr. Richard Shepherd, MP

Mr. Tony Grant, MP

Mainframes

Mr. R.W. Wilmot	Managing Director, International Computers Ltd.
Mr. J. Fairclough	Director, IBM (UK) Ltd.
Mr. B. Long	Vice President and Managing Director, Honeywell Information Systems Ltd.

Minicomputers etc.

Mr. D.H. Roberts	Director, General Electric Company. Hirst Research Centre
Mr. Basil de Ferranti	Deputy Chairman, Ferranti Ltd.
Mr. C.A. Davies	Chairman, Computer Technology Ltd.
Mr. J. Gow	Managing Director, Systime, Ltd.

Office Systems

Mr. M. Bevan	Chairman, Xionics Ltd.
Mr. M. Aldrich	Managing Director, Rediffusion Computers Ltd.
Mr. D. Pitcher	Director, The Plessey Co. Ltd.
Mr. D. Leighton-Davies	Deputy Managing Director, Racal Electronics Ltd.
Mr. A. Sumner	Managing Director, Data Recall Ltd.

Micros

? Mr. M.D. Fischer	Chairman, Research Machines Ltd.
Dr. H. Hauser	Managing Director, Acorn Computers Ltd.
Mr. C. Sinclair	Managing Director, Sinclair Research Ltd

Unions

Mr. T. Webb	National Officer, Association of Scientific, Technical and Managerial Staffs

Peripherals, Terminals and Data Communications

Mr. R. Saar	Managing Director, Newbury Laboratories
Mr. H.H. Brown	Managing Director, Lynwood Scientific Developments Ltd.
Mr. J.L.A. Selby	Managing Director, Trend Communications
Mr. L. Brownlow	Managing Director, Rodime Ltd.
Mr. H. Smeaton	Managing Director, Fortonics Ltd.

Computer Services and Consultancy

Mr. L. Taylor	Managing Director, Logica Holdings Ltd.
Mr. B. Reynolds	Chairman, Micro Focus Ltd.
Mr. G.M.R. Graham	Chairman, BIS Applied Systems Ltd.
Mr. R. Thomas	Chairman, The Altergo Group
Mrs. V.S. Shirley	Chairman, F International Ltd.
Mr. H. Hunt	Managing Director, PA Computers & Telecommunications

Academic

Professor B. Randell	University of Newcastle
Professor J. Alty	University of Liverpool
Professor Enid Mumford	Manchester Business School

Users

Mr. N. Lewis	Director for Systems, Ford Motor Co. Ltd.
Mr. P. Hermon	Management Services Director, British Airways
Mr. D. Harris	Director of Computers, Tesco Stores Ltd.

Others

Mr. A.A. Benjamin	Chairman, Information Technology 1982 Ltd.
Mr. D. Fairbairn	Director, National Computing Centre Ltd.
Mr. G.J. Pocock	Senior Director, Marketing Executive, British Telecom
Mr. J.P. Dukes	Managing Director and Deputy Chief Executive, The Channel Four Television Co. Ltd.
Mr. K.E. Macdonald	Managing Director, IPC Electrical-Electronic Press Ltd.
Mr. G.B. Jackson	Managing Director, Jackson Associates
Mr. Bryce McCrirrick	Director of Engineering, BBC Broadcasting House
Mr. E. Sharp	Chairman, and Chief Executive, Cable & Wireless Ltd.

Officials

Mr. R.H.F. Croft	Deputy Secretary, Department of Industry
Mr. G.W. Watson	Director, Central Computer & Telecommunications Agency, CSD
Mr. A.H. Lovell	Under Secretary, HM Treasury
Mr. R.G. Courtney	Information Technology Unit, Cabinet Office
Mr. A.R.D. Norman	" " " " "
Mr. J.B. Unwin	" " " " "

10 Downing Street

Mr. Ian Gow, MP

Mr. John Hoskyns

Mr. Michael Scholar

Hn 0389

MR SCHOLAR

c Miss Drummond (No 10 Press Office)

PRIME MINISTER'S RECEPTION/SEMINAR FOR MEMBERS OF THE COMPUTER INDUSTRY
2 NOVEMBER

I have just heard that Mr Robb Wilmot (ICL) has succumbed to flu and will not be able to attend the reception this evening.

2. I have therefore spoken to Mr Mike Aldrich (Managing Director of Rediffusion Computers, and a member of the IT Advisory Panel) who has agreed to introduce the first topic himself vice Mr Wilmot.

3. The Prime Minister should therefore call on Mr Aldrich to introduce topic 1 at the start of the discussion.

J B UNWIN
2 November 1981

IT Unit
Cabinet Office

Hn 0332

MISS L DRUMMOND (No 10, Press Office)

COPY FOR

c Mr Scholar (for info) - No 10
Mr Courtney
Mr Norman

PRIME MINISTER'S RECEPTION FOR REPRESENTATIVES OF THE COMPUTER INDUSTRY ON 2 NOVEMBER

We spoke briefly about press handling of this occasion. Since it was decided not to invite journalists, I think your view was that no publicity should be sought before the occasion.

2. Clearly, however, we ought to try to publicise the occasion afterwards as a demonstration of the keen interest being taken by the Prime Minister and the Government in the computer industry and the development and application of information technology in the UK generally. This is particularly so as the reception will take place on the same day as the launch earlier in the day by Government and industry jointly of IT Year 82 (Mr Kenneth Baker from DOI and Mr Barney Hayhoe from CSD will be taking part in the launch).

3. I therefore attach as background information for you a copy of the brief I am submitting for the Prime Minister. As you will see, this contains a full list, with short biographical notes, of those (at the time of going to press) expected to attend. Also attached are summary notes providing a framework for discussion of the following three topics:-

- present strengths/weaknesses of computer industry in the UK;
- the applications, uses etc on which we should be concentrating in the UK;
- other problems/consequences (social, environmental etc) to which we should be paying particular attention.

If the Prime Minister follows the form recommended these will be introduced by Mr Robb Wilmot (Managing Director of ICL), Mr Tony Davies (Chief Executive of Information Technology Ltd), and Mr David Fairbairn (Director of the National Computing Centre) respectively.

4. I leave you to judge how far to make use of any of this material. Since gossip is spreading rapidly throughout the trade, however, I see no reason why you should not draw on it freely. So far as the guests are concerned, you should stress that

invitations were sent on a purely personal basis; in other words, guests had been invited as individuals and not as representatives of particular companies or organisations (this is important in order to minimise the inevitable feelings on the part of some companies that they have been missed out). You might also want to stress that on an occasion like this numbers have to be restricted for purely physical reasons and to make the occasion manageable.

5. General points that might be worth stressing are:-

- the occasion is a demonstration of the great importance the Prime Minister personally attaches to successful development and application of computing and related technology in this country;
- this is a genuine working session to enable the Prime Minister and some of her colleagues to hear at first hand the views of those at the sharp end on the problems and opportunities facing the UK in computing and information technology;
- the occasion follows a similar (and very successful) reception/seminar held for inventors earlier in the year. As on that occasion, relevant points of importance that arise will be vigorously followed up by the Government;
- it is particularly appropriate that this occasion should be held on the same day as the launch of IT Year 82 - it help give a flying start to the year by bringing together for a discussion with the Prime Minister an impressive selection of key individuals in the computing industry or closely related to it.

6. I should not object also if you indicated that the arrangements for the occasion had been made for the Prime Minister by the IT Unit here in the Cabinet Office.

7. Do not hesitate to get in touch if you wish to discuss any points with me. I shall in fact be away tomorrow, but Roger Courtney will be available and I shall be back here on Monday morning.

J B UNWIN
29 October 1981

I T Unit
Cabinet Office

30 OCT 1981

RESTRICTED

Hn 0383

MR SCHOLAR (No 10)

cc Mr D J Wright
Mr Gregson
Mr Courtney
Mr Norman
Mr Hoskyns (Policy Unit)

PRIME MINISTER'S RECEPTION FOR REPRESENTATIVES OF THE COMPUTER INDUSTRY ON 2 NOVEMBER

This note contains briefing for the reception/seminar that the Prime Minister is giving for representatives of the computer industry from 6.30 to 8.00 pm on Monday 2 November.

Guests

Flag A 2. I attach at Annex A a list of outside guests and officials due to attend (as at the time of preparing this note) with brief notes. The following Ministers should also be present:-

Home Secretary
Secretary of State for Industry
Chancellor of the Duchy of Lancaster
Minister of State, CSD (Mr Hayhoe)
Minister of State, DOI (Mr Baker)
Parliamentary Under Secretary, DOI (Mr Wakeham)
/The Chancellor has been invited but we do not yet know whether he will be able to be present/.

3. In selecting the outside guests we have gone for individuals rather than companies - especially those likely to make an active contribution. The list, however, covers most of the main companies and interests involved and gives a good spread of suppliers, users, consultants, and so on. There should, therefore, be no shortage of expertise (and willingness to express it) on a wide range of important issues likely to be of interest to the Prime Minister.

4. We have not invited all the members of the Government's IT Advisory Panel; we are in close and regular contact with them so that they have frequent opportunities to contribute their views. But two members of the Panel (Mr Mike Aldrich - Managing Director, Rediffusion Computers Ltd; and Mr Tony Davies - Chief Executive, Information Technology Ltd) will be among the guests.

Hn 0383

General arrangements and timing

5. On the assumption that the Prime Minister will only be free until about 8.00 pm, I think we should aim to start the discussion session in the dining room not long after 6.45 pm. There will then be time for an hour or so's discussion prior to informal continuation with refreshments in the Pillared Room. If the Prime Minister herself has to leave promptly, I hope nevertheless that guests if they wish might be allowed to stay on a little longer so that as many of them as possible have an opportunity to talk informally to the other Ministers present.

Discussion

Flag B 6. I have sent to each of those attending short notes on three topics. A copy of these is at Annex B. The notes are not intended to constrain discussion (and I have made this absolutely clear) but they cover briefly the main issues likely to arise and should provide a coherent general framework for the discussion.

7. As the main purpose of the evening is to enable the Prime Minister and other Ministers to hear at first hand the views of those in or closely connected with the industry, I have asked three of the outside guests to introduce the topics, as follows:-

Topic 1: Present strengths/weaknesses of the computer industry in the UK - Mr Robb Wilmot (Managing Director of ICL);

Topic 2: The applications, uses etc on which we should be concentrating in the UK - Mr Tony Davies (Chief Executive, Information Technology Ltd);

Topic 3: Other problems/consequences (eg social, environmental, regulatory etc) to which we should be paying particular attention - Mr David Fairbairn (Director of the National Computing Centre).

8. I have asked each of the above to introduce his topic very briefly (5 minutes at the outside). I think each will provide good value (the Prime Minister may, incidentally, care to glance at the excellent letter on technology and employment by Flag C Mr Fairbairn in the Times of 22 October - attached at Annex C). I suggest, therefore, that after a few general introductory remarks the Prime Minister should ask Mr Wilmot to lead off on the first topic. After discussion of 20 minutes or so, she should then invite Mr Davies to introduce the second topic; and so on. I am sure there

will be no shortage of speakers wishing to join in - I have talked already to a number of them who are unlikely to be reticent. But I will be at hand to give any help if the Prime Minister requires it.

Flag D 9. I attach at Annex D some brief speaking notes which the Prime Minister may wish to use as a basis for her introductory remarks.

IT Year 1982

10. As the Prime Minister knows, IT Year 1982 - a joint Government/industry sponsored enterprise - will be launched at a press conference (in which Messrs Baker and Hayhoe will take part) earlier in the day. The Prime Minister herself is recording a video tape message to be used at the launch. It would therefore be appropriate for the Prime Minister to refer to this, and I have included a reference in the speaking notes. The Chairman of the Information Technology 1982 Committee, Mr Alan Benjamin (formerly of ICL; now Communications Manager of the CAP Group, a software house) will be present and I think it would be very encouraging to him and his efforts if the Prime Minister felt able to refer to him.

Flag E 11. DOI have prepared a useful note on Government and IT for the 1982 Year launch. I attach a copy for general background at Annex E.

Follow up

12. We shall, of course, take notes on points of interest and importance raised and ensure that they are followed up where appropriate. Although the purpose of the evening is primarily educational, I hope that it may lead to some specific new actions being taken.

J B UNWIN
29 October 1981

IT Unit
Cabinet Office

ANNEX A

GUESTS ATTENDING PRIME MINISTER'S RECEPTION/SEMINAR FOR REPRESENTATIVES OF THE COMPUTER INDUSTRY ON 2 NOVEMBER

MAINFRAMES:

R W Wilmot Esq
MD, ICL (aged 36). Joined ICL from Texas Instruments in May 1981. Has instituted major re-organisation programme, streamlined ICL's product range and already concluded important collaborative deals with US, Japanese and Canadian companies.

J Fairclough Esq
Director, IBM (UK) Ltd. (Turnover £954m; 14,700 employees) Head of main IBM laboratories at Hursley. IBM are supporting inner city IT centres in Glasgow and Portsmouth and are involved in the DOI sponsored Office Automation Pilot Scheme (Cambridge County Council).

B Long Esq
Vice-President and MD, Honeywell Information Systems Ltd. (Turnover £140m; 5,000 employees). Substantial exporters of large and mini computers from the UK.

MINICOMPUTERS ETC:

D Roberts Esq
Director of GEC, Hirst Research Centre since 1979. Has a particular interest in micro-electronics. Included in Sunday Times list of "Men of the 80's". Has visited Japan.

B de Ferranti Esq
Member of the European Parliament, Deputy Chairman, Ferranti Ltd. (Turnover £271.5m; 18,254 employees). Has taken active part in Economic and Social Committee - was first British President from 1976-1978. Ferranti heavily dependent on defence contracts.

C A Davies Esq
Chief Executive, Information Technology Ltd, manufacturers of office technology products. (Turnover c£10m; 373 employees). Member of Government IT Advisory Panel. Previously started company making automatic test equipment for computer industry. Attended inventors reception in January.

J Gow Esq
MD, Systime Ltd, which he set up in 1973. (Turnover now £33m). Company is about to start major development project, with DOI assistance, leading to creation of 1,000 new jobs, many in Leeds area.

OFFICE SYSTEMS:

M Bevan Esq
Chairman (and joint founder in 1978) of Xionics Ltd. (Planned turnover of £1m in 1981-2). Company was formed to develop an "automated office" integrated architecture and has been given DOI contract to install pilot automated office system in IT Unit in Cabinet Office.

(Key: MD = Managing Director)

M Aldrich Esq
MD, Rediffusion Computers Ltd. (Turnover £44m; 600 employees). Company recently launched new office automation project ("Teleputer") and has substantial business behind Iron Curtain. Member of Government IT Advisory Panel.

D Pitcher Esq
Director, The Plessey Co Ltd. (Turnover £844.5m; 36,000 employees). Has responsibility for Plessey Telecommunications Office Systems Ltd. Member of Electronics Industry EDC

A Sumner Esq
MD, Data Recall Ltd. (Turnover £4m; 125 employees). Company is participating in office automation pilot schemes, and Government is one of largest purchasers of Data Recall's Diamond word processor.

MICROS:

M D Fischer Esq
Chairman, Research Machines Ltd, which he founded in 1973 (Turnover c£5m; 88 employees). Company's microcomputer is being used in educational establishments and strongly supported by DES. Two new products - Local Area Network and Databar - to be launched this November.

Dr D Hauser
MD, Acorn Computers Ltd. Chosen by BBC to produce computer which is one of those available under Micros in Schools Programme. This will also feature in BBC series "Computer Literacy" starting next January.

C Sinclair Esq
Chairman and MD, Sinclair Research Ltd. Prolific inventor in electronics field, his most recent products being the wide selling ZX80 and ZX81 micro-computers and new flat screen minature TV sets. Has just announced remarkable deal with Mitsui to sell ZX-81 computers in volume in Japan.

UNIONS:

T Webb Esq
National Officer, Association of Scientific, Technical and Managerial Staffs, which has taken active interest in effects of IT on employment. Mr Webb has been constructive member of several Sector Working Parties in this area.

PERIPHERALS, TERMINALS AND DATA COMMUNICATIONS

R Saar Esq
MD, Newbury Laboratories Ltd, manufacturers of visual display units (subsidiary of Data Recording Instruments Ltd). (Turnover £4.5m; 146 employees). Joined Newbury from IBM early this year and has reviewed and revived company's activities.

H H Brown Esq
MD, Lynwood Scientific Developments Ltd, of which he was joint founder in 1969. (Turnover £3.2m; 65 employees.) One of three independent UK visual display unit manufacturers.

J L A Selby Esq
MD, Trend Communications Ltd. Successful small company which supplies teletex teleprinters to British Telecommunication. (Turnover £6.5m - £2m in exports; 247 employees).

L Brownlow Esq
MD, Rodime Ltd. (Turnover c £2m; 39 employees). Left Burroughs in 1979 to set up this company to manufacture small disc drives in Scotland.

H Smeaton Esq
MD, Fortronics Ltd, of which he was joint founder in 1970. (Turnover £2.9m; 121 employees). Recently reached arrangement giving Burroughs exclusive sales rights, throughout Europe, Africa, and Fortronics banking equipment. Strong advocate of enlightened public procurement.

COMPUTER SERVICES AND CONSULTANCY

L Taylor Esq
MD, Logica Holdings Ltd. Logica's exports constitute over 50% of turnover and subsidaries have been established in USA, Benelux, Sweden and Australia.

M Reynolds Esq
Chairman, Micro-Focus. Has just won orders worth £400k from Japanese companies for programmes for micro-computers - probably first sale of its kind to Japan.

G M R Graham Esq
Chairman, The Altergo Group, founded in 1969. Successful in selling software for IBM systems to American companies including IBM.

Mrs V S Shirley
Chairman, F International Ltd. Left ICL in 1962 to form this software company, which employs women whose family commitments rule out full-time employment. Has taken a particular interest, through British Computer Society, in promoting interests of disabled people in computing and has recently become Vice President of professional section of the Society.

H Hunt Esq
MD, PA Computers and Telecommunications Ltd. (Turnover c £4.5m; 132 employees). One of UK's top five computing services companies which recently produce major IT strategy report for NEB.

ACADEMIC:

Prof B Randell
Prof of Computing Science, University of Newcastle-upon-Tyne. Recently visited Tokyo with DOI team attending conference on 5th Generation Computers.

Prof J Alty
Head of Computer Laboratory University of Liverpool since 1972. Ex-IBM. Member of IT Year 82 Regional Committee

Prof Enid Mumford
Professor of Organisational Behaviour at Manchester Business School, and Director of Graduate MBA course (Master Business Administration) and Participation Research Unit. Widely know for work on impact of IT on clerical work.

USERS:

N Lewis Esq
Director for Systems, Ford Motor Company Ltd (since 1973). Responsible for systems development and implementation and data processing installations and operations for all Ford affiliates in Europe. Particularly interested in the role of systems, communications and data processing in multi-national organisations.

P Hermon Esq
Management Services Director, British Airways, who operate large computerised booking system. Executive member of Board keen to find ways of improving organisation of BA.

D Harris Esq
Management Services Director, Tesco Stores (Holdings) Ltd. Has special responsibility for distribution, computing, personnel and training, industrial relations, and administration. Tesco are major and innovative users of computers and IT. Mr Harris is member of National Computer Board for Universities, and chairman of Technical Working Party of the NEDO SWP for Distributive Trades.

OTHERS:

A A Benjamin Esq
Chairman, Information Technology 1982 Committee.
Responsible for co-ordination and management of IT82 Year. (The year will formally have been launched on the morning of the Prime Minister's reception). Communications Manager of the CAP Group (Software House).

D Fairbairn Esq
Director, National Computing Centre, whose prime role is to help maximise effective use of computers in UK. NCC are currently helping DOI administer Software Products Scheme and independent schools portion of successful Micros in Schools Scheme and related training programmes. Will also be responsible for running 4 mobile Information Technology Trailers during IT Year 1982.

B McCrirrick Esq
Director of Engineering, BBC. Wide interest in IT generally and in particular in future development of satellite broadcasting.

E Sharp Esq CBE
Chairman and Chief Executive, Cable & Wireless Ltd. Closely concerned in negotiations on C&W, BP, and Barclays Merchant Bank consortium on project Mercury.

G Pocock Esq
Senior Director, Marketing Executive, British Telecom. His responsibilities include marketing, pricing and commercial policy, with special emphasis on directing BT's response to competition as result of new legislation.

J P Dukes Esq
MD and Deputy Chief Executive, The Channel Four Television Co Ltd. Before coming to this post Mr Dukes was a MD at the Financial Times.

K E MacDonald Esq
MD, IPC Electrical-Electronic Press Ltd, which publishes some of UK's leading computer trade magazines, including Electronics Weekly, Computer, and Practical Computer. Also on board of IPC Business Bress whose publications cover wide range of industrial and commercial, ie practical user, interests.

G B Jackson Esq
MD, Jackson Associates (suggested by Mr Gow)

MEMBERS OF PARLIAMENT

Mr John Butcher (Coventry, SW)
Mr Kenneth Warren (Hastings)
Mr Robert Atkins (Preston, N)
Mr Ray Whitney (Wycombe)
Mr Richard Page (Hertfordshire, SW)
Mr Anthony Grant (Harrow, Central)
Mr Keith Wickenden (Dorking)
Mr Richard Shepherd (Aldridge Brownhills)
Mr Michael Grylls (Surrey, NW)

Officials

Mr John Hoskyns	–	No 10 Policy Unit
Mr A H Lovell	–	Under Secretary, H M Treasury Head of Industrial Policy Division. Heavily involved in ICL negotiations earlier this year.
Mr R H F Croft	–	Deputy Secretary, Department of Industry Responsible for Divisions dealing with IT, Posts & Telecommunications, and Space.
Mr G W Watson	–	Under Secretary, CSD (Director of CCTA)
Mr R G Courtney	–	Senior Principal Scientific Officer, IT Unit, Cabinet Office. Formerly Secretary of ACARD and responsible for ACARD report on IT.
Mr A R D Norman	–	Adviser, IT Unit Cabinet Office (transferred from CPRS). On loan to Government from Consultants, Arthur D Little.

1. How well placed is the computer industry in the UK to take advantage of the opportunities presented by the new technology? What are our major strengths and weaknesses and how should we be exploiting/tackling them?

A number of weaknesses have been pointed to. For example:

- industry in the UK is fragmented, and concentrated on the relatively small UK market, so that we cannot match the volumes, and hence prices, of our major competitors;
- there are a number of weaknesses in development and manufacture; for example:
  - we do not make very large computers; we have not competed effectively in the middle-sized computer businesses;
  - our presence in mini computers is even weaker (with a substantial trade deficit) and very small also in micros;
  - we supply only a tiny proportion of the UK word processing market, and have few sales abroad;
  - we manufacture few of the peripherals (eg data storage systems) attached to computers of any size;
  - in telecommunications, our share of the world market for switching equipment has contracted sharply.

But as against this:

- British software has a high international reputation, and this has helped to attract multinational computer companies to increase their investment in British software;
- Britain has a good technological capability in the main areas of information technology, although this has not always been matched by successful commercial exploitation;
- we also have considerable technical and manpower strengths in a variety of areas such as fibre optics, networking and viewdata/teletext.

Are these fair claims and assertions? How can we exploit our strengths and remedy weaknesses so as to be able to compete effectively in international markets and achieve the economies of volume production that the UK market alone cannot provide? Are there any building blocks we should give priority to maintaining or developing in the UK? Should we, for example, devote more resources to the development of software with the object of winning a greater share of the software required by other nations' hardware? What are the implications of this and any other shifts in priorities for the structure of the computer industry in the UK? What are the implications for the Government which have been active in the support of suppliers and the development of products and bearing in mind that the public sector as a whole represents nearly half the total UK market for information technology products and services?

2. What is the best way to ensure that the UK derives the maximum economic and social benefit from the new technology?

The Government have made it clear that they regard the effective development and application of information technology as a key element in the future industrial and commercial success of the United Kingdom. Accordingly a number of Government schemes are concerned with support of R&D, assistance in the development of new products, encouraging awareness of new technology in industry, commerce and the public generally, influencing the development of standards, and so on. This is against the background that at least half of all economic activity is in some significant sense concerned with handling information; and as the underlying technology continues to change rapidly, so the demand for better and cheaper techniques is likely to rise too.

But how do we ensure that industry in the UK and the nation generally, makes optimum practical use of the application of the new technology, whether or not the demand from the market exceeds the capacity of British industry to supply it? There are many important fields of application:

- in the office and in public and private sector management and administration in a wide variety of fields;
- in industrial manufacturing and production;
- in almost all service industries, particularly where the direct provision of information to the public is involved;
- in the provision of financial and related services;

and so on.

In some of these areas substantial progress has been made and UK application of new technology compares favourably with anywhere in the world. The City, for example, has demonstrated the ability to harness the new technology to improve the cost effectiveness of its own systems and communications. But in other areas - particularly manufacturing and production - Britain seems to lag well behind some of its main competitors.

Is this "curates egg" picture a fair one? Is it true that in important areas British commerce and industry is slower to adopt new technology than our competitors (or are we just more reticent about our activities)? If so, should we be seeking to promote applications of new technology across the economy generally, or should we be trying to specialise in particular processes (such as investment analysis, management consulting, medical diagnosis, software production etc) which add value to information and where we appear to have traditional strengths? What are the roles of private industry and the Government respectively in promoting more effective application?

3. What are the main social and environmental aspects of the new technology to which we must pay attention if its application is to spread in a harmonious and effective way?

It is asserted that the new technology will cause in half a lifetime a greater revolution than the steam engine and internal combustion engine technology achieved in two lifetimes. While precise comparisons can be fanciful, it is certainly true that the new technology will be pervasive and that many economic and social patterns will need to change radically in a short period of time. This will apply not merely nationally, but internationally. Information moves freely from one country to another, and, unless restrictions are placed on the international flow of information, the process of harmonisation and standardisation could tend towards a single global information system.

What are the main social and environmental aspects to which we must pay attention if the effective development and application of the new technology is not to be harmfully impeded? Among some obvious areas for consideration are:

- Education and training: Education at all levels is being increasingly geared to promote awareness of, and the acquisition of skills in, all aspects of the new technology. The Government have taken a number of initiatives here. Is the UK, private and public sector, doing enough in the right direction?

- Employment consequences: There is wide agreement that Britain must harness the new technology in order to compete successfully and so provide the basis for new market opportunities and jobs. But have we taken the necessary steps to promote full understanding of the issues involved, especially the fears of unemployment? Are there some people who will be unable to adapt and what do we do about them?

- Privacy: The Government have announced their intention to introduce data protection legislation, mainly to ensure that foreign countries do not restrict their trade in data and information services.

- Government regulation: Are there fields in which traditional regulatory concepts are likely to become obsolete if obstacles to the beneficial spread of the new technology are to be removed. What are their consequences (eg for traditional approaches to copyright or broadcasting)?

Which of these or other areas should command priority? What are the main obstacles? What are the main opportunities that can be channelled to the national advantage?

Annex D

Introductory speaking notes for the Prime Minister

Welcome to guests.

2. I am particularly glad that this occasion coincides with the launch of IT Year 1982, which industry and Government are promoting jointly. I am also especially glad that the Chairman of the IT Year 82 Committee, Mr Alan Benjamin, is present with us and grateful to him and his Committee for the work they are doing to make this a success.

3. The Government's support for IT Year is another mark of the crucial importance we attach to the successful development and application of computing and related technology in this country. Like you, I want to see a vigorous industry in the UK that can both meet our own needs and capture export markets abroad. Success here is vital if Britain is to compete successfully in an increasingly cut throat world. This is the real way to more jobs and more employment.

4. I am sure that IT Year 82 will do much to increase awareness of the opportunities that the new technology offers Britain. I hope also that it will lead to some practical and visible achievements. But what are the opportunities? How can we best identify and exploit them? What are the strengths and the markets that industry should be seeking to develop? What should Government be doing - or not doing! - to establish the right climate for success? We have many strengths; but we all too often fail to exploit them.

5. These are the kind of questions on which I want to hear your views this evening. We cannot deal with everything in a relatively short discussion. But I am sure we can cover a great deal. And I and my colleagues will be taking very careful note of what you say.

Nat. Under-capitalised Ind.

- Intervention =
- Public Procurement - - Brit Telecoms

More Trade - less aid.

Applied Weidrichtung. →
Weidrichtung Broadcasting. Pb+7

Collaboration. →

Distribution. Int f Int's.

New Information. - Presto - guided way.

30%.

1942.

Nat Training - Prem - Pols. Skills - Right without enough.

Tot Loc. Dir Wolfe. Charge. -

Category D' gouvernement.

Shortage of Trained Managers.

New Ventures and ownership.

6. As a broad framework for our discussion we have identified three topics on which you have already received brief notes. These are:

First - the strengths and weaknesses of the computer industry in the UK;

Second - uses and applications;

and Third - the social, employment and other consequences.

I do not want to confine discussion to these, but I suggest we take them as our starting point. I propose, therefore, to deal with each of them in turn, and some of you have been asked briefly to introduce them. After [an hour or so's] discussion I hope we can then continue to talk informally again next door with the aid of some more light refreshments.

7. I should therefore like to begin by asking Mr Robb Wilmot to introduce the first topic on the strengths and weaknesses of the computing and related industry in the UK.

(1) Don't make money out of weaknesses

(2) Brit. Manufacturing w/ a slight chance.

Displacement Economics.

Because things large - with problems
≡ Dinosaurs - & wire large heavy & need.

Innovation, Creativity - Marketing

In with a chance.

Cost - awareness. - wheat.

Fast changing world.

Bank. - No-land Tenure do Locke.

Holmes Brown. Uhen Led

Dol CCTA. NLTB/NRDC.

Marketing attitude - Communal agreement.

- French. - Planning.

Poor Management. Centralised Control

Authority - control.

Additional:

Manufacturing - Low - marketing.

Area + by-law control.

4:1.

ANNEX E

GOVERNMENT AND INFORMATION TECHNOLOGY

Background

(1) A Minister for Information Technology (Mr Kenneth Baker) has been appointed with general responsibility for overseeing the development of coherent Government policies towards IT. An IT Advisory Panel, consisting of a number of senior industrialists and academics has also been appointed by the Prime Minister to provide the Government with a market-orientated input to IT policy. The Panel is available to advise all Departments and contact with it is provided by a small coordinating Information Technology Unit recently established in the Cabinet Office.

(2) Barney Heyhoe, as Minister of state in the Civil Service Department, has responsibility for the Central Computer and Telecommunications Agency. The Agency has a Key role within central Government in the application of IT (computers, telecommunications and electronic office systems) to Government administration.

Objectives

The Government is implementing a number of initiatives to facilitate the development of IT in the UK. The cornerstones of this programme are:-

i) To provide a national telecommunications network capable of stimulating and meeting demands for new services efficiently and economically.

ii) To develop a statutory and regulatory framework in the UK which will favour the growth of IT products and services.

iii) To raise the awareness of all potential users of IT to its possibilities so that they can take full advantage of new services and equipment.

iv) To encourage the development of new products and techniques through direct support and enlightened public purchasing.

INITIATIVES TO DATE

Department of Industry initiatives already announced include:

IT in Education

The DOI "Micros in Schools" scheme which aims to put a microcomputer into every secondary school by the end of 1982. This scheme is being implemented in parallel with the Education Departments' Microelectronics in Education Programme (MEP). (The first phase of the scheme, announced in April is open to all secondary schools currently without a microcomputer. Already more than 1,800 secondary schools without a micro have taken advantage of the Department of Industry's 50% funding).

The Second Schools Computer Competition is another example of efforts to encourage our youth; last year's competition attracted well over 600 entires with the Department's prizes being matched by generous contributions from manufacturers; this year over 1000 schools have indicated they will enter the competition.

The Department is also supporting through the Council for Educational Technology the purchase of hardware for teacher training for the micros in schools and BBC computer literacy projects.

MAP

The Microelectronics Applications Projects (MAP), which was launched in 1978 with a £55m budget allocated to the three areas of awareness/ training, consultancy and project support. So far expenditure of more than £45m out of the budget has either been committed or is under active consideration.

- almost 160,000 people have attended workshops, seminars etc under the awareness programme.

- over 34,000 extra training places on short-term courses have been created.

- support has been provided for developing 2 Open University home study courses (1 for Managers - 3000 sold) and 1 for Engineer (about to be launched) with kits to give "hands on experience".

- assistance has been provided to the TUC for an education programme for shop floor workers

- 2,250 feasibility studies are being carried out

- some 600 new microprocessor development projects are underway involving a total investment of approximately £88m

The year's major MAP awareness event has been the Microtrain which since May has been making week-long visits to more than 20 major centres throughout Great Britain. About 25,000 people have visited the train so far; as well as being a mobile exhibition, the train is the venue for special seminars, presentations and practical demonstrations of the new technology. After its highly successful tour of Great Britain, the MAP Microtrain will be returning to London for 5 weeks; Patrick Jenkin, Secretary of State for Industry, will be launching its 2 week stay at Olympia from 9 November. From there it will move to Holborn Viaduct for a week of special events and then to Marylebond for its final 2 weeks.

4 low cost automation centres at Paisley, Belfast, Stockport and Bristol are with MAP support, developing demonstration rigs to show the application of microelectronics. Also, as an example of the shift in MAP emphasis towards industrial sectors, the Department is supporting an awareness programme with the British Plastics Federation.

MISP

The Microelectronics Industry Support Programme (MISP) is aimed at:-

a) helping to create a capability for the development, design and manufacture of the custom - and industry - specific microchips that will be needed by user industries.

b) encouraging the production of standard integrated circuits in the UK

c) supporting companies supplying equipment, materials and services for the manufacture of silicon integrated circuits (the infrastructure industry).

d) supporting other microelectronic processes and products important to industry.

IT82

A major IT Awareness campaign through 1982, which has been designated Information Technology Year.

Office Automation Strategy and Pilot Projects

The Department is working closely with the Central Computer and Telecommunications Agency and other public sector bodies to carry through a wide-ranging strategy for promoting office automation with five main elements: increasing awareness of the availability and benefits of office automation; the use of consultancy where appropriate; product development support; increasing the use by the public sector of currently available office automation equipment; and the mounting of exploratory trials of advanced pre-production systems. This last element, the mounting of eight to twelve "office of the future" pilot projects has progressed well since it was first announced by Mr Baker in June of this year; he was able to announce the first three trials on 17 September, involving: Xionics at the Cabinet Office IT Unit;

Office Technology Ltd (OTL) at British Rail Engineering in London and Derby; and IBM (UK) Ltd at Cambridgeshire County Council.

IT Centres

A national network of IT centres are to be established in towns and cities around the UK as a joint initiative between the Department of Industry and the Manpower Services Commission. The centres will give unemployed young people training and work experience in microelectronics and computing skills which are increasingly important in enhancing permanent job prospects. The Centres will be closely linked with high technology companies, will develop technological products and services with a view to floating off small business ventures.

The response from potential sponsors has been excellent and MSC through their regions, along with a small consultancy team headed by Chris Webb, Director of Notting Dale Technology Centre, are developing and processing applications. We hope to announce details of the first locations very shortly.

Microsystems Centres

Following a successful trial with the National Computing Centre's own Microsystems Centre in London, the Department has agreed to provide a total of £600,000 in matching funds over three years towards the establishment of a national federation of centres at which advice and training will be available for business men and others who want to learn how to select and apply microcomputers. The NCC will be responsible, on behalf of the Department, for checking standards, producing course material and coordinating the development of the federation of centres.

IT Export Project

Following an approach by the Computing Services Association and the NCC the Department has agreed to provide financial backing of £250,000 for a one year project designed to improve the export performance of the UK IT industry, with particular emphasis on the services sector, and to provide it with a more coherent image overseas. The initial emphasis will be on inward and outward missions, promotional events, and the provision of briefing services. If the project is a success, a permanent Export Council may be established at the end of the year's trial.

National Teletext and Viewdata Promotion

Last January's Commitment Conference - involving television set and adaptor manufacturers, chip producers, the rental and retail trade, and the broadcasters - identified key areas for priority action aimed at promoting the more widespread awareness of Teletext and Prestel in the UK and accelerating their UK market establishment. Government has assisted by serving as a focal point for industry to initiate increased marketing activity, as well as helping to develop a teletext promotional campaign aimed at the consumer, culminating in National Teletext Month during October. Government has helped by amending legislation to enable

halving minimum HP and rental down payments required for teletext and viewdata sets, providing 3 million consumer leaflets explaining in simple terms the teletext and viewdata services, and producing and distributing a bi-monthly newsletter to industry to assist in communication between and within the various sectors of the industry and retail and rental trade. Unprecedented promotional efforts are being made by the television trade, and resources of £5m are being used by the industry to boost teletext sales. The aim is to achieve a total teletext set population in the UK of one million by the end of 1982.

CADCAM

A £6m programme to promote the awareness of computer aided systems for design and manufacture and the adoption of these techniques through seminars, and courses, demonstration and experience centres and support for consultancy advice.

Robotics

A Robot Support Programme designed to increase the use and manufacture of industrial robots by British industry. The Programme includes 50% grants towards consultancy studies and 25% grants towards the capital and other costs associated with new robot installation and towards the development and bringing to commercial production by UK manufacturers of new types of robot.

Fibre-Optics Scheme

This is a £25m 5-year scheme announced in July 1981 to assist the fibre optics and opto-electronics industries. The objectives are to:

a) build up an industrial capability able to meet the needs of equipment companies and end users for optical fibre system components.

b) build up the UK industrial competence in opto-electronic techniques and to produce a wider range of component products, with particular emphasis on critical components for novel systems.

Direct Support to the IT Industry

£80 million of direct support, which has been put aside by Government over the next four years to help research, develop and manufacture new products and processes in the IT field, and to raise awarenss of IT in all sectors of the community. This is in addition to the money provided under the schemes mentioned above. Government has also said that it will also use the power of purchasing by both central Government and other public bodies in order both to foster indigenous technology - such as Viewdata and Prestel - and to help "pull through" innovative products.

The Electronics and Avionics Requirements Board will also continue to provide financial support for research and development aimed at advancing standardization in computing, supporting design, and evaluating and evolving new materials and methods of processing for micro chips.

ICL

To help the company resolve temporary financial difficulties brought about by the recession the Government has given ICL substantial financial support through the provision of a loan guarantee of up to £200 million for a period of two years. Since the guarantee was given ICL has appointed a new top management team with the support of both HMG and its principal shareholders. The new management has moved swiftly to strengthen the company by measures of reorganisation and rationalisation and by the conclusion of collaboration agreements with other companies eg Fujitsu and Three Rivers Corporation to improve ICL's product range. It is now primarily for ICL to decide its own future. The Government has no stake in the company except as a user of ICL equipment.

British Telecommunications Act

An act enabling a substantial liberalisation of the Post Office's telecommunications monopoly was passed by Parliament in July this year. This will have a determining influence on the provision of the modern telecommunications that are so important to the application of information technology.

Telecommunications Liberalisation

As announced by the Minister for Information Technology on 30 July the Government intends to use the powers in the British Telecommunications Act to give the private sector much greater freedom to use the inland public network to provide value-added network services (VANS). Liberalisation will be phased to give British Telecommunications and UK industry time to prepare for the new regime and from early next year the private sector will be free to compete in the supply of all kinds of VANS that involve substantial elements additional to the main network.

Increasingly sophisticated equipment will be needed to make the most of these new opportunities and it is important to remove obstacles to innovation in telecommunication terminal apparatus. Over the next two years the Government is liberalising the supply of all telecommunications attachments, except the first telephone, subject to minimal technical standards to protect the network.

The Government also hopes to license shortly "Project Mercury" to provide an alternative national high-speed, digital network using optic fibre. This will help meet the growing demand from businesses for sophisticated transmission facilities.

Satellite Communications

Realising the large potential for growth in telecommunications, the UK government's expenditure on space has been concentrated over the last decade on satellite communications. Satellites have a vital role in meeting the immediate demand for advanced communications, before new terrestrial services are available on a wide scale, as well as in providing longer term services that exploit their unique characteristics. Through the UK's involvement in the European Space Agency, British Aerospace has been the prime contractor for the Orbital Test Satellite (OTS) launched in 1978, for the series of European Communications Satellites (ECS) first launch due next year, and for the MARECS satellites (first launch this December) which will form part of INMARSAT's global maritime system. The UK plans to continue its lead in communications satellites through the L-SAT programme referred to later. DOI has also sponsored the development of small ground stations and their use for demonstrations of new services such as television distribution and high speed data communications of the type needed for electronic offices.

INITIATIVES WITHIN GOVERNMENT

Civil Service Department initiatives include:-

Office Technology Exploratory Programme

CCTA is pursuing a programme of experimental work and monitored trials of office technology systems, with a view to being able to offer to departments firm guidance on its use. A report on stand-alone word processors has already been published, and another on electronic typewriters is due for publication next year. A portable text input device (the British "Microwriter") is also undergoing user trials in the Civil Service - this is likely to be of most value in out-of-the-office situations.

Microcomputer workshop

CCTA's microcomputer workshop has now been operational for $4\frac{1}{2}$ years and considerable expertise has been built up in the fields of hardware, software and systems applications. The workshop acts as a forum for the interchange of information about microcomputer applications. CCTA has negotiated call-off contracts for a standard range of 9 microcomputers for use in government: these are available for demonstration in the workshop, and, since July 1981, there have been some 140 visitors per month. The Minister of State, CSD, himself visited the workshop in March 1981.

Spearheads

CCTA provides assistance from its technical resources for a few "Spearhead" projects suggested, each year, by departments. These are typically development projects, examining a problem found in many departments. One example of a successful "Spearhead" project is the Grafix system at DHSS Newcastle, which was developed to allow direct input into machines of hand printed information.

Short document braille scheme

CCTA has started to provide, from August 1981, a service which transcribes short official documents into Braille, for use by visually handicapped civil servants.

INITIATIVES TO BE ANNOUNCED ON 2 NOVEMBER 1981

Department of Industry:-

Go-ahead of L-SAT programme

L-SAT is the major prospective satellite project for the UK. A joint announcement by Italy and the UK, the two major participants, of their decision to go ahead is expected shortly. Six other countries are involved in this programme of the European Space Agency. L-SAT will be a large satellite for telecommunications, including business services to small dishes and direct television broadcasting. British Aerospace will be prime contractors for the satellite and Marconi Space and Defence Systems will build the business services payload. Scheduled for launch in 1986, L-SAT will prove and demonstrate an adaptable design to meet the needs of the late 1980s and 1990s. It will also provide experiments and preoperational services.

Extension of Micros in Schools Scheme

Mr Kenneth Baker will announce an extension of the DoI Micros in Schools scheme to secondary schools which already have some micro equipment. He is able to do this since response to the first phase of the scheme has been so encouraging; since the scheme opened on 1 June nearly 1900 applications have been approved and processed. We estimate this is over half the secondary schools which were without equipment and puts us well on the way to our objective of having a micro in every secondary school by the end of 1982.

A mainsborne signalling system for meter reading and energy management

The Department is supporting the first stages of the development of a mainsborne signalling system using the electricity mains as a two-way information carrier. The development is being carried out by Thorn EMI Ltd with the help and co-operation of the electricity supply industry, British Gas Corporation and the National Water Council.

Office Automation Projects

The Information Technology Division of the Department has been chosen as the DoI pilot site for the next office automation pilot project. In addition, two more manufacturers, Rediffusion Computers and Aregon have been added to the list of suppliers, which brings the total up to eleven. Further announcements of supplier/host site trials will be made in the coming weeks.

Southwark Site Development Project

The Department is collaborating with Lysander Estates a consortium of commercial developers, in a project to provide an Information Technology Showplace on a 150 acre site in the Surrey Docks. The development provides a major commerical, industrial and residential complex on this site and the Department has engaged a leading firm of communications consultants, Logica Ltd, to identify ways in which examples of UK information technology products and services can be incorporated into this development.

Financial Times Demonstration

A demonstration of the transmission by satellite of newspaper facsimile for remote printing is planned for the first week in December 1981. The Financial Times will transmit from a 3 m diameter earth station positioned on the top of Bracken House in London to the European Space Agency's Orbital Test Satellite. The satellite will relay the signals for simultaneous reception in Frankfurt and Rome where supplements will be printed. Later in the demonstration the International Herald Tribune also will transmit from Paris.

The Financial Times already print their continental edition in Frankfurt, the facsimile being transmitted over land lines. The purpose of the demonstration is to draw attention to the greater suitability of satellites whose transmissions can be received simultaneously throughout Europe permitting local printing and saving high transport costs for distribution around Europe.

The Department assisted in the early planning of this demonstration until British Telecom and other European PTTs offered to carry it out on the newspapers' behalf. The earth station to be used at Bracken House is owned by British Telecom but was built by Ferranti.

Document Delivery System

The Department of Industry, National Physical Laboratory and the Printing Industry Research Association are collaborating in a project to develop a document viewing and delivery system - project HERMES. HERMES will be a substantial network of teletex terminals which will operate to internationally agreed standards on a data base of material of current interest which will be set up with advice from the Publishers Association. With HERMES it will be possible to input information, manipulate, store and transmit it to workstations on the network. HERMES will be operational next year and will it is believed, be an important demonstration of IT in action.

IT Stamp

An Information Technology Stamp is to be issued in September 1982.

Civil Service Department:-

Strategic study of Government administrative telecommunications

CCTA is to undertake a major study of Government administrative telecommunications. Much of the equipment at the heart of the present private telephone network will need to be replaced towards the end of the decade; the study will therefore be looking at departmental requirements, and the means for fulfilling them, over the next decade and beyond. The first stage of the study will begin in November 1981 and the whole study should be complete by the autumn of 1982.

Office Technology Film

CCTA is engaged with COI in the production of a film, for showing to civil servants, which will examine current and future development in office technology, and how these will affect staff and working practices.

CS College Awareness seminars

The College is mounting a series of 40 one-day seminars, running from November 1981 to summer 1982, to inform civil servants about office technology and its affects on them. The seminars will be held up and down the country and should cover 4000 civil servants. It is hoped to continue them beyond 1982.

OTHER GOVERNMENT ACTIVITY

CB Radio

The Home Office has recently announced the launch of the new UK Citizens Band radio service. The new service become legal today and licences to use CB will be obtainable over the counter at Post Offices for an annual fee of £10.

Government Response to ACARD Report on Information Technology

The Government publishes today its response to the Advisory Council for Applied Research and Developments (ACARD) report on Information Technology. The Government has welcomed the ACARD report and made clear that it regards the effective development and application of IT as a key element in the future industrial and commercial success of the UK. It also recognises the great potential significance of IT for both society and the individual.

IT Standards

A committee - the Focus Committee - chaired by Mr John Wakeham MP - Parliamentary Under Secretary of State at the Department of Industry consists of ten influential people in IT with an interest in standards. Its function is to look at the IT standards scene and recommend any activities it feels either Government or other bodies should undertake. It includes in this review the activities of other bodies, such as BSI; BSI is represented on the Committee by its Director General.

Data Protection Legislation

The introduction of legislation governing data protection falls to the Home Office, which is responsible for personal privacy. The Department of Industry has, however a very lively interest in the subject because of the effect it will have on industry. We have discussed it widely with industrial interests and also wish the Home Office and other Departments.

UK is trying to work towards a system which is not unduely burdensome and expensive to run and which meets the demands of personal privacy, and we also sympathise entirely with the view, put by many parts of industry, that UK cannot afford to run the risk of having barriers to date flows put up by other countries, on the grounds that our data protection rules fall short of theirs. We see the moves by the Council of Europe and OECD to establish a set of rules acceptable to the bulk of countries, as a productive way of overcoming this problem, and UK has now subscribed to the instruments drawn up by these organisations. The legislation currently being considered will, as the Home Secretary has announced, reflect this fact.

MP

EXAMPLES OF GOVERNMENT IT PROJECTS AND DEMONSTRATIONS

Department of Industry:-

Project Universe

Project Universe (a contraction of Universities Expanded Ring and Satellite Experiment) is a major national demonstration facility in communication between computers via satellite, which is being established by a consortium involving Government, universities and industry. The project involves the development and demonstration of a working system of communication, via ESA's Orbital Test Satellite (OTS), between groups of computers and other devices at seven separate locations within the UK. At each location the equipment will be linked in a local area network using technology developed for local communication known as "ring technology", which will most commonly be a "Cambridge Ring". Those involved in Project Universe are British Telecom, Cambridge University, the Department of Industry, GEC-Marconi Electronics Ltd, Logica Ltd, Loughborough University of Technology, the Science and Engineering Research Council (SERC) and University College London. The cost of the project over three years will be approximately £3 million, shared between DOI, SERC, British Telecom, GEC-Marconi and Logica. DOI will contribute up to £800,000.

DOI In-house Viewdata Experiment

The Department is running a trial project intended to examine the use of viewdata in Government and to help promote the use of viewdata more widely in Government and Industry.

The system is running on a bureau. Currently there are 20 terminals installed in various locations throughout the Department (of which 9 are full editing terminals and a further three have message keyboards), with a database of about 1000 frames. It is anticipated that the database will grow to about 10,000 frames during the course of the project with up to 50 terminals connected (of which it is expected that 20-25 will be full editing terminals).

It is intended that a wide range of information will be maintained on the system, including selected statistics, press cuttings, sector profiles and a cumulative index to the Departments of Industry and Trades' weekly magazine "British business"

Civil Service Department

CCTA in-house viewdata

CCTA is setting up a private viewdata system on an experimental basis. The first database will be the Project Appraisal Status Matrix, currently held on paper: the system will allow enquiries to investigate whether items of hardware and software have been appraised by Technical Services division.

CCTA Zynar management aid system

This network is being tried in CCTA and provides electronic mail facilities in a local area network, together with text editing facilities, file storage and retrieval and printers for hard copy output. The network extends both horizontally and vertically through the management hierarchy and its effect on the pattern of information flows is being monitored.

30 OCT 1968

Hn 0373

P.A.

CF

Science & Tech.

MR SCHOLAR (No 10)

PM'S RECEPTION/SEMINAR ON 2 NOVEMBER FOR REPRESENTATIVES OF THE COMPUTER INDUSTRY

I thought you might like to have for your own reference the enclosed copy of a letter and discussion notes that I am sending to each of those attending next Monday's reception as I hear that they have accepted.

2. I have lined up the following guests to introduce the three topics:-

Topic 1: Mr Robb Wilmot (Managing Director of ICL);

Topic 2: Mr Tony Davies (Chairman, Computer Technology Ltd)

Topic 3: Mr David Fairbairn (Director of the National Computing Centre).

I have asked them to speak for 5 minutes at the outside - preferably a little less - and I think each will give a good account of himself and usefully lead off the discussion.

3. I will let you have later this week a brief for the Prime Minister to which will be attached relevant supporting papers (including brief speaking notes for the Prime Minister and a full list, with descriptions, of all the outside guests attending). I will suggest that the Prime Minister makes a few general introductory remarks and then invites Mr Wilmot to introduce the first topic, and so on.

4. The acceptance rate is very high so I fear we may be a little tight on numbers.

5. I shall be out of the office on Friday (celebrating my grandmother's 100th birthday!) but Mr Courtney will be available during the day if you have any queries or need any further help (in extremis I can be contacted at Chesterfield 4697).

J B UNWIN
27 October 1981

IT Unit
Cabinet Office

CABINET OFFICE
70 WHITEHALL
LONDON SW1A 2AS

~~xxxxxxx~~ ex233 7140

Hn 0349

I am glad to learn that you will be able to attend the Prime Minister's reception at 10 Downing Street on 2 November. As promised in the note accompanying the Prime Minister's invitation I write to let you have some further information on the arrangements for the evening.

2. The Prime Minister is anxious to have an opportunity of hearing from you at first hand your views on the problems and opportunities facing the United Kingdom in computing and information technology, and on the part that private industry and the Government have to play. As a suggested starting point for the discussion I therefore enclose brief notes on some of the problems and questions arising on the following three broad topics:

- the present strengths/weaknesses of the industry in the UK;
- the applications, uses etc that we should be concentrating on in the UK;
- the other problems/consequences (eg social, environmental, regulatory etc) to which we should be paying particular attention.

3. When you arrive at No 10 Downing Street you will be given a name tag, a list of those others attending, and shown into the dining room where refreshments will be available. The Prime Minister will then make a few introductory remarks and invite one of your number to introduce the first topic above. Following general discussion of this topic, the Prime Minister will then invite someone else to introduce the second topic, and so on.

4. This part of the proceedings should last for an hour or so. The selection of topics and the enclosed notes are not intended to constrain the scope of the discussion and I hope you will feel free to make additional points as you think appropriate. But the notes should help to provide a coherent general framework for some of the key issues likely to arise.

5. Following this period of discussion the Prime Minister will then lead the way into the Pillared Room where more refreshments will be available and the reception will continue informally, with the Prime Minister and her colleagues circulating amongst you. Several other Ministers will be present and their names will be on the list given to you when you arrive.

6. Given the necessarily tight timing we hope that it will be possible to start the discussion part of the proceedings reasonably punctually. It would therefore be very helpful if you could arrive at No 10 promptly for 6.30 pm.

7. I am in contact separately with those who will be invited to introduce each of the three topics referred to above. But if you are not one of those I hope that you will feel free to make a contribution and so help make this an informative and stimulating, as well as enjoyable, occasion.

J B UNWIN
Under Secretary
Head of Information Technology Unit

1. How well placed is the computer industry in the UK to take advantage of the opportunities presented by the new technology? What are our major strengths and weaknesses and how should we be exploiting/tackling them?

A number of weaknesses have been pointed to. For example:

- industry in the UK is fragmented, and concentrated on the relatively small UK market, so that we cannot match the volumes, and hence prices, of our major competitors;
- there are a number of weaknesses in development and manufacture; for example:
  - we do not make very large computers; we have not competed effectively in the middle-sized computer businesses;
  - our presence in mini computers is even weaker (with a substantial trade deficit) and very small also in micros;
  - we supply only a tiny proportion of the UK word processing market, and have few sales abroad;
  - we manufacture few of the peripherals (eg data storage systems) attached to computers of any size;
  - in telecommunications, our share of the world market for switching equipment has contracted sharply.

But as against this:

- British software has a high international reputation, and this has helped to attract multinational computer companies to increase their investment in British software;
- Britain has a good technological capability in the main areas of information technology, although this has not always been matched by successful commercial exploitation;
- we also have considerable technical and manpower strengths in a variety of areas such as fibre optics, networking and viewdata/teletext.

Are these fair claims and assertions? How can we exploit our strengths and remedy weaknesses so as to be able to compete effectively in international markets and achieve the economies of volume production that the UK market alone cannot provide? Are there any building blocks we should give priority to maintaining or developing in the UK? Should we, for example, devote more resources to the development of software with the object of winning a greater share of the software required by other nations' hardware? What are the implications of this and any other shifts in priorities for the structure of the computer industry in the UK? What are the implications for the Government which have been active in the support of suppliers and the development of products and bearing in mind that the public sector as a whole represents nearly half the total UK market for information technology products and services?

2. What is the best way to ensure that the UK derives the maximum economic and social benefit from the new technology?

The Government have made it clear that they regard the effective development and application of information technology as a key element in the future industrial and commercial success of the United Kingdom. Accordingly a number of Government schemes are concerned with support of R&D, assistance in the development of new products, encouraging awareness of new technology in industry, commerce and the public generally, influencing the development of standards, and so on. This is against the background that at least half of all economic activity is in some significant sense concerned with handling information; and as the underlying technology continues to change rapidly, so the demand for better and cheaper techniques is likely to rise too.

But how do we ensure that industry in the UK and the nation generally, makes optimum practical use of the application of the new technology, whether or not the demand from the market exceeds the capacity of British industry to supply it? There are many important fields of application:

- in the office and in public and private sector management and administration in a wide variety of fields;

- in industrial manufacturing and production;

- in almost all service industries, particularly where the direct provision of information to the public is involved;

- in the provision of financial and related services;

and so on.

In some of these areas substantial progress has been made and UK application of new technology compares favourably with anywhere in the world. The City, for example, has demonstrated the ability to harness the new technology to improve the cost effectiveness of its own systems and communications. But in other areas - particularly manufacturing and production - Britain seems to lag well behind some of its main competitors.

Is this "curates egg" picture a fair one? Is it true that in important areas British commerce and industry is slower to adopt new technology than our competitors (or are we just more reticent about our activities)? If so, should we be seeking to promote applications of new technology across the economy generally, or should we be trying to specialise in particular processes (such as investment analysis, management consulting, medical diagnosis, software production etc) which add value to information and where we appear to have traditional strengths? What are the roles of private industry and the Government respectively in promoting more effective application?

3. What are the main social and environmental aspects of the new technology to which we must pay attention if its application is to spread in a harmonious and effective way?

It is asserted that the new technology will cause in half a lifetime a greater revolution than the steam engine and internal combustion engine technology achieved in two lifetimes. While precise comparisons can be fanciful, it is certainly true that the new technology will be pervasive and that many economic and social patterns will need to change radically in a short period of time. This will apply not merely nationally, but internationally. Information moves freely from one country to another, and, unless restrictions are placed on the international flow of information, the process of harmonisation and standardisation could tend towards a single global information system.

What are the main social and environmental aspects to which we must pay attention if the effective development and application of the new technology is not to be harmfully impeded? Among some obvious areas for consideration are:

- Education and training: Education at all levels is being increasingly geared to promote awareness of, and the acquisition of skills in, all aspects of the new technology. The Government have taken a number of initiatives here. Is the UK, private and public sector, doing enough in the right direction?

- Employment consequences: There is wide agreement that Britain must harness the new technology in order to compete successfully and so provide the basis for new market opportunities and jobs. But have we taken the necessary steps to promote full understanding of the issues involved, especially the fears of unemployment? Are there some people who will be unable to adapt and what do we do about them?

- Privacy: The Government have announced their intention to introduce data protection legislation, mainly to ensure that foreign countries do not restrict their trade in data and information services.

- Government regulation: Are there fields in which traditional regulatory concepts are likely to become obsolete if obstacles to the beneficial spread of the new technology are to be removed. What are their consequences (eg for traditional approaches to copyright or broadcasting)?

Which of these or other areas should command priority? What are the main obstacles? What are the main opportunities that can be channelled to the national advantage?

28 OCT 1981

Michael Scholar

Ian

Computer Reception - Monday 2nd November

Michael Scholar rang to say that they already have about 50 guests for this Reception - and three MPs (backbenchers) attending.

Do you mean him to invite all the extra MPs on the list you gave him, or just one or two?

— Yes please - all of them.

Can you let him know, please?

Tessa
26/10.

Tessa
23/10/81

Hn 0344

MR SCHOLAR - No 10

PRIME MINISTER'S RECEPTION FOR REPRESENTATIVES OF THE COMPUTER INDUSTRY ON 2 NOVEMBER

Forgive me for bothering you so soon again.

2. In my minute to you of yesterday I said that I proposed to write with further information to those attending the reception.

3. I attach a draft of the kind of letter I should like to send. Would you have a moment to cast your eyes over this and let me know whether you are content? I should like to get this off, and to line up the three introductory speakers, as soon as possible.

4. You will see that the letter refers to some of the logistics of the occasion (eg reference to name tags etc in paragraph 3). Again, this follows the arrangements for last January's seminar. Perhaps whoever is responsible for the physical arrangements could also contact me to confirm that this acceptable. I should also welcome an opportunity some time next week briefly to survey the ground myself. Perhaps I could come round and see you at some convenient quiet moment?

J. Unwin

pp J B UNWIN
20 October 1981

IT Unit
Cabinet Office

DRAFT LETTER

I am glad to learn that you will be able to attend the Prime Minister's reception at 10 Downing Street on 2 November. I thought it would be helpful if I let you have some further information on the arrangements for the evening.

2. As the note enclosed with your invitation indicated, the Prime Minister is anxious to have an opportunity of hearing at first hand from you your views on the problems and opportunities facing the United Kingdom in computing and information technology, and on the part that private industry and the Government have to play. As a suggested starting point for the discussion we have therefore prepared the brief notes enclosed which raise some of the problems and questions arising on:

- the present strengths/weaknesses of the industry in the UK;
- the applications, uses etc that we ought to be concentrating on in the UK;
- the other problems/consequences (eg social, employment, regulatory etc) to which we should be paying attention.

3. When you arrive at No 10 Downing Street you will be given a name tag, a list of those others attending, and shown into the dining room where refreshments will be available. The Prime Minister will then make a few introductory remarks and invite one of your number to introduce the first topic above. Following general discussion of this topic for some 15-20 minutes, the Prime Minister will then invite someone else to introduce the second topic, and so on.

4. This part of the proceedings should thus last for an hour or so. The selection of topics and the enclosed notes is not in any way intended to constrain the scope of the discussion and we hope you will feel free to make additional points where appropriate. But it should help to provide a coherent framework for some of the key issues likely to arise.

5. Following this period of discussion the Prime Minister will then lead the way into the Pillared Room where more refreshments will be available and the reception will continue informally, with the Prime Minister and her colleagues circulating amongst you. Several other Ministers will be present and their names will be on the list given to you when you arrive.

6. Given the necessarily tight timing we hope that it will be possible to start the discussion part of the proceedings reasonably punctually. It would therefore be very helpful if you could arrive at No 10 promptly for 6.30 pm.

7. I am in contact separately with those who will be invited to introduce each of the three topics referred to above. But if you are not one of those we hope that you will come prepared to make a contribution and so help make this an informative and stimulating, as well as enjoyable, occasion.

J B UNWIN
Under Secretary
Head of Information Technology Unit

21 OCT 1981

Note
Told Mr Unwin OK
MLS 20/10

Hn 0340

MR SCHOLAR - No 10

cc Mr Courtney
Mr Norman

PRIME MINISTER'S RECEPTION FOR REPRESENTATIVES OF THE COMPUTER INDUSTRY ON 2 NOVEMBER

As I mentioned to you on the telephone (and as I indicated in paragraph 3 of my submission of 9 October) I propose to write to each of the outsiders attending the reception to give them further details of the occasion and to enclose short notes on the topics that might be discussed. This follows the procedure followed by Dr Ashworth for the Inventors' reception last January.

2. I attach a copy of the short notes I would propose to send out. I have agreed them with the DOI and the CCTA. They do not, of course purport to provide a comprehensive analysis of the many issues that might usefully be discussed; nor are they intended to constrain the discussion which will no doubt take its own course on the night. But I am sure that some starting framework is desirable to help focus the minds of those attending on the kind of points it might be worth pursuing. The notes accordingly pursue the following broad logic:-

- the present strengths/weakness of the industry in the UK;
- in the light of that, what applications uses etc ought we to be concentrating on in the UK;
- what are the other problems/consequences we should be paying attention to (eg social and employment consequences, regulatory environment etc).

3. Again, following the form of the inventors' seminar, I would propose to ask 3 of the outside guests to introduce these topics very briefly. I have in mind:-

- first topic: Mr Robb Wilmot (ICL);
- second topic: Mr Tony Davies (Computer Technology Ltd)
- third topic: Mr David Fairbairn (National Computing Centre).

4. In writing to those attending I propose to:-

- send the notes and explain that the topics will be briefly introduced but that neither the notes nor the introductions are intended to limit the scope of the discussion;

Hn 0340

- explain the general arrangements for the occasion (viz initial refreshments; informal "seminar" for an hour or so; and then further refreshments with an opportunity for informal discussion with the Prime Minister and other Ministers attending);
- Given the limited time, urge every one to arrive promptly!

5. I should be grateful to know whether these proposals are acceptable to you.

J B UNWIN
20 October 1981

IT Unit
Cabinet Office

Introductory Notes on suggested topics for discussion

1. How well placed is the computer industry in the UK to take advantage of the opportunities presented by the new technology? What are our major strengths and weaknesses and how should we be exploiting/tackling them?

A number of weaknesses have been pointed to. For example:

- industry in the UK is fragmented, and concentrated on the relatively small UK market, so that we cannot match the volumes, and hence prices, of our major competitors;
- there are a number of weaknesses in development and manufacture; for example:
  - we do not make very large computers; we have not competed effectively in the middle-sized computer businesses;
  - our presence in mini computers is even weaker (with a substantial trade deficit) and very small also in micros;
  - we supply only a tiny proportion of the UK word processing market, and have few sales abroad;
  - we manufacture few of the peripherals (eg data storage systems) attached to computers of any size;
  - in telecommunications, our share of the world market for swtiching equipment has contracted sharply.

But as against this:

- British software has a high international reputation, and this has helped to attract multinational computer companies to increase their investment in British software;
- Britain has a good technological capability in the main areas of information technology, although this has not always been matched by successful commercial exploitation;
- we also have considerable technical and manpower strengths in a variety of areas such as fibre optics, networking and viewdata/teletext.

Are these fair claims and assertions? How can we exploit our strengths and remedy weaknesses so as to be able to compete effectively in international markets and achieve the economies of volume production that the UK market alone cannot provide? Are there any building blocks we should give priority to maintaining or developing in the UK? Should we, for example, devote more resources to the development of software with the object of winning a greater share of the software required by other nations' hardware? What are the implications of this and any other shifts in priorities for the structure of the computer industry in the UK? What are the implications for the Government which have been active in the support of suppliers and the development of products and bearing in mind that the public sector as a whole represents nearly half the total UK market for information technology products and services?

2. What is the best way to ensure that the UK derives the maximum economic and social benefit from the new technology?

The Government have made it clear that they regard the effective development and application of information technology as a key element in the future industrial and commercial success of the United Kingdom. Accordingly a number of Government schemes are concerned with support of R&D, assistance in the development of new products, encouraging awareness of new technology in industry, commerce and the public generally, influencing the development of standards, and so on. This is against the background that at least half of all economic activity is in some significant sense concerned with handling information; and as the underlying technology continues to change rapidly, so the demand for better and cheaper techniques is likely to rise too.

But how do we ensure that industry in the UK and the nation generally, makes optimum practical use of the application of the new technology, whether or not the demand from the market exceeds the capacity of British industry to supply it? There are many important fields of application:-

- in the office and in public and private sector management and administration in a wide variety of fields;
- in industrial manufacturing and production;
- in almost all service industries, particularly where the direct provision of information to the public is involved;
- in the provision of financial and related services;

and so on.

In some of these areas substantial progress has been made and UK application of new technology compares favourably with anywhere in the world. The City, for example, has demonstrated the ability to harness the new technology to improve the

cost effectiveness of its own systems and communications. But in other areas - particularly manufacturing and production - Britain seems to lag well behind some of its main competitors.

Is this "curates egg" picture a fair one? Is it true that in important areas British commerce and industry is slower to adopt new technology than our competitors (or are we just more reticent about our activities)? If so, should we be seeking to promote applications of new technology across the economy generally, or should we be trying to specialise in particular processes (such as investment analysis, management consulting, medical diagnosis, software production etc) which add value to information and where we appear to have traditional strengths? What are the roles of private industry and the Government respectively in promoting more effective application?

3. What are the main social and environmental aspects of the new technology to which we must pay attention if its application is to spread in a harmonious and effective way?

It is asserted that the new technology will cause in half a lifetime a greater revolution than the steam engine and internal combustion engine technology achieved in two lifetimes. While precise comparisons can be fanciful, it is certainly true that the new technology will be pervasive and that many economic and social patterns will need to change radically in a short period of time. This will apply not merely nationally, but internationally. Information moves freely from one country to another, and, unless restrictions are placed on the international flow of information, the process of harmonisation and standardisation could tend towards a single global information system.

What are the main social and environmental aspects to which we must pay attention if the effective development and application of the new technology is not to be harmfully impeded? Among some obvious areas for consideration are:

- Education and training: education at all levels is being increasingly geared to promote awareness of, and the acquisition of skills in, all aspects of the new technology. The Government have taken a number of initiatives here. Is the UK, private and public sector, doing enough in the right direction?
- Employment consequences: There is wide agreement that Britain must harness the new technology in order to compete successfully and so provide the basis for new market opportunities and jobs. But have we taken the necessary steps to promote full understanding of the issues involved, especially the fears of unemployment. Are there some people who will be unable to adapt and what do we do about them?

- Privacy: the Government have announced their intention to introduce data protection legislation, mainly to ensure that foreign countries do not restrict their trade in data and information services.
- Government regulation: are there fields in which traditional regulatory concepts are likely to become obsolete if obstacles to the beneficial spread of the new technology are to be removed. What are their consequences (eg for traditional approaches to copyright or broadcasting)?

Which of these or other areas should command priority? What are the main obstacles? What are the main opportunities that can be channelled to the national advantage?

Prime Minister (1)

You asked why (1) and (2) had been put forward - it was because of their involvement in the micros for schools programme. Do you want them invited?

Hn 0337

MR SCHOLAR (No 10)

cc Miss S Goodchild - No 10

PRIME MINISTER'S RECEPTION FOR REPRESENTATIVES OF THE COMPUTER INDUSTRY ON 2 NOVEMBER

You asked for a few additional names. I suggest the following:- MCS 20/10

Please see, too, the additions suggested by Mr Gow at Flag A. Content for these to be invited?

Schools: Mr G M A Harrison
Education Offices
Leopold Street
Sheffield S1 1RJ (Tel: 0742 26341)

(Chief Education Officer for Sheffield; Chairman of the Society of Education Officers' Sub-Committee on introducing IT into schools; Chairman of the Education Sub Committee for IT Year 82).

Polytechnics: Mr G Smith
Middlesex Polytechnic
Trent Park
Cockfosters
Barnet
Herts EN4 OPT

MCS 20/10

(Senior lecturer in Education; Leader of local Science and Technology Regional Organisation (jointly financed by DOI and private industry); recommended by DOI and DES).

BBC: Mr Bryce McCrirrick
Director of Engineering
BBC
Broadcasting House
London W1A 1AA

(Our main IT contact at the BBC; and recommended by the Home Office).

Cable and Wireless:

Mr E Sharp CBE
Chairman & Chief Executive
Cable & Wireless Ltd
Mercury House
Theobalds Road
LONDON WC1 X8RX

(Recommended by DOI)

2. As previously requested, it would be very helpful if someone could let me have the list of acceptances (and notice of any early refusals) as soon as possible.

J B UNWIN
19 October 1981

IT Unit
Cabinet Office

Prime Minister

(1)

MR. SCHOLAR

Content for these people to be added to the list you have already approved?

Reception/Seminar for Representatives of the Computer Industry on 2 November MCS 19/10

David Wolfson has suggested the following names for inclusion in the Reception for Representatives of the Computer Industry:

Why?	Mr. G.M.A. Harrison 1	Chief Education Officer for Sheffield
Why?	Mr. G. Smith 2	Senior Lecturer in Education, Middlesex Polytechnic
✓	Mr. Bryce McCrirrick 3	Director of Engineering BBC
✓	Mr. E. Sharp 4	Chairman, and Chief Executive, Cable & Wireless.

Would the Prime Minister agree that these be included?

Sue Goodchild

3 - 4 Yes.

I see no reason for 1 - 2 unless further advised N.B. Middx. Poly is in my constituency

19 October 1981

Schools. Polytechnics } Training.

POST OFFICE? CABLE + WIRELESS.?

MR. GOW

~~c.o. Mr. Wolfson~~
Mr. Ingham

P.a. Mes 19/10

BBC. Computer Series in January. + Their 2 Manufacturers.

Prime Minister's Reception on 2 November for Representatives of the Computer Industry

I attach a copy of a note to me from Mr. Unwin, which provides a suggested list of people to be invited to the Prime Minister's Reception for representatives of the computer industry.

You have already suggested that Mr. G.B. Jackson, Managing Director of Jackson Associates, should be added to the list, and this is being done. I would be grateful for any further suggestions you or Mr. Wolfson may have. Since time is getting very short, I am in parallel submitting Mr. Unwin's list of names to the Prime Minister for approval, with the rider that we are keeping a number of spaces vacant to accommodate people suggested by Mr. Wolfson or yourself. (Our progress with this has been held up by the absence of the last two weeks; my aim is to get the invitations out on Monday, 19 October.)

Mr. Ingham will notice that Mr. Unwin is proposing that only one journalist should be invited, a Mr. Peltu. I would be grateful for his advice on this aspect of the occasion.

MS

14 October, 1981.

Prime Minister (4)

Mr Gow has already suggested one additional guest and I am asking him and Mr Wolfson for further suggestions. Subject to their views are you content with this list?

Hn 0300

MR M SCHOLAR - NO 10

cc Mr D Wright
Mr Courtney
Mr Norman

PRIME MINISTER'S RECEPTION ON 2 NOVEMBER FOR REPRESENTATIVES OF THE COMPUTER INDUSTRY

MCS 14/10

Mr Lankester's minute of 23 September conveyed the Prime Minister's agreement to the proposed format of the above reception and asked me to provide a list of people to be invited.

2. I attach such a list at Annex A. The names are the outcome of consultation with the CCTA and the Department of Industry . Although, for convenience, I have grouped them under industry headings, we have chosen them not as representatives of particular companies or institutions but as individuals who should be capable of making a useful contribution to the evening. This should also help to avoid too many bruised feelings among companies not invited, though there will no doubt be some.

3. I also attach at Annex B a short paragraph to send out with the formal invitations. A similar procedure was followed for the reception for inventors last January. As this indicates, I would propose (as Dr Ashworth did last time) to follow this up by writing to each of the outsiders attending to give them further details of the occasion including short notes on the topics we suggest might be discussed. I will also line up individuals to introduce them briefly, together with some "reserves" for the ensuing discussion, although I doubt in practice whether this will be needed. I will, of course, let you see the short notes I propose to send out.

4. It would be very helpful if you could arrange to let me know as soon as possible the names of those accepting and, in particular, of any early refusals. I can then follow up as proposed above and, in the case of any early refusals, suggest one or two substitutes.

5. Nearer the time I will let the Prime Minister have briefing for the occasion, including some short introductory speaking notes and brief notes on those attending.

J B UNWIN

9 October 1981

IT Unit
Cabinet Office

ANNEX A

RECEPTION/SEMINAR ON 2 NOVEMBER FOR REPRESENTATIVES OF THE COMPUTER INDUSTRY

Guests to be invited

Ministers

Chancellor of the Exchequer
Secretary of State for Industry
Chancellor of the Duchy of Lancaster
Home Secretary
Minister of State, CSD (Mr Hayhoe)
Minister of State, DOI (Mr Baker)
Parliamentary Under Secretary, DOI (Mr Wakeham).

Conservative Bank Benchers

Mr John Butcher (Coventry, SW)
Mr Ian Lloyd (Havant & Waterloo)
Mr Kenneth Warren (Hastings)

Outside Guests

Mainframes

R W Wilmot Esq
Managing Director
International Computers Ltd
ICL House
Putney
LONDON SW15 1SW

J Fairclough Esq
Director
IBM (United Kingdom) Ltd
PO Box 41
North Harbour
Portsmouth
Hants PO6 3AU

B Long Esq
Vice President & Managing Director
Honeywell Information Systems Ltd
Honeywell House
Great West Road
Brentford
Middlesex

Minicomputers etc

D Roberts Esq
Director
GEC
Hirst Research Centre
East Lane
Wembley
Middlesex

B de Ferranti Esq
Deputy Chairman
Ferranti Ltd
Bridge House
Park Road
Gatley
Cheadle
Cheshire SK8 4H2

C A Davies Esq
Chairman
Computer Technology Ltd
Sunley House
46 Jewry Street
Winchester
Hants SO23 8RP

J Gow Esq
Managing Director
Systime Ltd
Concourse Computer Centre
432 Dewsbury Road
Leeds
Yorkshire LS11 7DF

Office Systems

M Bevan Esq
Chairman
Xionics Ltd
Dumbarton House
68 Oxford Street
London W1N 9LA

M Aldrich Esq
Managing Director
Rediffusion Computers Ltd
17/27 Kelvin Way
Crawley
West Sussex RH10 2LY

D Pitcher Esq
Director
The Plessey Co Ltd
2/60 Vicarage Lane
Ilford
Essex 1G1 4AQ

Sir Ernest Harrison
Chairman & Managing Director
Racal Electronics Ltd
Western Road
Bracknall
Berks RG12 1RG

A Sumner Esq
Managing Director
Data Recall Ltd
Diamond House
138 Smith Street
Dorking
Surrey RH4 2EU

Micros

M D Fischer Esq
Chairman
Research Machines Ltd
Mill Street
Oxford OX2 OBW

Dr H Hauser
Managing Director
Acorn Computers Ltd
27 Bridge Street
Cambridge
Cambs

C Sinclair Esq
Managing Director
Science of Cambridge Ltd
6 Kings Parade
Cambridge
CB2 1SN

Unions

T Webb Esq
National Officer
Association of Scientific, Technical &
Managerial Staffs
10-26A Jamestown Road
London NW1 7DT

Peripherals, Terminals and Data Communications

R Saar Esq
Managing Director
Newbury Laboratories Ltd
King Street
Odiham
Hants RG25 1NN

H H Brown Esq
Managing Director
Lynwood Scientific Developments Ltd
Caker Stream Road
Mill Lane
Alton Hants

J L A Selby Esq
Managing Director
Trend Communications Ltd
Knaves Beech Estate
Loudwater
High Wycombe
Bucks HP10 9QZ

L Brownlow Esq
Managing Director
Rodime Ltd
Nasmyth Road
Southfield Industrial Estate
Glenrothes
Fife
Scotland

H Smeaton Esq
Managing Director
Fortronics Ltd
Holden Way
Donibristle Industrial Estate
Dunfermline
Scotland

Computer Services and Consultancy

P A B Hughes Esq
Chairman
Logica Holdings Ltd
64 Newman Street
London W1A 4SE

M Reynolds Esq
Chairman
Micro Focus Ltd
58 Acacia Road
St John's Wood
London NW8 6AG

G M R Graham Esq
Chairman
BIS Applied Systems Ltd
York House
199 Westminster Bridge Road
London SE1 7UT

R Thomas Esq
Chairman
The Altergo Group
Warwick House
38 Soho Square
London W1

Mrs V S Shirley
Chairman
F International Ltd
Chesham House
Church Lane
Berkhamsted
Herts HP4 2HA

H Hunt Esq
Managing Director
PA Computers & Telecommunications Ltd
Rochester House
33 Greycoat Street
London SW1P 2QF

Academic

Prof B Randell
University of Newcastle
Claremont Towers
Claremont Road
Newcastle-Upon-Tyne

Prof J Alty
University of Liverpool
Brownlow Hill
PO Box 147
Liverpool L69 3BX

Prof Enid Mumford
Manchester Business School
Booth Street West
Manchester
M15 6PB

Users

N Lewis Esq
Director for Systems
Ford Motor Company Ltd
Eagle Way
Brentwood
Essex

P Hermon Esq
Management Services Director
British Airways
Speedbird House
London (Heathrow) Airport
PO Box 10
Hounslow
Middlesex

D Harris Esq
Director of Computers
Tesco Stores Ltd
PO Box 18
Delamare Road
Cheshunt
Herts

Others

A A Benjamin Esq
Chairman
Information Technology 1982 Ltd
19 Bedford Row
London WC1R 4EB

D Fairbairn Esq
Director
National Computing Centre Ltd
Oxford Road
Manchester M1 7ED

G J Pocock Esq
Senior Director
Marketing Executive
British Telecom
2-12 Gresham Street
London EC2V 7AG

J P Dukes Esq
Managing Director and Deputy Chief Executive
The Channel Four Television Co Ltd
Avenfield House
118-127 Park Lane
London W1Y 3AF

M Peltu Esq
(Freelance Journalist)
33b Chiswick Lane
London W4

Mr G B Jackson
Jackson Associates
44/45 West St
Chichester
West Sussex PO19 1RP

K E Macdonald Esq
Managing Director
IPC Electrical-Electronic Press Ltd
Quadrant House
Sutton
Surrey SM2 5AS

Officials

Mr John Hoskyns (No 10 Policy Unit)

Mr R H F Croft (Deputy Secretary,
Department of Industry)

Mr G W Watson (Director, Central Computer &
Telecommunications Agency, CSD)

Mr A H Lovell (Under Secretary, H M Treasury)

Mr R G Courtney) Information Technology Unit
Mr A R D Norman) Cabinet Office.

ANNEX B

Following a successful occasion earlier this year, when the problems associated with innovation were discussed, the Prime Minister has decided to hold a similar reception at Downing Street for a small number of representatives of the computer industry and related fields. The main purpose of the reception is to give the Prime Minister an opportunity of hearing at first hand the views of those closely involved in the industry on the problems and opportunities facing the United Kingdom in computing and information technology, and on the part that both private industry itself and the Government have to play. The Information Technology Unit of the Cabinet Office will be in touch separately with those attending with further information about the occasion.

File

DSG

CF

cc: DOI
M/S, DOI
CO
CCTA, CSD
bc MRS Foodchild

10 DOWNING STREET

From the Private Secretary

MR. UNWIN
CABINET OFFICE

PRIME MINISTER'S RECEPTION FOR REPRESENTATIVES OF THE COMPUTER INDUSTRIES

Thank you for your minute of 21 September which I have shown to the Prime Minister. The Prime Minister is content with your proposals for the format of the reception, and I should be glad if you would now let us have a list of people whom you think should be invited in addition to those mentioned in paragraph 7 of your minute. The Prime Minister would like John Hoskyns to be included.

I am sending copies of this minute to Ian Ellison (Department of Industry), Jonathan Hudson (Mr. Baker's Office, Department of Industry), David Wright (Cabinet Office) and Gerald Watson (Central Computer & Telecommunications Agency, CSD).

T. P. LANKESTER

23 September 1981

Prime Minister

You have agreed to hold a reception for the computer industry. This seems a sensible format (i.e. similar to the one we had for innovators). Content?

1

Hn 0240

MR LANKESTER (No 10) Yes

PRIME MINISTER'S RECEPTION/SEMINAR FOR REPRESENTATIVES OF THE COMPUTER INDUSTRIES

Your minute of 11 September sought my advice on the arrangements for the above reception/seminar which the Prime Minister has decided to hold on 2 November.

2. I have had some preliminary discussion with the CSD (CCTA) and the Department of Industry. My outline proposals are summarised below. If these are generally acceptable to the Prime Minister I will consult further and submit detailed proposals (names, topics for discussion etc) within this framework later.

Objective

3. The primary objective of the evening should be to give the guests an opportunity to put personally to the Prime Minister and other Ministers their own views on national problems and opportunities in the computer and information technology field. Discussion should thus cover the part that both private industry itself and the Government have to play. The occasion should also, of course, serve to contribute to the Government's general IT "awareness" programme, particularly following the launch of IT Year 1982 on 19 October.

General form

4. This should follow the pattern of the reception/seminar for innovators last January, viz:

- initial reception and drinks (while the guests assemble);
- "formal" discussion;
- closing drinks and refreshments.

Given the tightness of the timing (18.30 to 20.00 hrs), however, and the desirability of allowing as much time as possible for the main discussion session, the closing refreshments might be allowed to extend beyond 20.00 hrs if arrangements at No 10 permit this (as in fact happened with the innovators' seminar). Even if the Prime Minister has to leave promptly herself, it would enable guests and other Ministers to continue informal discussion a little longer. But we can consider this further nearer the time in the light of any flexibility on the timing or the Prime Minister's other commitments.

Hn 0240

Substance of seminar

5. The Prime Minister will no doubt wish to make a few introductory remarks. Thereafter I suggest we aim to discuss, say, three pre-arranged topics, each to be introduced briefly by one of the (forewarned) guests. In the time available it would not be sensible to attempt more. Possible areas from which topics might be selected include:-

- industrial aspects (eg the future direction of computing, where is the UK best placed? etc);
- encouraging applications and awareness;
- "social" and environmental implications (eg employment, privacy, education etc).

When we have settled the topics, and selected introductory speakers, there would probably be merit in circulating very short notes on them to those attending.

Attendance

6. Unless you advise to the contrary, I shall plan on broadly the same numbers as in January, viz 55 to 60 in all, including Ministers and officials. A seminar with many more than this would be too large and, in the time available, offer little chance for all participants to make a contribution.

7. On this basis the guest list might look like:-

Ministers:
Prime Minister
Chancellor
Secretary of State for Industry
Chancellor of the Duchy of Lancaster
Home Secretary
Secretary of State for Employment
Minister of State, CSD
Minister of State, DOI (Mr Baker)

Five or six Conservative Members of Parliament

Fix or six officials from the main Departments concerned

Thirty-five to forty representatives from the industry. + John Hoskyns

8. Given the wide range of industrial and other interests potentially involved, we shall need to be fairly rigorous in our selection of the industrial guests. It will probably be better to go for individuals, chosen for their originality and ability to

contribute, rather than representatives of firms. This should in any case help to avoid too many feelings about why one firm rather than another has been invited.

Conclusion

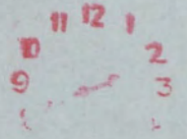
9. If the above outline is broadly acceptable I will let you have specific proposals and names as soon as possible after further consultation with the Department of Industry and the CCTA.

10. I am copying this note to Ian Ellison (Secretary of State for Industry's Office), Jonathan Hudson (Mr Baker's Office), David Wright (Cabinet Office) and to Gerald Watson at the CCTA.

J B UNWIN
21 September 1981

IT Unit
Cabinet Office

22 SEP 1981



MRS GOODCHILD

10 DOWNING STREET

From the Private Secretary

MR. UNWIN
CABINET OFFICE

Reception for Representatives of the Computer Industries

The Prime Minister has definitely decided that she would like to give a reception cum seminar for representatives of the computer industry. (This was mentioned in my letter of 16 March following her lunch with the British Computer Society.) The reception has been fixed for 2 November from 1830 to 2000.

I should be grateful if you could now provide advice on who should be invited and what form the seminar should take. The Prime Minister gave a very successful reception cum seminar for industrial innovators last year, in the preparation of which Dr. Ashworth was closely involved. The seminar might perhaps follow a similar pattern.

I am sending copies of this note to Ian Ellison (Department of Industry) and David Wright (Cabinet Office).

I.P. LANKESTER

11 September 1981

MRS. SUE GOODCHILD

Mr. G.B. Jackson -
Managing Director of Jackson Associates

1. Herewith copy letter dated 5th March from Mr. G.B. Jackson, together with a copy of my reply.

2. Would it be possible, please, to put him on a future guest list for a Reception at which the Computer Services Industry will be represented?

11th March, 1981

IAN GOW

JACKSON ASSOCIATES

44/45 West Street
Chichester
West Sussex PO19 1RP

Telex 86405
Telephone
· Chichester 0243/787721

G.B. JACKSON ASSOCIATES LIMITED
Principal Subsidiaries
JA Computer Services Limited
JA Software Services Limited

GBJ/RT

I. Gow, Esq.,
Parliamentry Private Secretary
House of Commons,
London SW1A OAA

5th March, 1981

Dear Mr. Gow,

Very many thanks for your letter of the 26th February, and I very much look forward to meeting you on June 6th.

I was very interested to read in the Financial Times of the Prime Minister's recent meeting with small companies who are helping to counteract the recession. I was surprised that, bearing in mind the previous correspondence we have had with Mrs. Thatcher, and the fact that her diary commitments would not allow her to visit Chichester, that she did not feel it relevant that a representative from the Computer Services Industry was present at that gathering.

I believe our industry will contribute in a major way to the country's export achievements, and industrial and commercial growth.

It is interesting that within a matter of ten days of forming our company in the United States, we are on the verge of signing a major contract with a New York Commodity Company, and making an acquisition in the New York area, and I would certainly have thought that the Prime Minister should be interested in an area of industry and commerce which I am sure over the next twenty years is likely to feature quite prominently in our commercial life.

Looking forward to hearing from you.

Yours sincerely,

G.B. JACKSON
Managing Director

Directors
A R Starkey Chairman
G B Jackson MBCS Managing Director
Mrs S C Jackson Secretary
M J Burton MA MBCS
D W Ferguson
Mrs I E King
S H J A Knott BA
I S V Mackenzie BSc Eng
I G Olliver
C Rengert FCA
I M G Senior
Mrs E A Wood BA Hons

Registered in England
No. 1169451
VAT No. 321 7116 96

Member of the
Computing Services Association

10 DOWNING STREET

11th March, 1981

Your ref:
GBJ/RT

Many thanks for your letter of 5th March.

The Prime Minister does have meeting with representatives of the Computer Services Industry, and will do so again.

I was delighted to hear of the success of your Company, and I hope that it may be possible for you to meet the Prime Minister on some future occasion. I will do my best to arrange this.

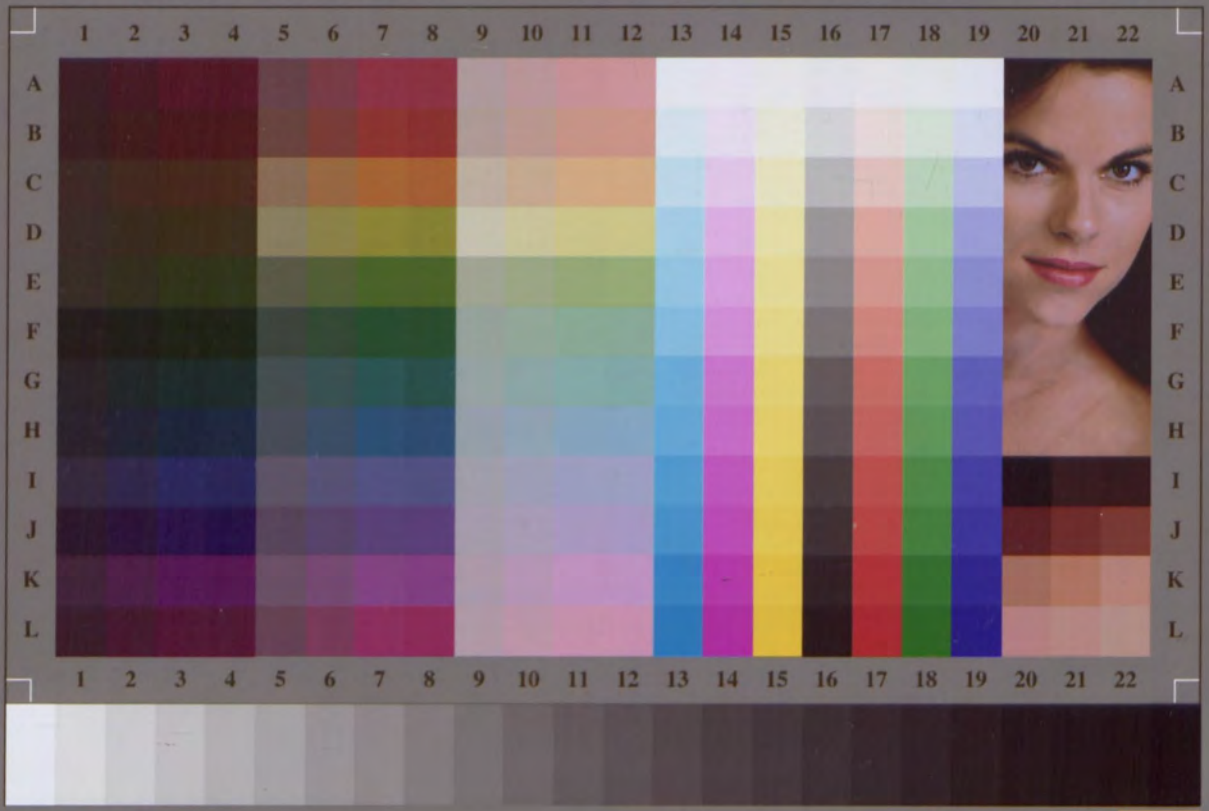
With best wishes.

IAN GOW MP
Parliamentary Private Secretary
to the Prime Minister

G.B. Jackson, Esq.
Managing Director,
Jackson Associates,
44 West Street,
Chichester, West Sussex

b.c.c. Anthony Nelson, Esq. M.P.

KODAK Q–60 Color Input Target



IT8.7/2–1993
2007:03

FTP://FTP.KODAK.COM/GASTDS/Q60DATA

Q-60R2 Target for
KODAK
Professional Papers