

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



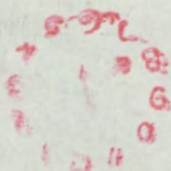
grateful to have your approval for them. I will then arrange for them to be implemented and for the IT Secretariat to monitor progress.

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.

ROBERT ARMSTRONG

11th February 1982



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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 AO7478, 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

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15 February 1982

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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.

It is as per recipients below.

X 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?

MUS

Yes
ml

9 November 1981

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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

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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 vigorously 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;

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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

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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 been 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);

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- 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);

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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.

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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

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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

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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.

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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 suppliers 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

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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.

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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 authorities) 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.

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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.

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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 Government 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;

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- 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.

More promotion of computer uses and applications in the public sector

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?

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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.

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6.10 However, performance across Government remains distinctly 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 suppliers 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

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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

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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 a 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

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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.

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

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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

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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.