PREM 19/1958

Long Tem Strategy for Social Security Operations

SOCIAL SERVICES

PART 1

PRISEPTEMBER 1980

Referred to	Date	Referred to	Date	Referred to	Date	Referred to	Date
28-10-80 28-6-83 2-7-81 27-7-81 27-7-82 21-82 21-82 21-82 21-82 21-82 21-82 21-82 21-82 21-82 21-82 21-82 21-82 21-82 21		RE		19		95	
	No.						

PART ends:-

DHSS to TF 2114

PART 2 begins:-

55 DHSS to PM 24/6

TO BE RETAINED AS TOP ENCLOSURE

Cabinet / Cabinet Committee Documents

Reference	Date
E(A)(85) 16 th meeting, item 2	29/07/1985
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The documents listed above, which were enclosed on this file, have been removed and destroyed. Such documents are the responsibility of the Cabinet Office. When released they are available in the appropriate CAB (CABINET OFFICE) CLASSES

Signed

PREM Records Team

Date 27/10/2014

Published Papers

The following published paper(s) enclosed on this file have been removed and destroyed. Copies may be found elsewhere in The National Archives.

Department of Health and Social Security Social Security Operational Strategy A framework for the future Printed by HMSO ISBN 011 760861 0

Signed _

Date 27/10/2014

PREM Records Team

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CC 36-

DEPARTMENT OF HEALTH & SOCIAL SECURITY

Alexander Fleming House, Elephant & Castle, London SEI 6BY

Telephone 01-407 5522

From the Secretary of State for Social Services

Any PV comments ?

Tim Flesher Esq Private Secretary 10 Downing Street

21 April 1986

Dear Tim

4500

PROCUREMENT OF MAINFRAME COMPUTERS

Thank you for your letter of 7 April reporting the Prime Minister's agreement to the proposals in my Secretary of State's minute of 27 March. You indicated that the Prime Minister would wish to be assured on a number of points.

My Secretary of State fully accepts the need to ensure both that ICL provide a high standard of prompt service and that as much as possible of his Department's computer requirements are put to competitive tender.

We have already taken a number of steps to ensure that we get full value from the Department's considerable investment, or potential investment in ICL. Progress on the Department's wide range of computer activities is reviewed at quarterly meetings of the Social Security Management Board (SSMB), the main operational control body for social security matters; the Managing Director of ICL, Peter Bonfield, has been asked to attend these meetings. We are also setting up regular review meetings with senior ICL officials to ensure both that equipment and support services are up to specification standards and that the company remains fully committed to achieving our operational strategy. Any issues unresolved at these meetings would automatically be raised at the SSMB. We are confident that this mechanism will mean that issues are resolved quickly.

We are currently negotiating a comprehensive agreement with ICL for all DHSS's future dealings with the company. Its main aims are to streamline procedures wherever possible without loss of quality controls and to negotiate discount arrangements which adequately reflect the large amount of business we do with ICL. In this way we intend to ensure that a single tender decision does not mean we lose the advantages which normally accompany open competition.

E.R.

We also intend that as much as possible of our computer equipment and service contracts are secured as a result of competitive tendering. Your letter mentions the two major areas - computer terminals and communications network - where contracts are to be let over the next year or so. The contract for terminals is to be let by the end of June and follows keen competition among the three shortlisted companies (Wang, Honeywell and British Telecom) who were themselves chosen from among a much longer list of potential suppliers. The communications network contract will not be let until next year but interest has already been expressed by a wide range of potential bidders. We expect this to be a highly competitive process and no options will have been closed by the imminent decision on terminals. It is also our policy to go out to competitive tender on programming or other technical or consultancy services wherever practicable.

I am copying this letter to Private Secretaries to members of E(A), Tony Galsworthy (FCO), Michael Saunders (Law Officer's Department) and Michael Stark (Cabinet Office).

Yours un

Cilis

GILES DENHAM Private Secretary SOCIAL SERVICES
LONG- TERM STRATEGY
9/80







THE PRIME MINISTER

KBRA

PROCUREMENT OF MAIN FRAME COMPUTERS

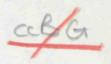
- I have seen Norman Fowler's minute to you of 27th March, the response from your office of 7th April, Peter Brooke's minute to you and Kenneth Baker's letter to Norman.
- 2. Procurement of computers on a single tender basis gives rise to complex legal hazards. I discussed these in the letter annexed to my minute to you dated 24 July 1985. I agree to the procedure suggested by Norman Fowler but must stipulate that each proposed procurement be individually cleared by his lawyers. If in any instance they remain anxious on a legal point I shall of course be happy to advise. I would, however, need full instructions.
- Copies of this minute go to the members of E(A), Sir Geoffrey Howe and Sir Robert Armstrong.

Edich Pay25m

14 April 1986

Law Officers' Department.

Social Services: UT Strategy; Sept 80





FCS/86/096

Moon.

SECRETARY OF STATE FOR SOCIAL SERVICES

Procurement of Mainframe Computers

1. Thank you for copying to me your minute of 27 March to the Prime Minister. The potential conflict between our decision to go for single tender and the requirements of the EC directive on public procurement were fully weighed last year. There could be some risk of legal challenge by one of ICL's competitors given the value of the contract (£50 million) and the fact that competitive tender for the related equipment (computer terminals, communications networks etc) will make it impossible to disguise the existence of the contracts from other major computer manufacturers. But on the basis that nothing has changed since last year to affect the Law Officers' advice that we would have a reasonable prospect of defeating any legal challenge to the single tender decision, I am content for you to go ahead as you propose.

I am copying this letter to the Prime Minister, Members of the E(A), Sir Michael Havers, Sir Patrick Mayhew and Sir Robert Armstrong.

(GEOFFREY HOWE)

Foreign and Commonwealth Office 10 April 1986 Soc. Serv: [10.11. 9] AM86]
Long Term Sept 1980

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FROM: Minister of State

DATE: 7 April 1986

PRIME MINISTER

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PROCUREMENT OF MAINFRAME COMPUTERS

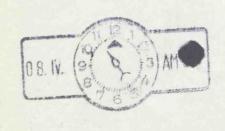
Norman Fowler minuted you on 27 March proposing a framework for the procurement of mainframe computers by DHSS in the light of the decision by E(A) on 29 July 1985 that the mainframe computers for his Local Office Project should be purchased by single tender to ICL.

I am content with Norman Fowler's proposal that advance notice should be given of each procurement decision, and that each of the projects on the list enclosed with his minute should be the subject of a single-tender approach to ICL, provided no unforeseen cost or other difficulties emerge. I suggest that Norman's officials discuss each project with Treasury officials in advance, as part of the normal procedure for the approval of projects which exceed the level of financial authority delegated to DHSS. This would enable officials to identify any difficulties before the project is brought to our attention.

I am also content that the Departmental Central Index procurement which is due to begin next month should be by single tender to ICL. There does not seem to be the same need to announce this decision as in the case of the Local Office Project but, if anything is contemplated, I should be grateful if Norman's officials could discuss it in draft with mine and, I suggest, those of the Solicitor General and the Secretary of State for Trade and Industry.

I am copying this to members of E(A), Michael Havers, Patrick Mayhew and to Sir Robert Armstrong.





Soc. Sorv: Long Term Strategy
Aug. '80



M STREET

2 MARSHAM STREET LONDON SWIP 3EB 01-212 3434

My ref:

Your ref:

7 April 1986

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PROCUREMENT OF MAINFRAME COMPUTERS

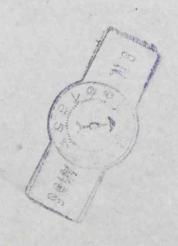
Thank you for copying to me your minute of 27 March to the Prime Minister in which you seek agreement to handling future mainframe procurements without the need to involve the Cabinet Committee on each occasion.

The decision taken last year has already effectively determined that the ICL will supply the main frame computers required for projects within your operational strategy. I am therefore quite content that you should now proceed as you suggest; giving advance notice of each procurement decision to the Chancellor of the Exchequer, the Solicitor General and the Secretary of State for Trade and Industry.

I am copying this letter to the Prime Minister, Members of E(A), Sir Geoffrey Howe, Sir Michael Havers, Sir Patrick Mayhew and to Sir Robert Armstrong.

KENNETH BAKER

Soc. Serv. Long Term Sept 80



JAIAOR
7 April 1986



10 DOWNING STREET

From the Private Secretary

Den Celes,

The Prime Minister has now seen your Secretary of State's minute of 27 March about the procurement of main frame computers. She has agreed to your Secretary of State's proposal and in particular to the single tender approach to ICL. She very much hopes however that your Department will be making arrangements to ensure that ICL deliver on time and to specification given the substantial computer contracts over the next five years which they are being guaranteed. Moreover, she further hopes that your Department's undertaking to put as much of its computer requirements as possible out to tender will be carried out.

The Prime Minister would wish to be assured that the computer terminals, the communications network linking them together and the software programmes will all go out to competitive tender. Perhaps you could arrange for comments on both these points to be provided as soon as is appropriate.

I am sending copies of this letter to Private Secretaries to members of E(A), Tony Galsworthy (Foreign and Commonwealth Office), Michael Saunders (Law Officers' Department) and to Michael Stark (Cabinet Office).

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(TIM FLESHER)

Giles Denham, Esq., Department of Health and Social Security. Phue Murte

Agree Mr

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4 April 1986 subject

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Willetts Z

PRIME MINISTER

PROCUREMENT OF MAIN FRAME COMPUTERS

Local Office Project (LOP) by single tender to ICL. The LOP covers the non-contributory means-tested benefits. Norman Fowler now wants to procure replacement computers, totalling about £50m, to handle the contributory benefits by single tender to ICL as well. This is consistent with the E(A) decision last July, and I recommend you agree.

But you may want to add two comments. First, a Government committed to free markets can never be entirely happy with single tenders. Norman Fowler must keep his promise to put as much of his computer requirements as possible out to open tender. He should be able to assure you that the terminals, the communications network linking them together, and the software programs will all go out to competitive tender.

Secondly, the DHSS admitted in their paper last July that ICL have a reputation for delivering equipment late and with technical faults. ICL will be facing the juicy prospect of a lot of guaranteed computer contracts from the DHSS over the next 5 years. What arrangements will the Department be making to keep pressure on ICL to deliver properly working equipment on time?

David Willetts

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PRIME MINISTER

PROCUREMENT OF MAINFRAME COMPUTERS

You will recall that after consultation with the Law Officers I wrote to you and colleagues on E(A) Committee last July seeking agreement to procuring mainframe computers for our Local Office Project (LOP) by a single tender to ICL. This approach was endorsed by E(A) at its meeting on 29 July and I announced the decision, along with the go-ahead for a LOP prototype, on 11 September. The purpose of this minute is to seek your agreement to a framework for handling future mainframe procurements so as to avoid the need for detailed consideration in Cabinet Committee on each occasion.

The principal reason for a single tender approach for LOP was that our aim of a fully integrated computer system was only attainable if all mainframe computers shared the same technical architecture. This meant choosing one supplier for all strategy mainframes and in view of my Department's existing investment in ICL equipment and software it was essential that the supplier chosen be ICL. These considerations apply to future mainframe procurements within our Departmental Central Index (DCI); subsequently we shall need new mainframes to replace existing ICL systems where we will be retaining (and enhancing) the ICL based software. We therefore need to establish a clear basis for handling these procurements.

My officials have discussed the proposed procurement approach with their counterparts in the Treasury, CCTA, DTI and the Treasury Solicitors. The way forward has been agreed and the projects requiring a single-tender approach to ICL have been identified. The attached list gives brief details. Unless you or colleagues see any difficulty, I would propose simply to give advance notice of each procurement decision to the Chancellor of the Exchequer, the Solicitor General and the Secretary of State for Trade and



Industry. I would hope this minute could be regarded as serving that purpose for the DCI procurement, which is due to start with the issue of an Operational Requirement next month.

I would be grateful to know of any reservations about this approach by 7 April.

I am copying this to members of E(A), Sir Geoffrey Howe, Sir Michael Havers, Sir Patrick Mayhew and to Sir Robert Armstrong.

27 March 1986

NF

PROJECT/FUNCTION	HARDWARE OR SOFTWARE TO BE PROCURED	REQUIREMENT	VALUE REQUIREMENT	DATE FOR ISSUE OF OPERATIONAL
Departmental Central Index (DCI)				
Will provide an essential tracing service for all social security computer systems.	Both.	Six 2988 mainframes or one 3900 series level 80/2 dual node Estriel	£5.5 million.	April 1986
Retirement Pensions				
This project will replace the existing ICL mainframe computers handling Retirement pensions as they near the end of their lives. The system will also be redesigned to bring it in line with Operational Strategy standard thus facilitating integration with LOP and other systems.		Mainframe computers (exact number still to be determined)	£9 million	July 1986
National Unemployment Benefit Systems (NUBS)				
This project involves the replacement of the existing ICL mainframe computers and redesign of the system to permit future integration with the rest of the social security computer network.	Both	Possibly 10 mainframe computers	£28 million	1987–88
National Insurance Contributions				
The ICL hardware serving the existing system will be due for replacement towards the end of the decade. The software will be	Hardware	6 Mainframe computers	£7 million	1986–87
simultaneously enhanced to provide local office staff and other computer systems with direct access to records as a step towards a fully integrated social security system.	Software	Annual licence	£250,000	

VALUE

DATE FOR ISSUE OF OPERATIONAL REQUIREMENT

Child Benefit

Like Retirement Pensions, this system will be redesigned in line with strategy standards as the hardware nears the end of its life.

Both

Detailed mainframe requirements not yet determined

£7.8 million

1990

SOCIAL SERVICES: Long Term Strategy: Sept. 1980



NOPM OT 29/7

2 MARSHAM STREET LONDON SWIP 3EB 01-212 3434

My ref: J/PSO/15935/85

Your ref:

26 July 1985

Dear Norman,

LOCAL OFFICE PROJECT

Thank you for copying to me your minute to the Prime Minister of the 19 July about the proposal to procure mainframe computers for the DHSS Local Office Project on a single-tender basis from ICL.

The judgement is a difficult one in the light of the arguments set out in the paper. However experience in my Department certainly suggests that industry standards have not yet advanced to the point where the equipment of different manufacturers can be mixed without encountering technical risks and possible timing and other penalties. This is quite apart from the question of providing support to ICL. For my part I am content with the course of action proposed.

I am copying this letter to the Prime Minister, Members of E(A), Sir Geoffrey Howe, Sir Michael Havers, Sir Patrick Mayhew and to Sir Robert Armstrong.

PATRICK JENKIN

SOCIAL SERVICES: L-T Strategy Sept 80



DHSS LOCAL OFFICE PROJECT: MAINFRAME COMPUTERS

The DHSS and DTI papers muddle up two different questions:

- i. Should we go to open competitive tender?
- ii. Should we eventually buy the ICL mainframes?

The crucial question at this stage is the first one. We believe you should have an open tender because:

i. A contract awarded to ICL on merit after fair open competition does much more for the company than one won by fixing the rules in their favour. The requirement for intercommunication with other benefit computers can legitimately be put into the contract specification. If the case for ICL is as strong as Norman Fowler and Norman Tebbit believe, they can win the contract in fair competition. If not, they shouldn't get it. And that is surely the implication of point iv. on page 2 of the Attorney General's letter: "It would not be economic for any of ICL's competitors to supply the computers for LOP on the basis that they would have to meet the consequential costs of thus adapting the software and data base. It makes more technical and financial sense to use ICL machines."

ii. Serious risk of legal challenge. The Government does not have an agreed policy of integrating the different benefit systems quite as closely as Norman Fowler claims. So the Law Officers' advice shows that they are increasingly nervous that we could be challenged in the European Court. iii. We have a clear preference for putting such contracts out to open tender. The papers are surprisingly light on arguments against open tendering, as distinct from arguments in favour of eventually buying ICL. The only one I can find is buried in paragraph 6.5 of the DHSS paper. They argue that going straight to ICL will "bring forward by several months the time at which staff reductions can be achieved. This would save some £8m a month, eventually". But: A lengthy EEC court case might actually slow things up compared with a fair competitive tender. Writing a detailed project specification is essential anyway. It is a salutary discipline. The question is whether the specification is then sent just to ICL or to other companies at the same time. The Efficiency Unit Report on Capital Projects shows that we pay dearly for skimping at the early stages. - 2 -

Getting ICL to compete should mean that we get a lower price from them than otherwise. We therefore recommend that you go for an open tender. David Willetts DAVID WILLETTS - 3 -

PRIME MINISTER

E(A) (85)16th MEETING AT 10.30 AM ON MONDAY, 29 JULY

DHSS LOCAL OFFICE PROJECT (LOP)

(Minute from the Secretary of State for Social Services of FLAGA 19 July; Minute from the Solicitor General of 24 July; FCAGB.

Minute from the Secretary of State for Trade and Industry

FLAG C of 25 July)

BACKGROUND

The Secretary of State for Social Services seeks agreement to purchase the main frame computers for LOP (initial contract value about £30 million) from ICL by single tender. This would not be in accord with normal Government policy of open tender, or with the EC or GATT rules. Mr Fowler argues, however, that technical considerations justify this course and should be sufficient to defeat a legal challenge if one were mounted.

2. The Solicitor General had originally advised that the circumstances of this case could justify exceptional single tender procurement under EC and GATT rules. In his Minute of 24 July, however, he explains that his advice was given upon certain premises about Government Policy on the integration of all DHSS benefit systems which are now in doubt. The Treasury are clear that the Government are not yet committed to this integration. Although this may be the present DHSS intention, each stage of further development will need to be properly cost justified at the time.

MAIN ISSUE

3. It is unsatisfactory that DHSS should have brought this issue forward without adequate consultation and with continuing dispute on

key elements in the argument. However, Mr Fowler is pressing for a decision before the recess andyou will wish to see whether it is possible to reach agreement in discussion on the proposal for single tender procurement from ICL.

The DDHSS Computer Strategy

- 4. The DHSS computerisation programme, which was outlined in the June Social Security Green Paper, will stretch over 20 years, producing estimated savings of about £1800 million by the year 2000 for an investment of about £700 million. The aim is to facilitate wider, quicker and easier access to records on all aspects of the social security system, and to make it possible for local office staff to deal with the whole of an individual's business on the spot (the so called "whole person approach"). This approach, if followed to the limit, would require full integration of the various DHSS computer systems, which is DHSS' long-term strategic objective.
- 5. The LOP is one aspect of this strategy. It will provide comprehensive automated assistance to the income support system which will replace Supplementary Benefit. It will require terminals in local offices, a communications network, and central mainframe computers. It is the procurement of these computers which is at issue. A number of manufacturers would in principle be interested, including ICL, IBM, Honeywell, and Sperry and Amdahl. Normal Government procurement policy and the EC and GATT rules, requires open competition between manufacturers. But DHSS believe they should procure ICL equipment because:
 - (a) other DHSS systems, including unemployment benefit, child benefit, retirement pensions, and National Insurance contribution records, are held on ICL equipment. Full integration of these could only be achieved if local offices have equipment from the same manufacturer;
 - (b) DHSS staff are trained in and use ICL software.

 Operating different systems in parallel would stretch scarce

technical resources. Although it would be possible for DHSS progressively to change to another computer supplier, starting with the machines for the LOP, and so eventually build up a compatible integrated network, the burden on the Department of developing and acclimatising to an entirely different range of software would be considerable;

- (c) if DHSS know at the outset that ICL equipment will be used, they can begin the detailed prepartions now. They argue that with an open tender it would not be clear until the very last stage what equipment would be used, so that detailed implementation work would be delayed by 12 months, at a cost of £8 million a month.

 Any has a taken he force so long then to be the force of £8 million.
- 6. The LOP contract would also have major commercial significance to ICL (which is why Mr Tebbit supports Mr Fowler's proposal), although this is obviously not a point the Government could use to justify a decision to allow only ICL to tender.
- 7. However, there are risks in going to ICL. Even as a subsidiary of STC, it is small compared with IBM; and their latest products are less powerful than those of their competitors and as yet unproven. ICL have a good reputation for well engineered and designed products, but have often delivered late and with many software faults. It is not obvious in any case that the best way to help ICL improve their performance is to hand them this contract without competition. Moreover, an open competition might produce a keener price for the taxpayer, and ICL might still win it. DHSS argue that any saving from open competition would be outweighed by the costs of the delay involved. But if a single tender procedure were (as seems most likely) challenged by IBM or others, the delay could be even longer.

The Legal Argument

8. The Solicitor General had advised that if it was settled Government policy that all DHSS systems should be progressively linked, and that it

was not technically possible to achieve full integration with existing systems and software unless future machines were ICL, there would be sufficient grounds for the exemptions set out in the EC and GATT rules. The key issue is whether the Government are actually committed to full integration. The Solicitor General has, in his minute of 24 July, qualified his advice to make it clear that if the Government's position is only to keep open the possibility of integration if it proves cost effective when the precise costs and benefits are clear (which the Treasury asserts to be the case), this would not be a sufficient basis for single tender action.

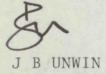
9. Given that DHSS computerisation is the biggest such project in Europe there must be a serious risk of challenge in the courts by IBM or another company, or by the Commission in the European Courts, if DHSS proceed by single tender. IBM wish to be loved by European Governments, but if ICL win this contract their position as sole supplier to DHSS is assured. If legal proceedings were instituted before a contract had been awarded, the Government would have to stay its hand. But DHSS could continue system planning and design and not too much time would be lost if the Government won the case. The key issue, therefore, is not so much the risk that action might be started, but that action might succeed.

HANDLING

10. You will wish to ask the <u>Secretary of State for Social Services</u> to introduce his paper, and to address the issue of the extent to which the Government is committed to the integration of the benefit systems (I understand that he may send a further short minute on this over the weekend). The <u>Chancellor of the Exchequer or Chief Secretary will wish to comment on this and also, as Ministers responsible for the CCTA and for procurement procedures, on the technical arguments and the case for departing from normal procurement procedures. The <u>Solicitor General</u> will wish to speak on the legal issues and the <u>Secretary of State for Trade and Industry</u> on the implications for ICL.</u>

CONCLUSIONS

- 11. You will wish to reach conclusions on:
 - (i) whether a defensible open tender could be held which ICL would win;
 - (ii) if not, the degree to which the Government are committed to full integration of all the DHSS benefit systems;
 - (iii) the risk that a successful court action might be launched against the Government if it proceeds by single tender;
 - (iv) in the light of (i) and (ii), whether the proposal to proceed by single tender action should be endorsed.

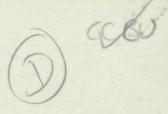


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on the DHSS' future policy on full integration. He states that they have the "firm intention" of moving towards integration of all the major benefit systems. You will wish to ask the Solicitor General whether in his view this satisfies the legal requirements. His original advice rested firmly on the premise that it was settled Ministerial policy that all the DHSS computer systems will be progressively linked.

Cabinet Office 26 July 1985





Prime Minister

DHSS LOCAL OFFICE PROJECT

I have seen the Solicitor General's minute of 24 July which seeks further clarification before he can confirm the advice he had previously given. The proposal for single tender has been the subject of extensive consultation between my Department and the Treasury, as well as with the Law Officers. The Solicitor General's minute is based on a recent Treasury statement that our policy for computerising social security is limited to keeping open the possibility of integrating the benefit systems.

This is not really an adequate statement of my Department's policy. We have the <u>firm intention</u> of moving towards the technical integration of all the major benefit computer systems as quickly as it is practical and economic to do so. This corresponds with the objectives described in my Green Paper.

Treasury are of course right to point out that further integration of the operational or policy aspects of benefit systems, or indeed of benefits and PAYE taxation, will require step-by-step analysis of the precise costs and benefits. But if we are to be able to offer the public a more rational and comprehensible system of social security (such as is at the heart of my Green Paper proposals) it is essential that we take every opportunity to work towards simpler and more effective operational arrangements. In order to follow this path I require the computer systems to move as rapidly as is practical and economic to a situation where my Department can take a clear and consistent view of an individual's or a family's needs and entitlement across all benefits; where local office staff will be able to deal with the whole of an individual's business on the spot; and where we have the capability of restructuring benefit programmes as policy develops.

E.R.

To achieve these long-term objectives will require the flexibility that can best come from a network of compatible computers. In the future we must not be locked into established benefit systems or administrative practices by our computers. Thus while we will continue to cost-justify each computer project individually, as the programme develops and as technology advances, we must do so within the general strategy of compatibility and technical integration.

I thought I should circulate this clarification in advance of our discussion on Monday. I am copying it to members of E(A), Sir Geoffrey Howe, Michael Havers, Patrick Mayhew and Sir Robert Armstrong.

July 1985

NF



PRIME MINISTER

LOCAL OFFICE PROJECT Fre with AT

I strongly support Norman Fowler's recommendation in his note to you of 19 July that the mainframe computers for DHSS's Local Office Project (LOP) should be purchased by single tender from ICL.

- The most important consideration is that DHSS has a clear operational requirement for all the mainframe computers needed for the Social Security Operational Strategy to be closely compatible. This not only means that the computers for LOP need to be compatible with DHSS's existing systems; but also that whichever supplier is awarded the contract for LOP is virtually guaranteed all the contracts for mainframe computers in the subsequent phases of the strategy. DHSS's existing systems use ICL computers and only ICL can offer machines compatible with them. Even if it made sense for DHSS to scrap this investment in ICL systems and skills and start again from scratch, I do not think we should offer IBM or another of the US multinationals the opportunity to monopolise the supply of computers to the social security service, particularly when the contract is of major importance to ICL's mainframe computer business.
- 3 I was therefore glad to see that the Solicitor General has advised that there are good and defensible technical reasons for single tender within the EC and GATT rules.



4 Norman Fowler also mentioned a further consideration which I believe could be important, namely the option to integrate the tax and social security benefit systems at some future date. This would be much easier to carry out if the computer systems for administering PAYE and social security benefits were closely compatible: the PAYE system is, of course, being implemented on ICL equipment. There is a real danger that if non-ICL equipment were chosen for LOP, integration might turn out to be prohibitively difficult or expensive.

5 I am copying this minute to members of EA, Sir Geoffrey Howe, Sir Michael Havers, Sir Patrick Mayhew and to Sir Robert Armstrong.

NT

25 July 1985

Department of Trade & Industry

Social Sensices, long term Strotegy; 9/80. 25. WII (5) 4 3 AM





PRIME MINISTER

DHSS LOCAL OFFICE PROJECT

- I have advised on the justification for single tender procurement under EEC and GATT rules. My advice was favourable. I attach a copy at Annex A.
- 2, Central to that advice was the premise, expressed at paragraph 4(ii), that

"although the LOP computers will at first operate independently of these other DHSS systems, it is settled Ministerial policy that all the DHSS computer systems (i.e. those listed above and LOP) will be progressively linked, so that eventually an entirely integrated data-base will be created and the main frame machines will be capable of running the software from other machines within the system".

The premise derived from my Instructions from DHSS, viz. 'The Department's strategy is firmly committed to the convergence and integration of all benefit systems in what has been described as the "whole person approach", a passage which now appears at paragraph 5.3 of Norman Fowler's paper to E(A).

3. I have seen his minute to you dated 19 July covering his paper. At page 3 it is stated that:

"it must be recognised that future plans for integration are not as persuasive a justification as immediate technical requirements."

CONFIDENTIAL



- page two -

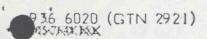
4. I have also seen a copy of a Treasury letter to DHSS dated 19 July (Mr Watson to Dr Spackman) containing the following passage:

"I do not therefore believe that we can at this stage say that it is Government policy to go to the level of integration which your paper now appears to envisage; we must limit ourselves to what is in fact the position, that we wish to keep open this possibility provided that it proves cost-effective when we are clearer about the precise costs and benefits.

.... It may well be that if the Law Officers have not understood this point they will wish to consider whether their legal opinion remains as stated to date."

- 5. I must make it clear that my advice as to the prospects of bringing ourselves (in the event of challenge) within the relevant exceptions contained in Council Directive 77/62, so as to justify the use of a single tender procedure, was given upon the premise to which I have referred. If the true position as regards the Government's policy is as described in the Treasury letter the prospects are very different. It is probable that we would fail.
- 6. It is difficult to envisage with precision any intermediate position between "settled Ministerial policy" and "keeping open the possibility". If, however, there is one, and we in fact occupy it, I would need to know what it is before being able to assess the legal consequences.
- 7. I am copying this minute to Members of E(A), Sir Geoffrey Howe, Norman Fowler and Sir Robert Armstrong.

AM.



Communications on this subject should be addressed to THE LEGAL SECRETARY ATTORNEY GENERAL'S CHAMBERS ATTORNEY GENERAL'S CHAMBERS,
LAW OFFICERS' DEPARTMENT,
ROYAL COURTS OF JUSTICE,
LONDON, W.C.2.

Our Ref: 400/85/153

Your Ref: A85/15L/JRJB

J R J Braggins Esq. The Treasury Solicitor Queen Anne's Chambers 28 Broadway London SW1H 9JS

10 July 1985

Dea James

PROPOSED LOP COMPUTER PROCUREMENT BY DHSS

- 1. The Solicitor General has seen your letters to Michael Saunders dated 18 and 19 June 1985 and your subsequent letter to me dated 3 July 1985. He has also seen the letter from Dr Spackman of DHSS of 4 July 1985 enclosing the latest draft of the paper for E(A). He has asked me to write setting out his advice and views.
- 2. Your letter of 18 June poses four specific questions which arise in the context of a proposal by DHSS to purchase, by way of single tender, ICL main frame computers for their Local Office Project (LOP). In general, they can be summarised as asking whether use of a single tender procedure is justified by virtue of the exceptions contained in Article 6(1)(b) or 6(1)(e) of Council Directive 77/62, as amended by Counsel Directive 80/767 ("the Directive"), or under Clauses V.15(b) or V.15(d) of the GATT Procurement Agreement ("the Agreement"), and what would be the consequences of any legal challenge to the single tendering procedure.

Is the single tender procedure justified?

3. The Solicitor General wishes first to set out his understanding of what appear to be the relevant facts in the light of which his advice is sought. The proposed paper for E(A) contains a great deal of information about the current state of computing within DHSS, the requirements of LOP and the overall

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operational strategy of the Department, but if the exceptions to the Directive and the Agreement are to be invoked certain features have special relevance.

- These basic facts are as follows: 4.
- (i) DHSS already has ICL main frame computers running ICL software to process the following benefit schemes, namely child benefit, retirement pensions, insurance contributions, and disablement benefits.
- (ii) Although the LOP computers will at first operate independently of these other DHSS systems, it is settled Ministerial policy that all the DHSS computer systems (i.e. those listed above and LOP) will be progressively linked, so that eventually an entirely integrated data-base will be created and the main frame machines will be capable of running the software from other machines within the system.
- (iii) It is not technically possible to achieve the degree of integration and compatibility mentioned (ii) above unless all the main frames and software are supplied by the same manufacturer. A mixed system comprising in part ICL machines and in part other machines could not achieve this.
- (iv) As all the main frame computers currently operated by the DHSS are ICL machines, to use any other machines in LOP would necessitate changing all the existing machines and software if the degree of integration and compatibility mentioned in (ii) above is to be achieved. Such an operation is not cost-effective from a DHSS point of view either in terms of cost or in terms of the additional time that will be required to modify the software and data-base. It would not be economic for any of ICL's competitors to supply the computers for LOP on the basis that they would have to meet the consequential costs of thus adapting the software and data base. It makes more technical and financial sense to use ICL machines.

in which case ICL should be able to win in open tender

- page three -

- (v) If ICL machines are used, further integration with the National Unemployment Benefit System (which is operated by DHSS for the DOE on ICL main frame computers) and the tax system will be possible because they also utilise ICL main frames.
- 5. The conclusion to be drawn from these facts is that unless the entire system of DHSS computers is replaced (e.g. by IBM main frames), together with all the appropriate conversion of the necessary software and the data-base, the only way in which the Department's overall requirements can be met is by the provision of ICL main frames for LOP.
- 6. The purpose of both the Directive and the Agreement is to ensure that suppliers can compete for public supply contracts on equal terms. To this end, they require that save in specified circumstancesall such contracts must be subject to the tendering procedures laid down. There are exceptions but, because these constitute exceptions from the general rule, it is likely that any court considering them will construe them narrowly. It is to be noted that you have not been able to find any cases decided by the European Court of Justice relating to any of the exceptions contained in Article 6 of the Directive.

Exceptions based upon technical reasons or the protection of exclusive rights:

7. The exception in Article 6(1)(b) is available where the goods can only be manufacturered or delivered by a particular supplier, either for technical reasons or for reasons connected with the protection of exclusive rights. The Solicitor General considers that there are persuasive arguments in favour of both of these exceptions in the circumstances of this case. It can be said that the requirement to merge the appropriate DHSS data-bases to obtain an integrated system, and the requirement to be able to run existing ICL software on the new machines, mean that technically there is no other manufacturer which could manufacture or deliver the equipment which is needed. Put in these terms, the requirement might even meet the narrow construction test proposed in paragraph 8 of your letter to Michael gaunders of 18 June in the sense that only ICL can manufacture a computer which is architecturally compatible with the existing computers and hence ultimately able to form part of a common pool of computer resources. Another manufacturer

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seeking to provide an appropriate machine couldonly do so by infringing the exclusive rights of ICL and such a consideration brings the case within the second limb of Article 6(1)(b).

- 8. Furthermore, even if it were theoretically possible to acquire non-ICL main frames for LOP, the requirements for ICL based software to be able to run on the LOP computers and the objective of merging the data-bases would mean that this could only be done with ICL software. Again, the use of the exception could be supported by reason of the protection of exclusive rights.
- The weakness in these arguments lies in the fact that, in reality, a particular machine is being selected but there is no opportunity whatsoever for a competitor to present a tender. The question, therefore, is whether it is permissible to draw the specification in such a way that only one firm can meet it. Article 7 of the Directive applies to all tendering procedures covered by the Directive, including single tender (see Article 4). Article 7(2) prohibits the specification containing technical specifications which have the effect of favouring or eliminating certain undertakings or products. However, the requirements of this Article do not apply if such specifications "are justified by the subject of the contract", and the argument here would be that the specific requirement that the LOP system can be fully integrated with the existing DHSS systems means that this provision can be invoked. This constitutes an objective and proper reason both for drawing the tender in such a way that only ICL are in fact able to meet it; but it is important that the Department should be able to demonstrate that these requirements are genuine, and not merely a method of ensuring that ICL are awarded the contract. The Solicitor General understands from the papers he has seen that this is the case.
- 10. As for the exemption in Clause V.15(b) of the Agreement, although this does not contain any reference to technical reasons (and in that sense is narrower than the Directive) it is available "for reasons connected with the protection of exclusive rights". As indicated in relation to the Directive, there are arguments in favour of this exception being able to apply. In addition, this Clause adds a further requirement to that in the Directive, namely not only must the goods be able to be supplied by a particular supplier but that "no reasonable alternative or substitute exists". The Solicitor General does not

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consider that this detracts from the strength of the available argument.

The exception based upon compatibility with an existing installation:

- 11. The exception in Article 6(1)(e) is available where the goods are to be delivered by the original supplier because they are a replacement or extension of an existing installation, and to purchase elsewhere could lead to the purchase of equipment with different technical characteristics resulting in incompatibility or disproportionate technical difficulties in operation or maintenance. If this exception is to apply here, it has to be established that the LOP main frames constitute "an extension of an existing installation". This gives rise to two questions: first, is the existing body of DHSS computers an installation; secondly, is it intended as an extension when integration, although firm policy, is still some little time in the future?
- 12. The Solicitor General thinks that this exception is less easy to rely on.

 LOP is undoubtedly capable of operating as a free-standing project, and in the light of the current organisation of DHSS and the way in which benefits are distributed, it is a separate system. This means that whilst it is capable of being integrated, and will be integrated in due course, arguably it is not being purchased as a component of an overall system; it is an independent installation which in due course will be merged with other DHSS installations. If the fact that a computer drew information from other computers meant that it could be regarded as an extension of such computers, this exception could become unjustifiably wide.
- 13. A further difficulty in regarding the existing DHSS main frames as an installation is that they would at some point (i.e. when the Operational Strategy was adopted) have changed their status from independent installations to a system constituting one new installation. No other manufacturer would have had any chance of tendering for any part of that system, and hence one of the objectives of the Directive would have been avoided.
- 14. It is, however, possible to regard the LOP computers not as independent installations but as part of a system which in due course would embrace all the DHSS computers all of which, as indicated above, would have to be compatible

- page six -

with those installed in LOP. It seems that those adopting the Directive did not have in mind the possibility that a number of similar computers could be linked in the way here proposed to form a unified system. Although the Solicitor General thinks that article 6(1)(b) of the Directive is wide enough to embrace the current DHSS proposal, he thinks that had the Community legislators contemplated something similar to the current proposals, they would have been more likely to place it expressly within the scope of Article 6(1)(e). purpose of that Article is to avoid the necessity for the open tendering procedure where the technical characteristics of the existing system make it practically impossible to instal equipment manufacturered by any one other than the original supplier. It would be a perverse interpretation of Community legislation which led to the result that purchasers were forced to scrap all their existing machines and purchase an entirely new system. Assuming there is no evidence to the contrary as to what the intentions of the legislators were in this connection, the Solicitor General thinks there is an attractive and very respectable argument for construing the exception in the light of the technological developments so as to apply also to this kind of situation; such an argument might well find favour with the European Court.

15. As for the exemption in Clause V.15(d) of the Agreement, the qualifying conditions are so close to those in the Directive that the same conclusion follows.

Effect of legal challenges:

16. However strong the case in favour of single tendering, it is still possible that a competitor will himself take legal proceedings against the Department or will complain to the Commission causing them to take proceedings under Article 169 of the EEC treaty. The Solicitor General thinks it is very likely that, if a competitor of ICL were minded to take proceedings on the basis that the DHSS has failed to comply with the Directive, the European Court of Justice would regard the Directive as being of direct effect. He thinks that the court would regard this as a case of vertical direct effect, given that a company would be complaining about the disadvantage it had suffered as a result of the failure of a Member State to carry out its Community obligations. That failure is either the failure to legislate (which, the European Court would be likely to hold, can be invoked as against the Government acting as a purchasing authority)

CONFIDENTIAL - page seven or the failure to proceed by way of open tender. The fact that that might have an effect upon a third party would not constitute a finding of horizontal direct effect. It would merely be a consequence of the application of vertical direct effect. As to the remedy which the Court might be asked to provide, the Solicitor General thinks that the most likely is a declaration. He doubts whether damages would be available since a competitor could not prove that he would have been awarded the contract following an open tender. It is possible that the judicial review procedure might be used in an attempt to quash the decision to proceed by way of single tender and the award of the contract to ICL on that basis and to direct the Department to re-tender in accordance with the terms of the Directive. That would require the Department to retender and to disentangle the commitment it would have already made to ICL. 18. The Solicitor General considers that the remedy a competitor would be most likely to pursue is that of a declaration. The scope of the declaration requested is a matter for speculation but could range from a mere statement that the Department had failed to proceed by way of open tender, as required by the Directive, to a specific finding that any contract entered into with ICL was void. However the declaration was expressed, given the requirement of Community law that remedies provided by the domestic courts should be available for the purpose of ensuring observance of directly effective Community provisions, the consequence

is likely to be the termination of any contract already entered into and a require-

convince the Court both that the Directive is directly effective (which it probably is) and that the DHSS have not acted within any of the exemptions in Article 6. The latter is a difficult hurdle for a competitor, and for the reasons given above

the Solicitor General thinks there is a reasonable prospect of successfully defending

You then raised the further question of what the Government should do if

proceedings were brought. The Attorney General has already advised in relation to the PAYE contract that, if any challenge is mounted in the United Kingdom

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These consequences are serious but depend upon a competitor being able to

ment to re-tender.

such an action.

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20.

CONFIDENTIAL - page eight -Courts or in the European Court of Justice before the contract is granted, seeking to impugn the validity of a single tender approach, it would be quite wrong for the Government to award a contract for the supply of equipment before the Court gave a final decision. The Solicitor General would give the same advice in the circumstances which you suggest. If such proceedings were commenced after the contract has been executed, 21. ICL would have acquired legal rights and obligations under a contract. Consequently it would not be just a case of holding the single tender procedure in abeyance while matters are sorted out. In these circumstances the question whether an injunction could in similar circumstances be obtained against a defendant other than the Crown might be relevant, although it must be pointed out that in the absence of horizontal direct effect no such situation could occur. 22. If it were decided not to suspend the carrying out of the contract whilst such proceedings were considered by the Courts, the consequences from the Department's point of view might at the end of the day be worse than if such a suspension had operated. This would be the case if the Court did in fact determine that re-tendering was necessary, or if any Order of like effect was made, since there would be a potential claim for compensation by ICL arising out of the damage caused to them as a consequence of the Government's action, plus the additional problems caused by having to rethink the entire procurement in the light of the Court's judgment. The Solicitor General thinks it likely that the nearer to completion the ICL contract is, the more difficult would be these problems. Conclusion: 23. The Solicitor General's answers to your questions are, therefore, as follows: (i) There are good arguments for relying on the exceptions set out in Article 6(1)(b) of the Directive and Clause V.15(b) of the Agreement. In the case of the exception set out in Article 6(1)(e) of the Directive and Clause V.15(d) of the Agreement,

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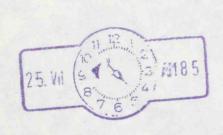
- page nine -

there is an attractive and respectable argument which could be advanced and which might well find favour with the European Court.

- (ii) and (iii) It would be improper for the Government to award a contract on the basis of the single tender procedure if, before it was concluded, proceedings were brought against the Government by a competitor in the domestic courts or by the Commission in the European Court of Justice. Whether or not the contract, once entered into, should proceed if proceedings were thereafter commenced is to be determined in the light of the circumstances existing at that time, but one of the relevant factors might well be whether or not in a similar situation a domestic court would be prepared to grant an injunction against a defendant other than the Government.
- (iv) There is a very real risk that if a competitor could establish that the Directive has direct effect and that the Government was <u>not</u> entitled to rely on any of the exemptions in Article 6, a Court would then declare that the Government had failed to comply with its obligations and possibly that the contract is void. In any event, it is likely that the Department would have to re-tender in the light of such a declaration.

your sincerely,

D J PEARSON

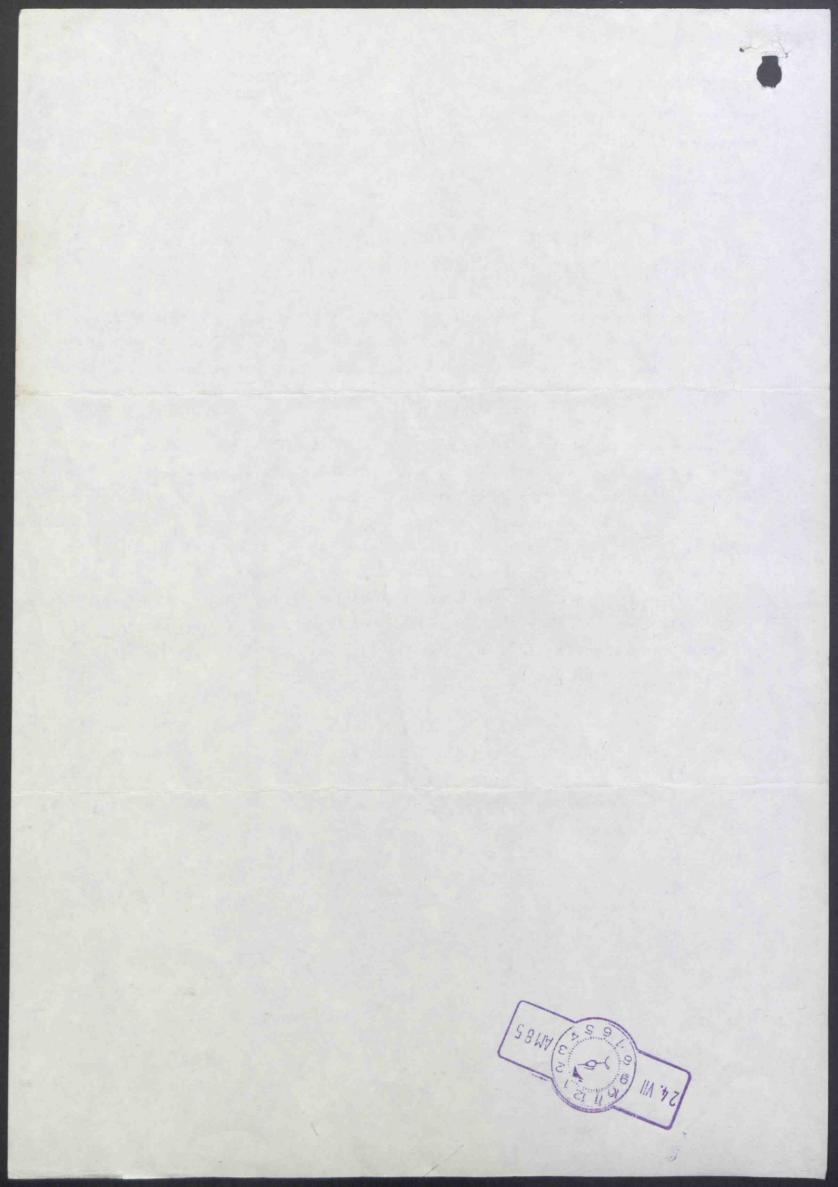


CONFIDENTIAL @ P 01613 MR WIGGINS cc Mr Turnbull - No 10 Mr Roberts DHSS: COMPUTER SYSTEM FOR LOCAL OFFICE PROJECT (LOP) Mr Fowler's minute to the Prime Minister of 19 July seeks agreement to a single tender procurement of the proposed new LOP computer system with ICL. He suggests discussion at the E(A) meeting arranged for 29 July if the matter cannot be settled in correspondence. This is an extremely difficult one. It is difficult to believe that IBM and possibly other interested companies will not challenge such a decision in the European or domestic courts. The European Commission might also take the matter to the ECJ. Nor is it by any means certain that, if so challenged, the Government would win. As I understand it, since no final decision has yet been taken on whether to move to the concept of 'full integration", the case for going now to ICL rests primarily on the need to keep the integration options open. It may be difficult to

demonstrate that this could not be achieved by other means. Further, if the decision were challenged, this would presumably cause further delay which could eliminate the savings at present estimated to accrue from early procurement with ICL.

I understand that there are divided views within the Treasury; CCTA generally support the DHSS line, but the expenditure division are not convinced that what is proposed is the most cost-effective course for DHSS. If Treasury Ministers take the latter view, then Ministers will need to discuss this. I think, therefore, that, subject to any comments Mr Turnbull may have, we had better pencil this in for E(A) next Monday.

24 July 1985



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SF wer responses from

Per, CLEX, SSLFS

no comments 22/17

PRIME MINISTER

LOCAL OFFICE PROJECT

I have been considering how we should approach the procurement of mainframe computers for my Department's Local Office Project (LOP). This is a key element in our plans, highlighted in the Social Security Green Paper, to modernise the administration and delivery benefits. I have concluded that the balance of argument lies with a single-tender approach to ICL and accordingly seek the agreement of yourself and of colleagues on E(A) Committee.

The key issue is, of course, the justification for single-tender procurement under EEC and GATT rules. The Solicitor General has considered this and, I understand, advises that there is good justification under the exceptions relating to technical compatibility with existing computer systems. Officials have prepared a detailed analysis of the issues involved and their paper is attached.

My main concern is that we should provide ourselves with the technical scope for integration of the various benefit systems (including the system supporting unemployment benefit staff in the Department of Employment) by ensuring that the Local Office Project computer mainframes are fully compatible with the ICL systems already in use. Looking further ahead, we have highlighted in the Green Paper the need for technical compatibility between the social security system and that of the Inland Revenue - who are, of course, already planning to use ICL. This is the approach which underpins our plans to provide a more comprehensive service to social security beneficiaries and to keep open future options for closer integration between tax and social security.

There are other significant advantages for DHSS in continuing to procure computer mainframes from ICL. The Department's technical



expertise in this area lies solely with ICL; adopting a common supplier for all the Department's large systems increases our internal flexibility and provides greater resilience in the event of a loss of service at one of our installations. The Department's total current investment of some £50 million in ICL-based software would not be transferable to another type of machine if we sought to achieve integration around a different hardware standard, chosen from the competitors for an open LOP tender. Moreover, leaving aside the question of any possible delays in the delivery of acceptable equipment, an early decision on the mainframe manufacturer will reduce the development time needed to introduce the project.

We also need to take account of the major commercial significance of the LOP contract to the future of ICL - a point which I know is of The award of a contract of some concern to Norman Tebbit. £30 million for the new range of ICL computer mainframes would show Government confidence in the company and its new machines. Failure by them to obtain the award would be a serious blow and would call into question the substantial Government support to the company since 1981. We must, of course, be conscious of the very substantial market penetration of IBM - the major threat to ICL and indeed to other computer manufacturers. There are inevitably some disadvantages in proceeding through single tender from ICL. new range of ICL computer mainframes is less powerful than other existing machines and is not yet fully proven. And IBM in particular has considerably more experience in the provision of major systems involving very large networks. There can be no doubt that the competitive process would ensure that we achieved the lowest price in respect of this particular mainframe contract. And the choice of IBM-compatible mainframes would make available to us the very wide range of products that have been developed by third To avoid any risk that the lack of an already proven ICL product might delay the project, it will be essential to satisfy ourselves that the company is adequately controlling the quality of its products; and to ensure that, as far as possible, any financial penalty arising from late delivery or poor performance falls on ICL. This is the approach which, I understand, has been followed very successfully by the Inland Revenue.



Is be I di ata General getting and feat?

I have, of course, looked closely at the legal implications of adopting a single tender policy. I am advised, and I understand that the Solicitor General concurs, that the exceptions under the relevant EEC Directive and GATT Government Procurement Agreement justify such an approach. The justification flows from the need to ensure full compatibility with other ICL systems both for the present and so as to secure integration in the future. Thus there is a specific requirement for certain precisely defined technical characteristics which could not be met by other suppliers without infringing ICL's exclusive rights. In addition, it can be argued that the purchase of equipment with different technical characteristics from our existing equipment would cause disproportionate operational and technical difficulties.

ie tax (benefit

It must be recognised that future plans for integration are not as persuasive a justification as immediate technical requirements. The strength of the case is thus proportional to the Government's commitment to integration of benefit systems. It is possible that other interested companies (notably IBM) might challenge the decision in the European or domestic courts by a claim, firstly, for a declaration that the Government was acting unlawfully in not inviting competitive tenders and, secondly, for damages. Furthermore, single tender might be challenged by the European Commission of its own initiative, or following complaint by a competitor: if the Commission was not satisfied with our explanation it could bring the matter before the European Court of Justice alleging a breach of community law. The chance of an adverse finding by that court cannot be entirely excluded. Nevertheless, I conclude that the case in favour of inviting a single tender from ICL outweighs such a risk and that we should adopt this policy, subject to the company giving guarantees about performance.

I should add that there is some urgency about this issue. Delay of LOP, and of its substantial improvements in efficiency and service which we have presented in parallel with the Benefit Review, have both financial and political consequences which we should seek to avoid. I hope therefore that we can agree my proposal in correspondence, but I understand that E(A) will be meeting on 29 July when we could, if necessary, discuss the matter. Perhaps I might therefore ask for responses from colleagues by 25 July?



If you are content with my recommendations, I would propose to discuss with Norman Tebbit and the Chancellor the most appropriate time and manner for announcing the decision, once formal approval to proceed with the project itself has been given.

I am copying this to members of E(A), Sir Geoffrey Howe, Sir Michael Havers, Sir Patrick Mayhew and to Sir Robert Armstrong.

July 1985

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MAINFRAME PROCUREMENT POLICY

DEPARTMENT OF HEALTH AND SOCIAL SECURITY

LOCAL OFFICE PROJECT (LOP)

INTRODUCTION

- 1.1 .The aim of this paper is to present the arguments for and against placing a non-competitive tender for the mainframe computers for the Department of Health and Social Security's local office computerisation project. It will be argued that the balance of advantage for Government lies with placing a single tender to ICL and that this action is in accordance with EEC regulations for Government procurement and within the principles of the GATT agreement.
- 1.2 The recently published Green Paper "Reform of Social Security" outlined the Government's bold plans for major reforms in social security provision. An important underlying objective in the proposals is the desire to streamline the benefit structure and simplify and improve its administration. A good deal is made in the Green Paper of the need to use fully the opportunities presented by modern computer technology.

If this is to be achieved it will be necessary, as described below, for there to be a coherent and integrated approach to the planning and development of computer systems over a number of years.

BACKGROUND

2. The Operational Strategy

- 2.1 A discussion paper "Social Security Operational Strategy A framework for the future" was published in 1982. Publication was followed by detailed and widespread consultation within Government and with representatives of Industry, Commerce, the Trade Unions, and others, which resulted in a general endorsement of the objectives and approach of the Strategy.
- 2.2 The Strategy aims to modernise, simplify and unify the means of delivery of benefit, to give a greatly improved public service at reduced cost. A number of separate projects will be undertaken, within the framework of the Strategy, taking on board the changes proposed in "Reform of Social Security." These will be concerned with modernising and integrating the delivery of income support, Unemployment Benefit, Retirement Pensions, Child Benefit, Contributions Records, and other features of social security. These will be so designed as to be completely compatible, allowing

convergence on what has been described as the "whole person" approach - the ability to deal with an individual simultaneously across all benefits and thus get away from the present diversity of methods of claiming, assessing and payment of benefit. The present system is as confusing to the public as it is complex in operation.

2.3 The two objectives - to converge on a unified method of delivery of benefit and to accommodate, indeed to facilitate, legislative change - mean that it is no longer possible to design and implement benefit systems independently. The different computers that serve different benefits must fit closely together and be developed to common standards and common designs.

3. The Local Office Project (LOP)

- 3.1 This project is a major element of the Strategy. It will provide, for the first time, comprehensive automated assistance to the system of income support which will replace Supplementary Benefit. Some 19,000 computer terminals will be provided in 500 local offices. They will provide the clerks in those offices with a means of rapid and accurate assessment of benefit, immediate access to claimant records and an automatic initiation of payment. This will greatly improve the service to the public while providing a better, more modern environment for the staff.
- 3.2 The project requires three main technical components: terminals and associated controllers for the local offices; a communications network to link them together; and mainframe computers to carry out the processing of data. The first two components will be specified to international standards and will be procured by competitive tendering. The mainframe computers which support this network are an open question.
- 3.3 The initial contract value is approximately £30 million for mainframe computers and some £40 million for terminal systems. Interested vendors for the mainframe systems are ICL, IBM, Honeywell, Sperry and Amdahl, all US owned companies with the exception of ICL. IBM and Honeywell have a significant manufacturing capability in the UK but their corporate roots are unquestionably in the US.
- 3.4 The project is, in itself, cost effective. On present estimates it will yield some 700 manpower savings in its first year of implementation 1989/90 rising to 8,500 posts or about £100m per year by 1994/95.
- 3.5 The Treasury have authorised continuation of the project but have yet to authorise the commencement of formal procurement.

4. Procurement Policy

- 4.1 Government procurements such as that of LOP mainframes are subject to EEC and GATT rules which, in general, require open competition between manufacturers. However, there are various exceptions which allow limited, or single tendering where there is a requirement for technical features which are the exclusive property of a particular manufacturer; or for compatibility with existing systems. The legal issues are discussed in detail in Annex A.
- 4.2 The most effective test of value for money in computer equipment is a properly staged, thoroughly analysed, competitive tendering process. In looking at value for money in LOP, however, the issue is wider. This is because LOP is neither the first, nor the only, computer project within the DHSS strategy for information technology. The LOP mainframes will be required to participate in a wider network of computer processing which already exists, and which is planned to expand in its scope and inter-working.
- 4.3 Notwithstanding the arguments for single tender in this instance, the general policy of the Department is to seek the best value for money through competitive procurement. This has indeed hitherto been the Department's stance on LOP, and despite the different approach for LOP mainframes proposed here, major contracts within the Strategy have already been awarded after evaluation of competitive bids. Honeywell have gained a contract to supply terminal systems for the Unemployment Benefit system worth £33 million. British Telecom won the contract for the Local Office Microcomputer Project worth some £16 million. ICL were unsuccessful bidders for both these contracts. Terminal systems for all future projects, including LOP, will be put to competitive tender.

DISCUSSION

5. LOP in the context of the Departmental strategy

5.1 At the present time, ICL mainframes are used by the DHSS to process a number of benefits at five main locations: Newcastle, Washington, North Fylde, Reading and Livingston. These centres deal with unemployment benefit, child benefit, retirement pensions, national insurance contributions and disablement benefits. In very broad terms these systems represent a present capital investment in ICL mainframe hardware of £50 million and in ICL-based software of another £50 million. Plans to replace and upgrade all these systems during the period 1988-1992 have been approved by the Departmental Operational Strategy Steering Committee, and ICL mainframes will of necessity continue to be used. Use of other mainframes would require the re-writing of existing software, at very great expense, to adapt it to a different hardware environment. From the outset, LOP will need to exchange data with these systems and their replacements.

- 5.2 The position of LOP in the context of the DHSS's existing and planned computer systems may best be illustrated by means of the diagram at Annex B. From this it will be apparent that the LOP mainframes are a significant, but by no means overwhelming, addition to the existing network (£30 million compared to a total installed value of £50 million); and that they need to link effectively to the other ICL mainframes already in use. As the diagram also illustrates, over 80% of the 96 million records which social security computer systems will eventually hold are already held in existing computers. These records contain considerable duplication of data, and this increases costs and reduces efficiency.
- 5.3 The Department's strategy is firmly committed to the convergence and integration of all benefit systems in what has been described as the "whole person approach". Annex B explains in more detail the technical significance of the integration of all DHSS computer systems. The integration, and hence rationalisation, of benefit data will permit a single view of a claimant across all benefits instead of the present system of dealing benefit by benefit. This will yield greater savings and improvements in service, efficiency and resilience than can be achieved by piecemeal computerisation. Such convergence can only be achieved by close integration of these systems, and all current systems operate on ICL computers. By the same token,
- if the Department moved its new developments to another make of computer, this same requirement for integration would inevitably require that existing systems be moved over to that same type of computer, by single tender procurement. The difference in hardware costs would be insignificant; however, such a change would entail the waste of the entire ICL-based software investment, as all systems would need to be re-written for the new hardware environment.
- 5.4 Integration is not simply relevant to a reduction or elimination of duplication, but to a much wider issue. A common database and integrated software would greatly increase the options open to Government, for example if Ministers wish to consider major innovation in the areas of benefits and taxation. It is fundamental to the Department's strategy that this opportunity is not lost.
- 5.5 The first step towards integration is the modernisation of existing benefit systems, more or less as they stand (and the creation of the major new one LOP), to achieve common technical standards in line with the best current practice in the industry. This means upgrading existing benefit systems, not immediately to full integration, but to the use of common operating software and communications standards, so that full integration is economically achieved in the next step. This means adoption of a standard "operating system", "database management system", software development tools etc. All of these software products relate to the specific make of mainframe in use, and themselves represent a substantial investment by DHSS which is not transferable to other manufacturers' mainframes.

5.6 The most immediate requirement for integration is between LOP and the National Unemployment Benefit System (NUBS) currently serving the Department of Employment's Unemployment Benefit Offices. Given the obvious functional similarity between LOP and NUBS the two Departments need to find the most effective way of using new technology for a social security service more integrated and accessible to the public. present some 60% of claimants served by NUBS are also in receipt of supplementary benefit which is assessed and notified to NUBS clerically. Integration of the NUBS and LOP computers is therefore planned, and the first LOP processing centre will be provided as an extension of the existing NUBS centre at Livingston. The extent to which the DE and DHSS local office networks may eventually be merged is to be studied by both Departments in the light of the development of the computer systems, and of the implementation of the new Income Support benefit.

6. Arguments for a single tender to ICL

- 6.1 The principal argument is therefore the requirement for integration of computer systems. The scope for integration will be much reduced if the LOP system has a different technical architecture from the other DHSS systems. It would not be feasible to have a common database for the ICL systems and the non-ICL systems and it would not be feasible to integrate ICL software with non-ICL software. Although it may be possible for the systems to communicate using a common standard (eg Open System Interconnection), communication between systems falls far short of integration. It does not allow for parts of one software package to be merged with parts of another, for databases to be transferred, merged or split, or for common software to be run on several systems without change. A computer system for LOP with a different architecture from the ICL systems would not meet the Government's requirement for integrating the various DHSS systems and also lose the wider opportunities for flexibility and innovation in the area of possible integration of tax and benefits.
- 6.2 The skills, training and development methods of the Department are, so far as mainframe computers are concerned, all related to ICL systems (an investment in current ICL-based software of some £50 million). All the large DHSS installations use ICL 2900 equipment and DHSS staff are trained in and use ICL software facilities. The cost of conversion of the LOP team to another supplier's software (retraining, delay and loss of productivity) together with the cost of re-developing DHSS software aids will be high. The strategy, even if only ICL mainframe systems were to be used, will place great demands on these skills and technical resources which are already in very short supply. The technical difficulty and cost of developing and maintaining systems in a mixed hardware and software environment would be very much greater. It would seriously extend and complicate

the planned programme of work and make it very difficult to redeploy staff skilled in the use and development of one computer system to work on another.

- 6.3 Flexibility is a key requirement of the social security system. It is always open to further improvement, to better targeting of need, and even further simplification and rationalisation. It is essential that the systems developed under the Strategy are flexible enough to cope with rapid change changes that may merge benefit systems, further simplify and rationalise benefits or even integrate them with taxation. The best use of computer hardware will be achieved if, in the face of rapid and, at this stage unpredictable change, all the mainframe computers are architecturally identical so that any machine can take on any task work can be switched between machines, or records or functions can be merged. This is only possible if all mainframes are of the same type in respect of their hardware and software.
- 6.4 A further key requirement is the <u>resilience</u> to deal with a complete loss of service at mainframe computer installations. Industrial action is the most likely cause of this and the recent Newcastle strike has demonstrated the present system's vulnerability. Switching work to unaffected sites increases the ability to maintain a service. Again, this form of resilience is only possible if machines of the same hardware and software characteristics are used.
- 6.5 The timescale of the project can be reduced by proceeding directly to a single ICL tender. The cost of computers and peripherals at the computer centres represents under 20% of development and capital costs. On current planning assumptions a single tender decision would shorten the development time saving perhaps £lm; but of much greater significance bring forward by several months the time at which staff reductions can be achieved. This would save some £8 million a month, eventually, and puts hardware price differences of the order of perhaps £5m into perspective.
- 6.6 The ability to build early prototypes on the eventual supplier's equipment will significantly reduce the design and development risks of the project. The plans for LOP development and implementation include a process whereby the system is gradually developed through representations of the LOP system, concluding with a full LOP prototype at up to 20 local offices. The first stage in this is already under way, involving testing VDU screen formats. A single tender decision would enable the project to move swiftly into developing the prototype systems on ICL facilities which would be the eventual basis for a full prototype, thus providing reassurance on project timescales and confirming the functional design. This would give the best means of designing effective clerical interfaces with the new system, creating effective operational procedures, and confirming staffing assumptions.

- 6.7 The LOP contract is one of major commercial importance to ICL. It coincides with the launch phase of ICL's new large 'Estriel' mainframe computer range, one of the main elements in ICL's recovery plan which followed the Company's rescue in 1981 with the help of a £200m loan guarantee. Loss of the contract for the Government's largest mainframe requirements in the later 1980s would be read by the rest of the market as meaning that Government had serious reservations over Estriel's effectiveness and ICL's future as a mainframe supplier. This would be a serious blow to ICL which could precipitate a wider loss of confidence, leading to ICL's mainframe customers in both the public and private sectors switching to the US multinationals, particularly IBM, for their requirements. This would be bound to increase IBM's already substantial market penetration in the UK.
- 6.8 ICL will remain dependent for a long while to come on revenues from mainframe computer sales, in order to finance expansion into new market sectors such as office automation and networked systems. Mainframes directly provide about 40% of ICL's revenue, and many smaller products are sold for connection to them. Their contribution to profits is very much higher, probably more than 60%. The Company's financial position is still uncertain despite the takeover by STC (itself less well-placed financially as a result of the acquisition, and the loss of business with BT). An unsuccessful launch of the Estriel would be potentially disastrous, and would call into question not only the support totalling £16.8m which DTI has committed to ICL mainframe systems development since 1981, but also the maintenance of the company as the sole UK-owned mainframe computer supplier. On the other hand, the prospects for worldwide sales of Estriel mainframes are fairly promising if the UK market confidence in ICL is maintained; the VME operating system which it uses is technically more efficient than those of IBM or its other competitors, and has considerable potential for further development.
- 6.9 The total future requirements of the strategy, which will include a large centralised index, are estimated to be between 8 and 12 large computer mainframe installations. After LOP has been installed, the same arguments for compatibility used above will then result in considerable pressure to replace by single tender all these systems with the same mainframes as those for LOP. Thus, if say IBM won the LOP mainframe contract the Department would want to procure the replacement NUBS system from IBM also, and then to gradually replace other ICL mainframes from the same source.
- 6.10 The long-term industrial importance of seeking to preserve ICL as the UK's only indigenous mainframe computer supplier is hard to assess. The US-owned multinationals, particularly IBM, make a substantial contribution to the UK economy, (exceeding ICL's in terms of investment and jobs), while ICL is in many areas heavily dependent on US and Japanese technology. ICL's parent STC retains close links

with the US corporation ITT, which still has a substantial minority shareholding. There are no significant implications for the UK's defence capability.

7. Arguments against a single tender to ICL

- 7.1 There are risks in going to ICL, whether by single or open tender. ICL is a very small company compared with IBM whose enormous R&D budget (around £15 billion over the past 5 years) is reflected in their product line. The large computer mainframe market is totally dominated by IBM; any other supplier can only hope to gain a small share of the world market. Although ICL has a significant share of the UK market, their world share is very small indeed and shrinking. It is therefore not impossible that they will, in the long term, be forced out of the mainframe business. The consequences of this for Government would extend well beyond the boundaries of DHSS!
- 7.2 The new ICL product 'Estriel' is in fact a less powerful machine than some of the larger existing computers of IBM or other possible competitors, and is as yet unproven. The recently announced new range IBM machine, due in two years' time the 'Sierra' is very much bigger still. IBM software is in general well advanced and more reliable than ICL's, although some key ICL products are more technically advanced. In the key area of 'networking' the ability to interconnect computer systems all the other potential bidders, including IBM, have much greater experience of large networks and in general can offer more proven products. (This disadvantage could partly, but not entirely, be reduced by using non-ICL products for interconnection between systems.)
- 7.3 Furthermore, ICL have a reputation for well engineered and designed products but delivered late and with many of the software faults which ought to be eliminated by good quality control, left for the customer to discover. If a contract of this magnitude is delivered to ICL then Government must be assured that quality control of software is adequate and, more importantly, that any financial risks attendant on late or faulty delivery, or miscalculation of the size and power of the mainframe systems, fall on ICL and not on the Department. It will therefore be essential to ensure that any decision on single tender to ICL should be conditional on enforceable guarantees about the performance of their equipment. However, most of the relevant components will have been subjected to intensive validation trials in which ICL are working closely with CCTA and Inland Revenue, and will be evaluated by the COP project and other DHSS projects before they are required by LOP. There will therefore be a very much clearer view of the reliability of the Estriel hardware and software well before DHSS is finally committed to it for LOP.
- 7.4 It is arguable that complete dependence on one supplier for all Departmental mainframes is unwise and that putting "all the eggs in one basket" is to be avoided.

- 7.5 Because of IBM's almost total dominance, there is a wealth of IBM compatible software and hardware products on the market. There is no comparable commercial advantage in building ICL compatible products and an ICL contract (or any other vendor than IBM) would shut the Department off from this range of third party products.

 7.6 Compatibility can be achieved, although to a lesser degree than that described in para 5.4, by adherence to common
 - 7.6 Compatibility can be achieved, although to a lesser degree than that described in para 5.4, by adherence to common standards for interconnection of the mainframe computers. This would allow the different benefit systems to transfer information but would not allow functions to be transferred between computers of different manufacture nor permit integration of the computer files. Integration with Unemployment Benefit (and with taxation) would be prevented, and eventual convergence on an integrated 'whole person' view of benefit would be hampered; and there would be less flexibility and resilience. However, a system could be built which would be effective and operable. The standards specified for interconnection are the standards for open systems interconnection laid down by the International Standards Organisation (ISO). IBM normally market a different proprietary set of standards but it is believed they would offer the ISO standards in an attempt to win this bid.
- 7.7 The earlier policy of Government protection has not improved the quality and competitiveness of ICL's products. It is important, therefore, if the LOP project does proceed by single tender to ICL, that this should not be seen as a return to a generalised policy of preference.
- 7.8 Challenge by a competitor of ICL's on the grounds that single tender procurement contravenes EC and GATT regulations cannot be ruled out. The legal issues and the scope for a legal challenge are discussed in detail in Annex A. In the opinion of CCTA officials, only IBM is likely to consider challenging the decision, and even then it is unlikely that they would do more than vociferous lobbying. Ministers will need to be aware of this risk, and to consider their response to "sabre-rattling". Abandonment of a single tender policy for the LOP mainframes at the first sign of dissent would be worse than not adopting the policy in the first place.

SUMMARY

- 8.1 The principal argument in favour of single tender is based on planned integration of computer systems and hence the need for compatibility of the LOP system with existing and future benefit systems.
- 8.2 The timescale of the project would be reduced by several months by proceeding by single tender.

- 8.3 There are also strong grounds for protecting the commercial future, without 'featherbedding', of the only UK mainframe manufacturer, ICL. A mainframe capability is a key component of a domestic Information Technology industry.
- 8.4 The major argument against this line of action is that greater technical confidence and possibly better value for money, in the narrow sense of the price for the mainframe systems themselves, would rest in a contract with another vendor, probably IBM.
- 8.5 There could be some risk to the project timescales if key ICL products are delivered late or with residual technical problems, and to its eventual successful delivery if ICL systems are not proven in practice.
- 8.6 There is an arguable case in law for single tender action to the extent that Ministers are committed to the integration of benefit systems.
- 8.7 The case might be challenged particularly by IBM.
- 8.8 The balance of advantage to Government lies with single tender to ICL.

Al.2 The overall purpose of the EEC Directive and of the GATT Agreement (the "Regulations") is to harmonise procedures relating to public supply contracts and to introduce equal conditions of competition for such contracts in the territories of the contracting parties. The Regulations set down tendering procedures and the conditions on which public supply contracts may be awarded to ensure that foreign suppliers are not discriminated against. They require, as a general rule, that suppliers from other states should be given an opportunity to tender for public supply contracts on equal terms. Both the EEC Directive and the GATT Agreement provide, however, for exceptions to this general rule and thus permit contracting states to proceed by way of single tender to one supplier where certain conditions are fulfilled.

Al.3 There are two exceptions under the Directive and the GATT Agreement on which the Relevant Authorities can seek to rely to justify single tendering in favour of ICL for the LOP project.

A2 Exclusive Rights or Technical Reasons Exception

A2.1 Under Article 6.1(b) of EEC Directive 77/62: "contracting Authorities may award their supply contracts without applying the [normal tendering] procedures referred to in Article 4(1) and (2) in the following cases:...

(b) When, for technical ... reasons or for reasons connected with protection of exclusive rights, the goods supplied may be manufactured or delivered only by a particular supplier;"

A2.2 This exemption envisages the possibility of a public authority awarding a contract on the basis of a single tender where the operational requirements can only be met by one supplier for purely technical reasons and/or for reasons relating to proprietary rights. If Ministers require to achieve a much closer technical integration of the various benefit systems or of the taxation system, then the Operational Requirement for LOP must be written around the general specifications necessary to ensure compatibility between the architecture of the LOP system and of the other

DHSS systems. There are objectively justifiable reasons for basing the technical specifications for the LOP system on ICL architecture: namely, the need to give Ministers the means for integration spelt out in section 5 above. If the operational requirements were so written, only ICL could meet the technical requirements of the tender and therefore single tendering would be justified for technical reasons.

- A2.3 Similar arguments apply if Ministers wish a more radical innovation in the area of taxation and benefits. In general, however, the strength of the legal justification for single tender procurement is directly proportional to the Government's commitment to the integration of computer systems. Thus the case rests on the integration of benefit systems, as outlined most recently in the Green Paper "Reform of Social Security". It should be pointed out in this context that it must be regarded as uncertain whether the exception for technical reasons or the protection of exclusive rights could successfully be invoked to cover a desire to retain an option to integrate, as opposed to the purchase of equipment required for definitely planned integration.
- A2.4 In addition, single tendering would be justified under this exception if the operational requirements were so written, because no other supplier could meet the operational requirements without infringing ICL's exclusive rights. Those requirements would necessarily specify ICL architecture. Such architecture is based upon, and indeed defined by, ICL's proprietary VME operating software, copyright in which is vested in ICL. No other supplier has the right to use or license others to use VME, nor does any existing supplier provide hardware on which the VME software can operate.
- A2.5 With reference to Article 7.(2) of the Directive, (to which single tendering is subject by virtue of Article 4(3) of the Directive), the reference to ICL architecture in the operational requirements will be justified by the subject of the contract: that is the need to have a system for LOP which will meet the requirement of integration with other DHSS systems.
- A2.6 Under the equivalent exemption in the GATT Agreement, (Article V 15(b)) single tendering is justified where: "...for reasons connected with protection of exclusive rights, such as patents or copyrights, [whereby] the products can be supplied only by a particular supplier and no reasonable alternative or substitute exists". Although this exception in contrast with the EEC Directive does not refer to "technical reasons" it does provide that ... "reasons connected with the protection of exclusive rights"... can justify single tendering. For the reasons set out in para. 15.4, therefore, Article V,15(b) of the GATT Agreement can also be relied on.

A3 Compatibility Exception

A3.1 In addition to the technical reasons and exclusive rights exception, and as an alternative ground, the Relevant Authorities can seek to justify single tendering to ICL on the grounds of Article 6.1(e) of the EEC Directive. Article 6.1(e) provides that the Relevant Authorities may award their supply contracts without applying the EEC Directive's procedures if such contracts are "for additional deliveries by the original supplier which are intended...as the extension of existing supplies or installations where a change of supplier would compel the [Relevant Authorities] to purchase equipment having different technical characteristics which would result in incompatibility or disproportionate technical difficulties of operation or maintenance."

A3.2 The LOP system is not the first DHSS computer system. The acquisition of the LOP mainframes has to be seen in the context of existing DHSS computer installations. To regard the LOP system as a completely separate installation is to ignore the fact that first, the LOP system will be dependent on, and will want to use, information processed by other computer systems within the DHSS and, secondly, that the LOP system will subsequently be integrated with those systems. In view of the intention that the LOP system should be integrated with existing computer systems within DHSS, it can be argued that it should be regarded as an extension of those existing installations. However, since the LOP system would at the outset be operating independently, clearly a contrary argument could be raised that such an intention was not sufficient to bring the supply of the LOP mainframes within Article 6.1(e) of the Directive. Paragraph 5.5 above explains how such a period of independent operation is a necessary step towards integration.

A3.3 A risk of which Ministers should be aware is that a competitor of ICL might seek to argue that the proper course for DHSS to follow would be to put the supply of LOP mainframes out to open tender and then move to integration with the most advantageous of the systems offered by the suppliers who tendered. To counter this it could be argued, however, that the existing DHSS mainframes, being ICL, have "different technical characteristics" (ie a different architecture), and that this would give rise to "incompatibility" and "disproportionate technical difficulties of operation" in that the DHSS staff involved are all trained exclusively in the use of ICL hardware and software, and write their own user software for the ICL systems (see paragraph 5.3 above).

A3.4 The equivalent exception in the GATT Agreement, Article V,15(d) can be relied on by the Relevant Authorities for similar reasons. The award of the LOP contract to a non-ICL manufacturer would constitute "a change of supplier [which] would compel the [Relevant Authorities] to purchase equipment not meeting requirements of interchangeability with already

existing equipment." It is evident that ICL equipment and existing installations will not be "interchangeable" with non-ICL equipment supplied for LOP given the absence of a common technical architecture.

A4 Possibility of Legal Action

A4.1 Notwithstanding the foregoing analysis which indicates that an arguable case exists in law for single tender, there is no guarantee that other interested companies, IBM in particular, would not challenge the single tender decision in the domestic courts. A competitor of ICL might bring an action against HMG in order to obtain a declaration that HMG was acting contrary to community law and the Supplies Directive in particular in not going out to competitive tender. A competitor might also bring a claim for damages based on such an infringement. An action for damages would be novel in that it would be based on a failure to comply with a directive, but the domestic courts have already entertained such an action based on infringement of an article of the EEC Treaty (Bourgoin v Ministry of Agriculture Fisheries and Food, Judgment under Appeal). There would be difficulties of proof of the amount of damages but this would not affect the Court's attitude to liability.

A4.2 If a competitor succeeded in bringing a damages claim before the domestic courts and in establishing liability, the amount of damages for which HMG would be at risk would depend on a number of factors. If the competitor could show that it would have put up a better tender (ie one which was financially more beneficial to the Department and met the necessary technical and other requirements) then the court could be expected to award damages calculated by reference to the loss of profit. A competitor's position would be weaker if there were a number of alternative potential tenderers since then the court would have to bear in mind the possibility that the contract would not necessarily have gone to the claimant competitor. The fact that a competitor would be prepared to tender at a loss, in the expectation that if it won the contract it might make other more remunerative contracts later on, would also be a factor which the court would have to consider, whether the claimant was the sole competitor or one of a number.

A4.3 Although no formal power exists for any court to hold up procurement action (by injunction, for example) the Law Officers would normally wish the Government to behave as if such a power existed, and delay action until the matter is settled.

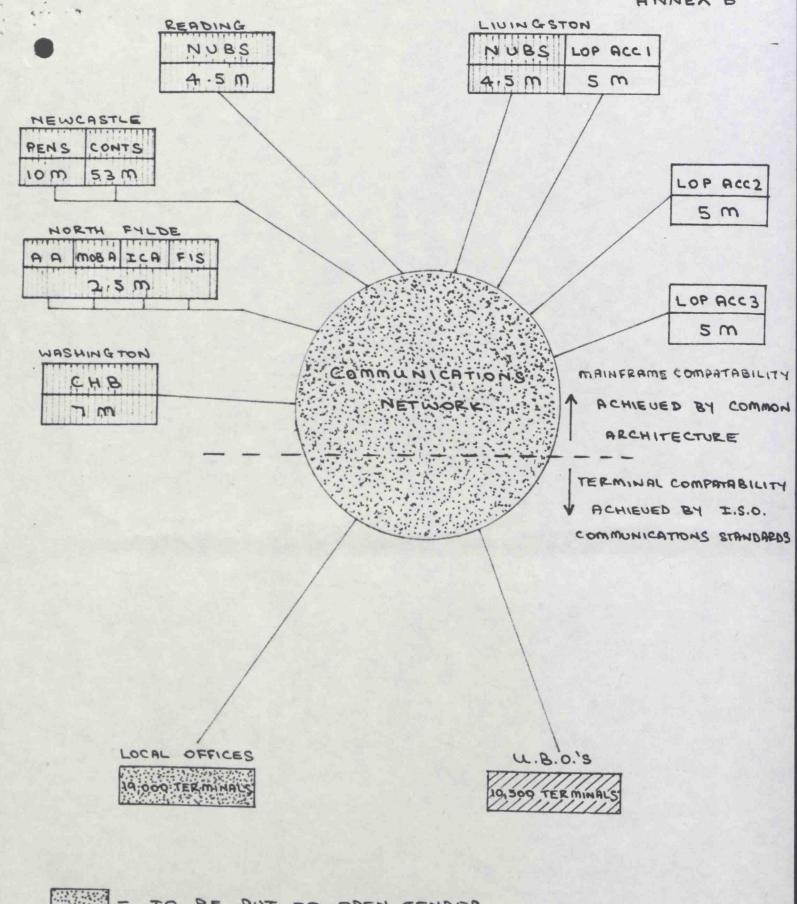
A4.4 Any question on interpretation of the provisions of EEC Directive 77/62 arising in such proceedings would be likely to be referred to the European Court of Justice for a preliminary ruling on it, which would then be binding on the court here which would proceed to deal with the case on that basis.

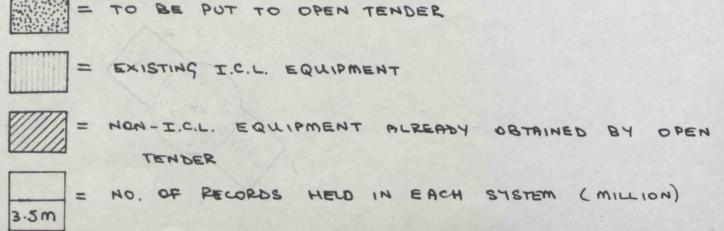
A4.5 The compatability of the single tender procedure with the Supplies Directive and Community law generally could also be raised directly in the European Court of Justice by infraction proceedings brought by the European Commission (or, very much less likely, by another member state). If the court upheld the Commission's case that single tendering was not justified by the particular exceptions in the Supplies Directive, it would declare that the United Kingdom had failed in that respect to comply with its treaty obligations. It would then be necessary to consider what measures were required to comply with the judgment and this could involve the provision of some form of remedy for those adversely affected by the breach, although this would also depend on consideration of domestic law as well.

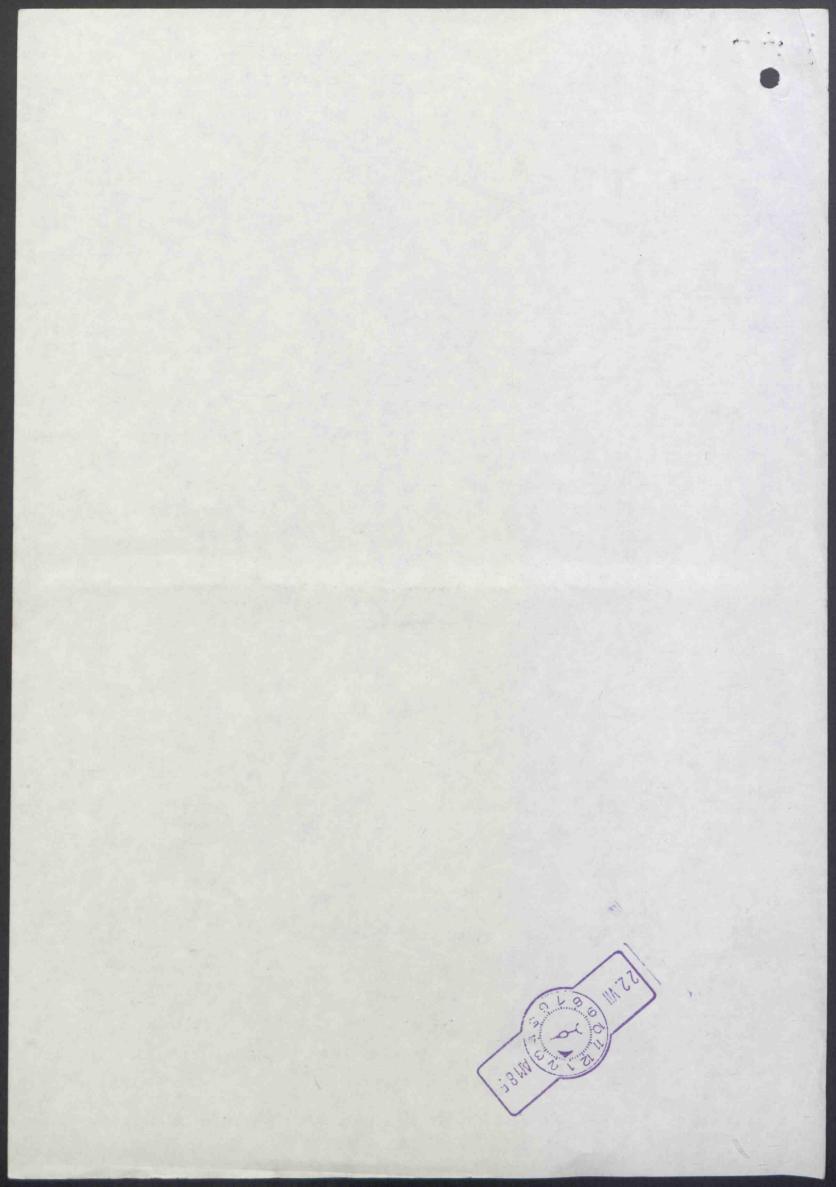
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Direct Effect of Gatt Agreement

It is highly unlikely that the provisions of the GATT Agreement could be invoked by any private party in proceedings in an English Court. As a matter of domestic law, it could not be invoked directly. As a matter of European Community law, the European Court of Justice has decided in five cases that various provisions of GATT cannot be invoked by parties in national proceedings to challenge the validity of either EEC or national decisions or measures (see Cases 41-4/70 International Fruit Company, [1971] ECR 411, Case 9/73 Schlüter, [1973] ECR 1135, Case 266/81 S.I.O.T., [1983] ECR 731, Cases 267 to 269/81 S.P.I. and S.A.M.I., [1983] ECR 801 and Cases 290 and 291/81 Singer and Geigy, [1983] ECR 847. In those cases the Court decided that the relevant provisions of GATT were not directly applicable for reasons concerning the nature of the GATT Treaty which appear to be of general application to GATT Agreements. This view appears to be supported by Advocate General Reischl's Opinion in the S.I.O.T. case at p.790.







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DEPARTMENT OF HEALTH & SOCIAL SECURITY

Alexander Fleming House, Elephant & Castle, London SEI 6BY

Telephone 01-407 5522

From the Secretary of State for Social Services

The Rt Hon William Whitelaw CH MC
Secretary of State for the Home Department
Home Office
50 Queen Anne's Gate
London SW1

SOCIAL SECURITY OPERATIONAL STRATEGY

My private secretary wrote to yours on \mathcal{A} September explaining that we had deferred the publication of the strategy document until 15 September. I now enclose a copy of the printed version of the working paper and of the Brief Guide, plus the press notice which will be issued when we publish tomorrow.

I am sending copies of this letter and enclosures for information to the Prime Minister, mambers of H Committee, Patrick Jenkin, Lord Cockfield, Sir Derek Rayner and Sir Robert Armstrong.

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SOCIAL SECURITY IN THE 1990s

GOVERNMENT REVEALS A STRATEGY FOR THE FUTURE

Norman Fowler, Secretary of State for Social Services, announced today the publication of a consultative document on Government plans for the modernisation of social security systems. Mr Fowler said:

"Our objectives are clear. We are aiming at a better quality of service for the public; more satisfying jobs for our staff; and reduced administrative costs. This document presents a challenge for us all to think about the future of a vital public service. How we proceed will depend on the comments we receive. It will be open Government in practice. There are exciting opportunities for the information technology industry and of course it is an important initiative to be taking in information technology year."

"The proposals put forward for consultation in the document are:

- a national network of computer centres to be created, linking local and central social security offices with fast transmission links;
- the public to get better advice and information about benefits with more kinds of social security business being handled at one place the local office and at one time;
- staff in DHSS offices and DE Unemployment Benefit offices to work with modern visual display units linked to the computers; more of the routine work being handled automatically, so that more satisfying work can be done in helping people directly;
- enquiries and claims to be dealt with more quickly and accurately through increased computer aids.

The proposals are not a rigid blueprint. Each project is designed to be phased in gradually and must be justified and approved within the overall framework. There is a built-in flexibility allowing for regular reviews and modifications along the way. As the proposals

stand now, the cost of implementation could be about £700 million on top of the cost of maintaining existing systems. They could produce savings of around £1,900 million over a 20 year period.

Around 20 - 25,000 fewer social security staff out of a total of well over 100,000 might be needed in DHSS and DE by the mid-1990s, with a significant rundown beginning in the late 1980s if all the projects go ahead. The utmost care will be taken of staff interests during this long period of change."

Notes to Editors:

Preliminary work on the possible first stages of the strategy is under way. It includes:

- improved benefits advice for the public; an experimental micro-computer system will be tested starting this autumn;
- extensive use of micro-computers to help local office staff with supplementary benefit work, starting next year with special training provided;
- LOP a Local Office Project on how computers can help with supplementary and incapacity benefit work; to operate from the mid-1980s through a network of computer centres;
- improved communication links between Unemployment Benefit offices and computer centres, to give DE staff better access to information;
- new central index of social security contributors and beneficiaries at Newcastle, to provide staff with better means of establishing records.

Government is seeking the views of all those with an interest closely involved - including technical experts, organisations concerned with claimant interests, social security staff, their trade unions and the Social Security Advisory Committee - before deciding on the way forward. Copies of the document are being placed in the libraries of both Houses of Parliament. The period for consultation is up to 1 February 1983.

A brief guide to the strategy and background papers, as listed in thedocument, are available from DHSS, Room 213, Ray House, 6 St Andrew Street, London EC4A 3AD. Social Services Long herm Stategy Sept 80

SOCIAL SECURITY OPERATIONAL STRATEGY

A brief guide

INTRODUCTION

This paper provides a brief guide to the social security operational strategy including its origins, the main proposals published for consultation, the costs and the returns. A glossary of terms is at the end. Further details may be found in two published working papers: 'A Strategy for Social Security Operations' (DHSS, 1980) and 'Social Security Operational Strategy: a Framework for the Future' (HMSO, 1982). These are referred to below as Working Papers I and II.

SOCIAL SECURITY TODAY

The scale of social security operations is huge:

- . 25 million claims a year;
- . 24 million beneficiaries at any one time;
- . 1,200 million payments a year;
- . £27 billion benefit expenditure a year;
- . 117,000 staff in the Department of Health and Social Security (DHSS) and the Department of Employment (DE) predominantly clerical staff working outside London;
- . £1,400 million administration costs.

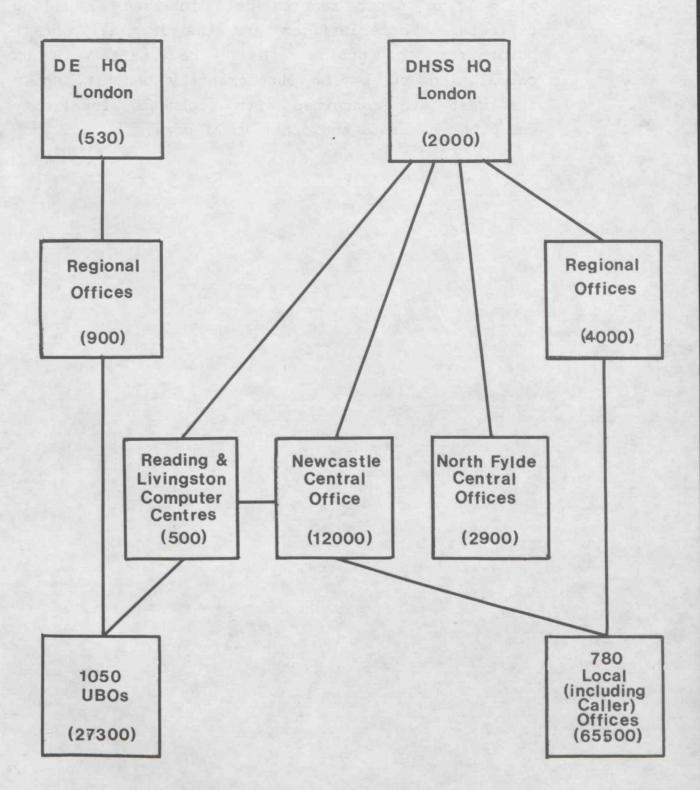
(1981/82)

The work is highly complex: over 30 benefits are paid (10 introduced in the 1970s); staff rely on over 100 bulky instruction manuals - closely printed, frequently amended and full of cross-references.

DHSS and DE already rely heavily on computers, housed at four centres. Newcastle is one of the biggest centres in Europe. Almost £40 million is invested in computers and there are around 3,000 ADP staff.

Figure 1 shows the organizational structure of the whole system, in both DHSS and DE. The Reading and Livingston computer centres are linked to a separate network of Unemployment Benefit Offices (UBOs) - run by DE - and pay benefits to the unemployed. Newcastle Central Office records contributions for the whole working population and pays Retirement and Widow's Pension and Child Benefit. North Fylde Central Office pays War Pensions and various disablement benefits. At all these points in the network computers play an important part.

ORGANISATIONAL FRAMEWORK



Staff nos. shown in brackets (October 1981)

Figure 1

DHSS local offices, however, are purely clerical with millions of paper records held in rows of filing cabinets. These offices are the initial contact point for the public. Half the staff work on calculating and paying supplementary benefit, while the rest are concerned with sickness, invalidity and other benefits and other local work.

WHY A STRATEGY?

A combination of <u>concerns</u> about the state of operations, allied with an awareness of new technical <u>opportunities</u>, surfaced together in the late 1970s and led to work on a strategy for operations for the 1980s and 1990s.

Staff were faced with a job of increasing complexity - during the 1970s Parliament approved 10 new benefits, bringing the total to over 30. Administration costs rose. Supplementary benefit error rates increased and standards of service to the public seemed to decline.

The computer systems were not able to give direct and immediate help to front-line local office staff in DHSS and, through them, to the public. In the absence of such help, local office staff were burdened with more and more paperwork.

Meanwhile, computers and telecommunications were generally becoming cheaper, faster, more reliable and able to handle more work. This opened up quite new opportunities. Things which had been technically impossible or too expensive to contemplate began to seem feasible.

The present DHSS computers have to be replaced during the 1980s and this offers an opportunity to introduce a more coherent system providing real improvements - for the public, the taxpayer and the staff.

WORK SO FAR

The work started within DHSS in the late 1970s. The pace quickened in 1980, when a new Strategy Team was set up and the Secretary of State for Social Services announced the work in Parliament:

'Piecemeal changes can never be enough. We need a more radical approach if we are to modernise the way we run the system and give the public a quicker and more accurate service. We also want the staff to have more worthwhile jobs with greater satisfaction.' (Hansard 21 November 1980.)

The first Working Paper was published in December 1980. It explained the reasons for the strategy and stressed as key issues the need for economy and efficiency; the need to improve service to customers, particularly by treating them more as 'whole persons' with a range of social security requirements; and the need to pay particularly close attention to the needs of staff, such as a better working environment and more job satisfaction. Working Paper I invited discussion and called for a further paper with specific proposals for a strategy to meet these needs.

In January 1981 the Parliamentary Secretary (Social Security) chaired a two-day seminar at Sunningdale, at which the strategy was considered by a group of well-informed outsiders - including people with extensive private sector computing and management experience. The broad approach was welcomed, but the scale of the undertaking and the need to avoid undue risk was stressed. Since then wide discussions - inside and outside Government - and analysis work have led up to the proposals contained in Working Paper II.

THE PROPOSALS

More Economic and Effective Use of Claimant Information

Collecting, storing and using information about contributors and claimants lies at the heart of social security operations. At present the information cannot be organised as effectively as we would wish. Several separate records have to be held about one individual. It is difficult to keep them up to date and consistent and for staff in one part of the organization to get relevant information held elsewhere. This increases the risk of overpayments to which the Public Accounts Committee has drawn attention:

'We urge the Departments [DHSS and DE] to pursue their investigations to ensure that full advantage is taken of the facilities offered by computers to crosscheck and supply information at the point at which a claim is decided.' (PAC 9th Report, 1976/77)

This highlights a central issue: either DHSS and DE continue to hold large numbers of separate records in a form not easily accessible to local office staff, or they link them together and make them readily available to the staff who need the information. Technology now makes it possible to pursue the second alternative and we propose that the records should be re-structured to minimise duplication of information and make it accessible to the staff who need it. There will be fears about privacy, and strict safeguards to control access and prevent abuse will have to be built in. But to take any other course would mean opting for less efficiency and less control of public money and foregoing opportunities to improve standards of service.

Cross Benefit Approach

In the past each benefit has been administered largely in isolation. The strategy work has sought to identify functions which are the same irrespective of benefit. Printing order books or giros is a clear example. It is recommended that so far as possible common approaches should be used for all benefits, to achieve economies and a less confusing system.

Common Communications Network

As telecommunications become more important, it is essential to prevent the spread of different, incompatible networks, which would restrict flexibility and confuse staff. A common, general purpose network spanning all social security offices is recommended.

Terminals for Staff

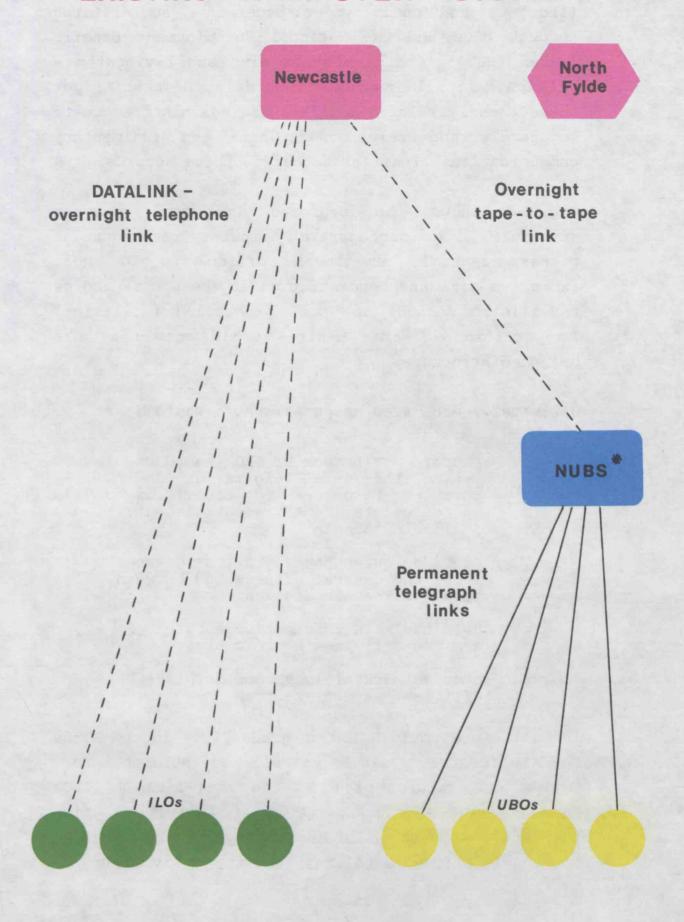
Computer terminals on the desk would be a real aid to staff in their daily work, by providing rapid access to the information they need and to computer assistance. The widespread use of such terminals is recommended: they would replace paper and pens as the basic working tool for benefit clerks.

New Computer Structure

To put these proposals into practice, DHSS and DE would have to move from the present computer structure to a more modern and integrated one.

Figure 2 illustrates the present arrangements. They reflect the constraints of the 1960s and 1970s when they were designed. For example, both sickness bene-

EXISTING COMPUTER SYSTEMS



^{**}National Unemployment Benefit System computer centres at Reading and Livingston

fit - administered in DHSS integrated local offices (ILOs) - and unemployment benefit - administered through UBOs and the National Unemployment Benefit System (NUBS) computers at Reading and Livingston - rely on national insurance records at Newcastle; yet these closely related benefits are administered quite separately and rely on separate and rudimentary communications links for access to these records.

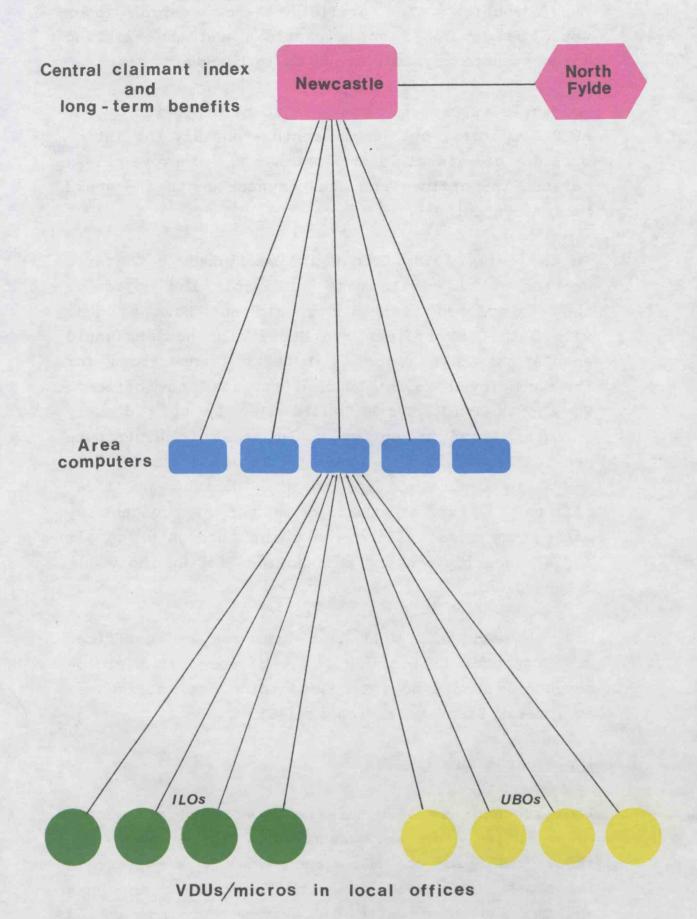
Figure 3 shows the proposed long-term computer structure. To concentrate computer resources at either central or local offices would mean excessive size and concentration at the centre and/or unrealistic demands on local processing facilities. The addition of area centres would enable a more balanced structure.

Ultimately, each area computer centre would:

- support a number of ILOs and UBOs, making the same information and computer resources (eg facilities to calculate benefit entitlement) available to both;
- provide quick communications between local and central offices and between local offices themselves;
- . hold the main information about claimants living in their area;
- provide natural locations for fast, efficient payment centres.

The structure would build up gradually. In the 1980s the Area Centres would be established, holding information and computer programs and with links to ILOs and Newcastle. Among the first activities which they would support would be the payment and uprating of local office benefits, and the calculation of

PROPOSED COMPUTER STRUCTURE



NOTE: all telecommunications use fast telephone/digital links

entitlement for claimants to supplementary and sickness benefits. In parallel, a new central index would be developed at Newcastle; and the existing large computer systems there would be modernised.

Meanwhile, UBOs would continue to be supported by the NUBS computers, but improvements - notably the introduction of visual display units to improve links between the offices and the computer centres - would be introduced.

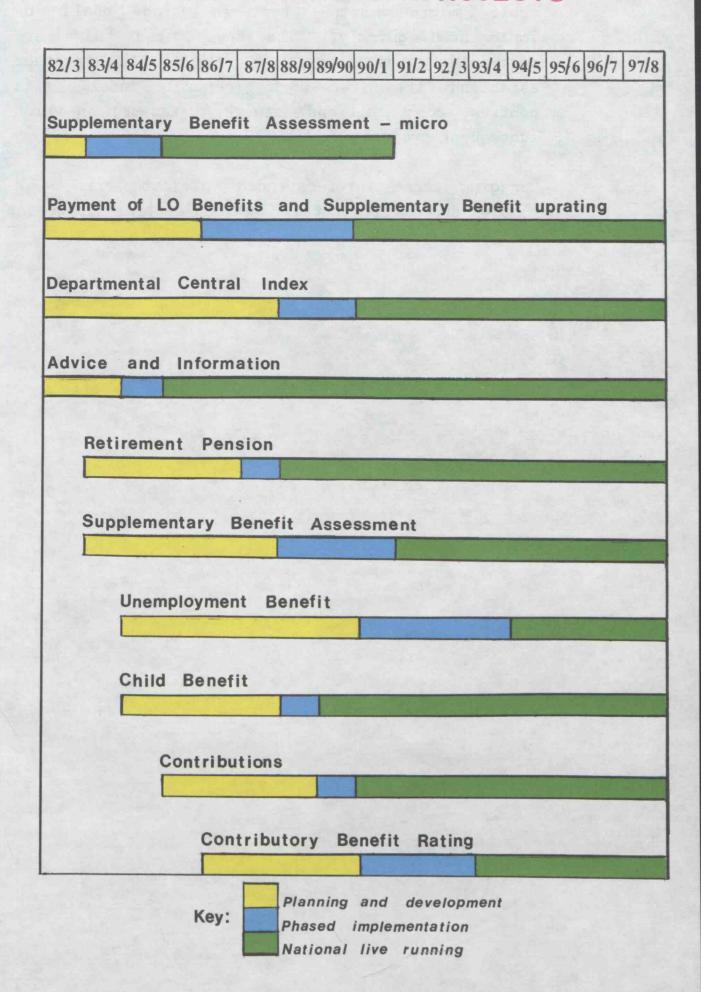
In the early 1990s UBOs would be linked to the area centres. This would make attainable the objective that unemployed claimants should not have to deal with both DHSS offices and UBOs: the network would enable the full range of benefit transactions for the unemployed to be handled through 'one office'. The North Fylde system would also be more closely integrated and an option would exist to distribute pension and child benefit administration from Newcastle Central Office to area centres and local offices to further the 'whole person' concept by making the local office the point through which all social security benefit transactions for an individual are handled.

However, all this will take time and local offices need computer help now. It is proposed that microcomputers should be introduced into local offices as an interim step - starting in 1983.

Implementation

The proposed new structure could not be implemented as a single exercise: it must be broken down into individual projects developed within a strategic framework. Figure 4 shows the most important ones and the suggested dates for systems development and implementation.

MAIN STRATEGY PROJECTS



The first and fourth projects are relatively small-scale micro-computer systems which could be implemented quickly. The second and third are particularly important, as they will together establish the frame-work (central index, area centres, communications network, database) on which subsequent projects will build.

Managing these inter-dependent projects will be a complex and difficult task. Strong central management will be essential.

THE GAINS

The proposals would enable a better service for the public. As local office staff would have ready access to all the information they need to deal with a case they would be able to provide better information to customers and a quicker and more efficient service. As computers shoulder more of the burden of calculations and ensure that all the right questions are asked, errors should be reduced and calculations speeded up. As staff would be less burdened by procedural and arithmetical work each of them would be able to handle a wider range of social security business, instead of requiring claimants to contact different counters at different offices. It would then be possible for them to treat customers as 'whole persons'.

The Government would achieve substantial savings (discussed further below); fewer complaints about inaccuracies, overpayments etc; better controls against abuse due to improved cross-referencing of available information; and a computer structure which was more responsive and adaptable to change than the present systems and more able to cope with additional demands than the present over-stretched manual systems. (The administrative difficulties of introducing a tax credits system, for example, would be reduced.)

The staff too would benefit. The focus of their work could shift from processing paper to dealing with people and resolving their problems. By having the information on which they depend readily available they would be able to do a better and satisfying job. The frustrations of not having information available, of depending on others elsewhere to complete a task, and of relying on complex and voluminous instruction manuals should all diminish.

COSTS AND SAVINGS

NET CASH FLOW OVER STRATEGY PERIOD

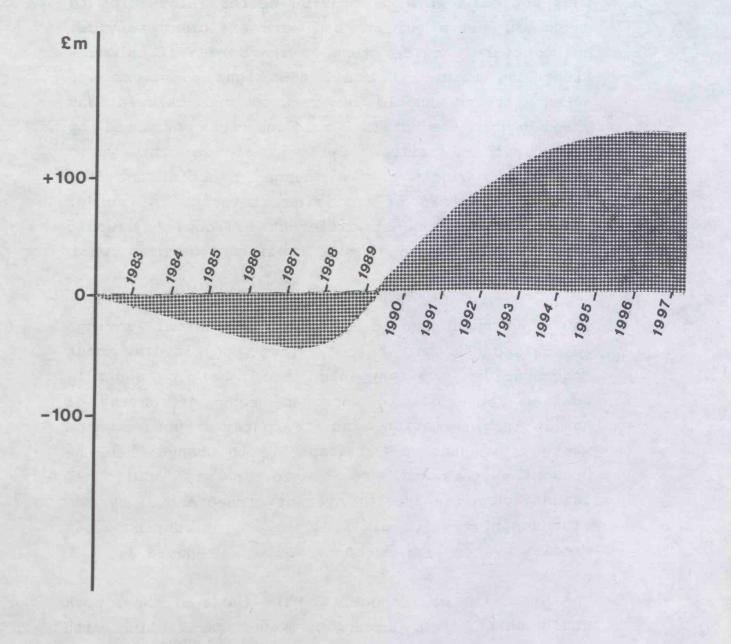


Figure 5

DHSS will need to spend around £900 million* (November 1981 prices) over the 20 years 1982/2002 simply to keep the current computer structure running with minimal improvement.

Implementation of the full strategy proposals would cost an <u>additional</u> £700 million* and would produce gross savings of £1,900 million* over the same period: a return of 123%. The internal rate of return (the discount rate at which savings would equal expenditure) is 27%.

Figure 5 shows the cash flow: net annual expenditure in the 1980s turns to net annual savings after 1990. In net present value terms the strategy will have paid for itself by 1993.

Most of the long-term savings would come from a need for fewer staff in DHSS and DE, particularly in local offices. The savings would build up, project by project, and would depend on the way the strategy progressed. If the full programme of projects were carried through on the timetable envisaged in figure 4, staff savings would start in 1984 and would build up, gradually at first but more sharply from 1990, and could reach a level of 20-25,000 by 1995. Other factors, including the extent to which savings were ploughed back into improvements in the quality of service, would affect the exact level achieved. There would be discussions with the trades unions about the staffing consequences of each individual The aim would be to achieve savings gradually through natural wastage.

^{*} At this stage the figures must be regarded as order of magnitude estimates.

The strategy would thus facilitate continued reductions in the size of two major Government Departments; would provide a planned framework for achieving them; and would enable this to be done while improving the level of service provided.

It is not necessary to seek global approval for the total investment needed to complete the strategy. Each project within it would be individually costed and decisions on investment would be taken one by one, in the light both of their individual justification and their contribution to the strategy as a whole. During the time the strategy is developing technology will advance and the demands on the system may change: this reinforces the need for a flexible approach, with constant reappraisal.

KEY REQUIREMENTS

Success is only possible if a number of key requirements are met.

The strategy must be <u>flexible</u> and responsive to change - not a strait-jacket. It should be seen as a framework within which individual projects are justified and carried forward. Constant monitoring will be necessary. In addition, several review points are built in at each of which it would be possible to stop or change direction. Working Paper II also outlines several variants, which would be less comprehensive and less expensive but would offer smaller savings and lower attainment of strategy objectives.

Privacy and security must be safeguarded. The strategy does not require any additional personal information to be held by the Departments: it proposes that existing information should be used better. Any forthcoming legislation would provide the framework for data protection. Access to sensitive information would be controlled (eg by passwords, badges, voice prints, special authorisation procedures, etc). Significant back-up support to cope with machine failure would be needed and has been included in the costings. The extent of security controls and back-up provision will be determined in the detailed planning of the individual projects, in the light of the possible risks and costs involved.

Effective management will be essential:

- to ensure unity of purpose throughout the planning and implementation process;
- to ensure that necessary resources (including skilled technical personnel) are available and efficiently deployed; and
- to maintain momentum and proper control.

Effective consultations will be essential:

- to ensure that the needs of those who receive the benefits and the views of the organisations who represent them continue to be taken fully into account
- . to ensure that the enthusiasms and ideas of the staff and those who represent them are fully engaged in the development of the strategy.

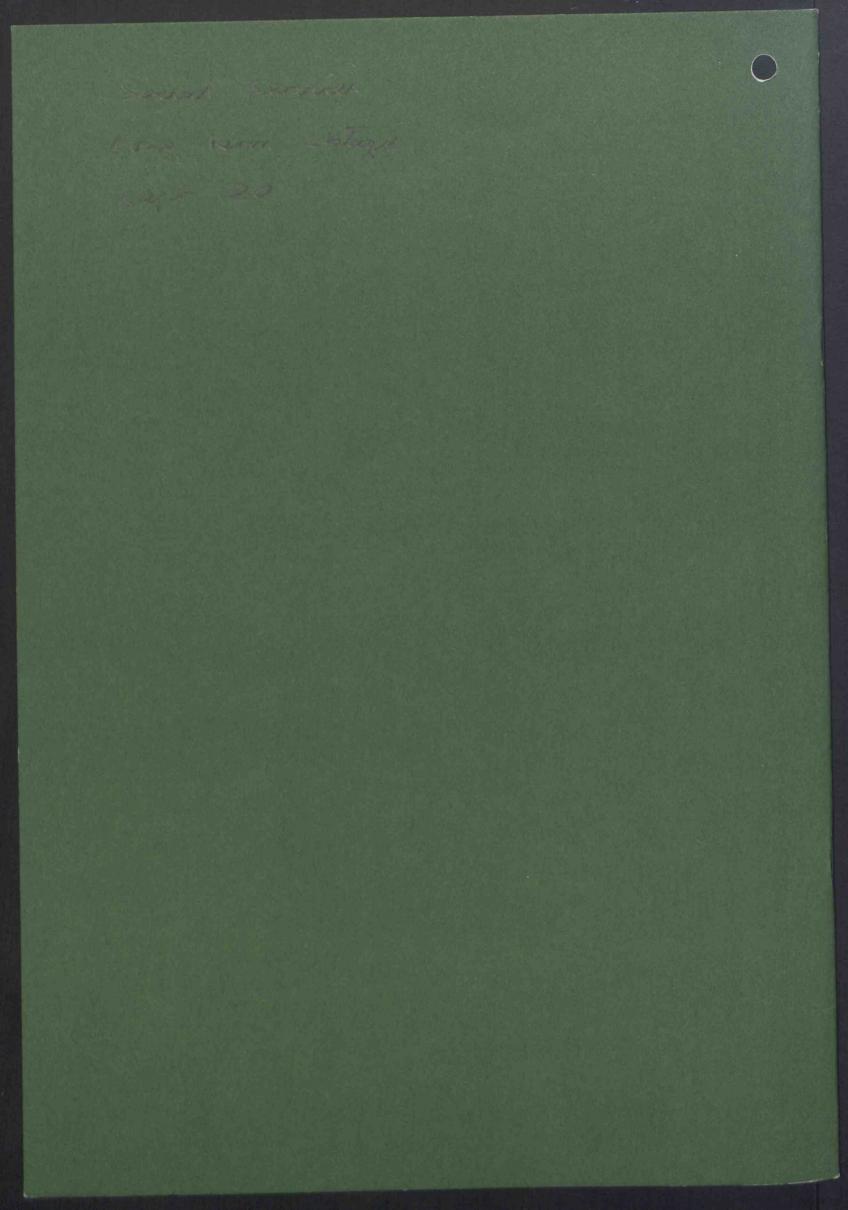
CONCLUSION

The proposed strategy would enable DHSS and DE to provide a modernised and more efficient service at lower cost. It would also have wider implications for Government:

- it would continue the Government's drive for greater efficiency;
- it would give practical expression to the Government's determination, in Information Technology Year, to take full advantage of modern technology in its own directly run services;
- . it would make a major contribution to technological advance in the UK, generating high technology business and jobs.

GLOSSARY

Department of Employment Department of Health and Social Security DHSS Integrated Local Office ILO Local Office LO Newcastle Central Office NCO North Fylde Central Office NFCO National Unemployment Benefit System NUBS Public Accounts Committee PAC UBO Unemployment Benefit Office Visual Display Unit VDU



Spaint Serves MBPM SM DEPARTMENT OF HEALTH & SOCIAL SECURITY Alexander Fleming House, Elephant & Castle, London ser 6BY Telephone 01-407 5522 From the Secretary of State for Social Services J F Halliday Esq Private Secretary Home Secretary's Office Queen Anne's Gate 7 September 1982 LONDON SWIH 9AT Dear John, SOCIAL SECURITY OPERATIONAL STRATEGY Mr Whitelaw wrote to Mr Fowler on 21 August confirming that he had no objection to the plans to publicise the strategy document. I am afraid we have had to defer the publication date for one week; it will now be 15 September. Copies to recipients of previous correspondence. Private Secretary

DEPARTMENT OF HEALTH A SOCIAL SECURITY
Alexander Flering House, Elephone & Casue, London use our
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Caxton House Tothill Street London SWIH 9NAF
Telephone Direct Line 01-213 6400
Switchboard 01-213 3000

31/8

Rt Hon Norman Fowler MP Secretary of State Department of Health and Social Security Alexander Fleming House Elephant and Castle LONDON SEL 6PY

27 August 1982

Dear Scirctary of State

SOCIAL SECURITY OPERATIONAL STRATEGY

Thank you for your letter of 17 August. I have noted your intention to go ahead with publication of the Working Paper on 8 September and we are making arrangements, in parallel with yours, for details of the proposals to be made available both to our trade union side and to staff general in the UBO.

I am grateful for your invitation to attend the Press Conference but, bearing in mind that my strictly Departmental interest accounts for only a small part of the full range covered by the Strategy, I think my presence would tend to put the issue somewhat out of perspective. Unfortunately David Waddington will be out of London and unavailable on that day but I am asking my officials to ensure that the Department sends a representative as an observer and to answer any factual questions that may arise on our side.

Finally, I am glad that you have agreed to enlist MPO's help in trying to resolve the question of management of NUBS and I understand that contact has already been made with them at official level. Clearly we shall have to wait to see what judgment they come to both on the merits of the case and on the timing of any change. In answer to your



final paragraph I would only say that it is not now, nor has it ever been, part of our case that the existing arrangements have broken down. What we do maintain, however, is that there is plenty of scope for doing the job better and more efficiently especially over the next few years of potentially valuable development.

I am sending copies of this letter to the other recipients of the previous correspondence.

(Approved by the Secretary of State and signed in his absence)

QUEEN ANNE'S GATE LONDON SWIH 9AT //. August 1982 SOCIAL SECURITY OPERATIONAL STRATEGY in Dox 20/2 Thank you for your letter of 17 August. As Norman Tebbit has withdrawn his objection to publication and our other colleagues are content, I agree that you should publish the consultative document as you propose. I am copying this letter to the recipients of the previous correspondence. The Rt. Hon. Norman Fowler, M.P.



DEPARTMENT OF HEALTH & SOCIAL SECURITY

Alexander Fleming House, Elephant & Castle, London SEI 6BY

Telephone 01-407 5522

From the Secretary of State for Social Services

Price Munta

The Rt Hon William Whitelaw CH MC MP
Secretary of State for the Home Department
Home Office
50 Queen Anne's Gate
LONDON
SW1

August 1982

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SOCIAL SECURITY OPERATIONAL STRATEGY

In my letter to you of 15 June I sought your agreement to the publication of our Second Working Paper on A Strategy for Social Security Operations. As I emphasised, it is a consultative document, the purpose of publication being to enable us to discuss our ideas with outside experts and with all those who have a real interest in this field, including our staff, and trade unions.

As you will know from subsequent correspondence, Norman Tebbit saw certain difficulties about going ahead in the way I proposed, but in his letter to me of 5 August has said that he does not wish to press for a meeting to discuss his reservations if other colleagues are content for the document to be published.

Apart from Norman, no-one has been in touch with me to suggest that we ought to discuss the document at a meeting before publication, and I therefore now seek your authority to go ahead. If you are agreeable, I propose to publish on 8 September and ask for any comments to be made by 1 February. We can then as I have indicated in my letter to Norman (a copy of which I attach) assess the results of our consultation and see what is indeed the best way forward.

I am copying this letter to the recipients of the previous correspondence.

NORMAN FOWLER



DEPARTMENT OF HEALTH & SOCIAL SECURITY

Alexander Fleming House, Elephant & Castle, London SEI 6BY
Telephone 01-407 5522

From the Secretary of State for Social Services

The Rt Hon Norman Tebbit MP Secretary of State Department of Employment Caxton House Tothill Street London S W 1

August 1982

SOCIAL SECURITY OPERATIONAL STRATEGY

Thank you for your letter of 5 August explaining your continued reservations about the line which has been adopted in the draft Operational Strategy Working Paper.

I am grateful to you for withdrawing your objection to early publication of this paper. I do take full note of your reservations, but feel the right course is to get the document out now so that we can test opinion on these difficult matters. The consultation period will of course allow for further discussion between our two Departments on the possibilities of alternative approaches. Since none of our other colleagues on H Committee has expressed any reservation about publication of the Working Paper, I propose - subject to Willie Whitelaw's agreement - to go ahead with publication on 8 September. My intention is to have a press briefing on that day, with Tony Newton. If you or one of your Ministerial colleagues would like to join us, I should be very pleased.

On the question of control of NUBS, Barney Hayhoe has pointed out that any proposal to change responsibilities for these installations must raise machinery of Government issues, which are the concern of Janet Young and the MPO. He evidently shares my view that it will not be easy to sort this out sensibly until we know where we are going on the strategy itself. The main thrust of our present proposals is towards greater integration of the services run by our two Departments, rather than more division of responsibility between them; and it was in that spirit that I suggested that we should emphasise the linkages by moving to a more formalised joint management of these computer installations. (In working practice, I understand, there is already a much closer degree of collaboration between our officials on this front than we have had before. Your people have been involved at every stage in recent discussions on the replacement of the computers over the next few years, while a joint working group has been set up on the new terminals for your offices, with the aim of giving them a worthwhile interrogation and enquiry service.)



I wonder, therefore, how far MPO will be able to take this in the interim, before we have a clearer idea what the future shape of our joint operational arrangements under the strategy is likely to be. Having said this, however, I have no objection to letting MPO look at the question now, if that is what you wish, and leaving it to them to judge how far it is possible to carry this matter forward at the present stage. I will ask my officials to open this up with MPO.

In conclusion, I feel I ought to say that though, as you point out, we have been in correspondence about the NUBS issue for a long time, it is not the case that there is any firm Rayner recommendation outstanding for a change of management. The Scrutiny Report was not conclusive on this issue, and recommended only that it should be studied further. Nor is there any immediate operational need for a change. The present system is undoubtedly operating very well so far as the present task is concerned, and we have just introduced taxation of unemployment benefit successfully and on time.

I am sending copies of this letter to the other recipients of the previous correspondence.

NORMAN FOWLER

M 8 AUG 1982







Pome Minister:

Caxton House Tothill Street London SW1H 9NAF

Telephone Direct Line 01-213.....6400

Switchboard 01-213 3000

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the continues to press his reservations. As you will see, he wonts a collective of discussion, presumatly

Elephant and Castle
LONDON SE1 6BY

Secretary of State for Social Services

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Rt Hon Norman Fowler MP

Alexander Fleming House

SOCIAL SECURITY OPERATIONAL STRATEGY

In replying to your further letter of 20 July I do not propose to rehearse again all the reservations I have previously expressed about the approach you have adopted to the operational strategy. I am bound to say, however, that your letter has done little to allay my fears.

I understand, of course, that at this stage you are asking for agreement to publish the proposals for consultation rather than for substantive decisions. Almost all the work done so far has been aimed at developing an extremely ambitious programme, which I believe carries equally high risks, while very little consideration has been given to a more modest alternative approach. This is strongly reflected in the consultative document which gives the clear impression that the Government favours the main proposals and intends to pursue them. I am concerned, therefore, that this favoured course is in danger of developing too great a momentum and that we shall find ourselves carried along by it without having given proper consideration to other, and possibly better, alternatives.

It was mainly for this reason that I suggested we should consider the issues collectively at this stage. I certainly am not proposing calling a halt to the work that has been done so far; rather that we should consider extending it to embrace an alternative approach more fully before we get too far down the road towards a commitment which we may later have reason to regret. Nor do I regard the issues as essentially technological: surely discussion should not be ruled out on this ground.



However, having made my own position clear, if no other colleagues share my concerns and wish to press for a meeting, I shall not myself stand in the way of publication any longer.

Turning to the question of control of NUBS, as I said in my letter of 5 July, I do not believe that your suggestion of joint management goes to the heart of the issue. What I am concerned to bring about is coherent and efficient management structure for the benefit service operation as soon as possible rather than waiting for the time, probably in the 1990s. when the operational strategy, as presently conceived, starts to have an impact on it. You will have seen a copy of Barney Hayhoe's letter to me of 27 July in which he suggests that if we cannot reach agreement between us when actual decisions of the strategy are taken, the matter might be handled as a 'machinery of government' question. As you know, this has now been outstanding since the Rayner report was published in March last year. I do not believe that there is any prospect of our being able to agree on this bilaterally either now or later and I think it would be right to acknowledge this and put the matter into the hands of the MPO now so that independent assessment can be made and a decision taken. I hope you will be able to agree that we should proceed on this basis.

I am sending copies of this letter to the recipients of the previous correspondence.

of Norman

H M Treasury, Old Admiralty Building, Whitehall, London SW1A 2AZ Telephone 01-273 5563 The Rt Hon Norman Tebbit MP Secretary of State Department of Employment Caxton House Tothill Street 2) July 1982 LONDON SW1H 9NF SOCIAL SECURITY OPERATIONAL STRATEGY Many thanks to you and Norman Fowler for sending me copies of your letters about this. As I have said in earlier correspondence, which some but not all the recipients of the latest letters have seen, I think that it would now be right to publish a consultative paper. As you have pointed out, there are plenty of problems ahead, but I agree with Norman Fowler that it is sensible to expose this important initiative to early comment before commitments are entered into. I believe these questions should be separated from the future of the NUBS computers. I see force in Norman Fowler's contention that it would be wise to see where we are going on the strategy as a whole before considering whether there is a case for change there. I hope that you and Norman would then be able to reach agreement about it. If not, however, the issue would seem to become one of the machinery of government in which Janet Young and the MPO would have a particular interest. Copies of this letter go to the recipients of yours. BARNEY HAYHOE

NORTHERN IRELAND OFFICE GREAT GEORGE STREET, LONDON SWIP 3AJ



SECRETARY OF STATE FOR NORTHERN IRELAND

> Rt Hon Norman Fowler MP Secretary of State for Social Services Alexander Fleming House Elephant and Castle LONDON SEL 6BY

2 July June 1982

SOCIAL SECURITY OPERATIONAL STRATEGY

will (green Thank you for sending me a copy of your letter of 15 June to Willie Whitelaw.

> My officials in the Northern Ireland Department of Health and Social Services have been in close touch with your officials during the preparation of Working Paper II, and an Inter-Departmental Steering Group has been set up to advise on the development of a complementary strategy in Northern Ireland. The Group has already endorsed the main design features outlined in the Working Paper as being equally applicable in Northern Ireland and we hope to produce draft strategy proposals tailored to our particular needs by about the end of the year.

I am therefore content with your suggested time-table for publication of the latest proposals. and subsequent consultation.

I am copying this letter to the recipients of yours.



Prime Minister (2) & J.V.
Mus 2/7

Caxton House Tothill Street London SW1H 9NAF

Telephone Direct Line 01-213 6400

Switchboard 01-213 3000

Rt Hon Norman Fowler MP Secretary of State for Social Services Alexander Fleming House Elephant and Castle LONDON SE1 6BY

30 June 1982

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SOCIAL SECURITY OPERATIONAL STRATEGY

In your letter of 15 June to Willie Whitelaw you sought the agreement of colleagues to publication of the document setting out your operational strategy proposals. You are now considering the views I put to you on these proposals in my letter of 26 May but I thought that, since many of the points I made are of general rather than strictly Departmental concern, colleagues may be interested in the following brief summary of my reservations. In putting them forward I should emphasise again that I appreciate the need for long term planning in this complex field, and endorse the aims of improving operational efficiency, enhancing services to the public, and modernising the work of the many staff involved.

First, I believe the proposals seem to run the risk of being seriously over-ambitious. They envisage an enormous and complex computer operation bigger than any system now in existence anywhere in the world. The risks inherent in developing such a programme are formidable both in terms of investment and lost opportunities for steady development which a more modest and securely based strategy might provide. There are, in addition, the technical risks to which Kenneth Baker has already drawn attention and which I agree need the most careful consideration.

The management of such a programme is another cause for concern. We have successfully introduced a computerised system for the relatively straightforward task of paying unemployment benefit, but our overall record of introducing and developing computer systems for the payment of benefit is not such as to give confidence. We do not have the experience or expertise needed for the massive operation envisaged by the strategy. And we would need to be sure of a high level of commitment by management and staff, especially given the long period before positive results were in evidence.

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There are two other broad issues to consider. A common system of benefit payment relies on a good deal of centralised information gathering and storage. This raises questions about data protection and confidentiality and we shall need to be sure that our aims in developing this strategy do not conflict with the policy of data protection as set out in the recent White Paper or in any future legislation. I am concerned too about the industrial relations implications. We cannot afford to construct an operation in the sensitive area of benefit payment which is too susceptible to industrial action by increasingly militant civil service trade unions. The more centralised the system the greater the risks will be and we shall need to take this fully into account.

For all these reasons I believe we should pause before publishing proposals, even for consultation, which carry with them the kind of risks I have outlined. There is a strong case for embarking on a more modest strategy path as suggested in Section V of the document and I think colleagues should have the opportunity to discuss this collectively before arrangements for publication are made.

Finally, there is the related issue of control of the NUBS computers about which I wrote to Willie Whitelaw on 2 April in the context of the H Committee discussion of issues outstanding from the Rayner Scrutiny on Payment of Benefits to Unemployed People. You have still not come to a view on this subject and if, as I hope, a meeting is arranged to discuss the Operational Strategy I suggest we take that opportunity to resolve this also.

I am sending copies of this letter to the Prime Minister, members of H Committee, Patrick Jenkin, Lord Cockfield, Sir Derek Rayner and Sir Robert Armstrong.

J Norm



The Rt Hon William Whitelaw CH MC MP Secretary of State for the Home Department 50 Queen Anne's Gate London SWIH 9AT NBPM Social Service 1.

Management and Personnel Office

Whitehall London SW1A ZAZ

Telephone 01-273 4400

GTN 273 4400

28 June 1982

Dean Secretary of State

SOCIAL SECURITY OPERATIONAL STRATEGY

Norman Fowler wrote to you on 15 June seeking H Committee's approval for the publication, on a consultative basis, of the follow-up document to the 1980 Working Party "A Strategy for Social Security Operations".

I am sure that he is right to want to consult as widely as possible on a matter of such basic importance as the framework for social security operations up to the end of this century. I therefore favour publication and I look forward to the review of responses to which he referred in his penultimate paragraph.

Norman Fowler and his department have produced an impressive piece of forward thinking. I am sure it is right to plan systematically and coherently for the future, at the same time as pressing on with more immediate improvements to streamline and simplify benefit administration: that will help realise the financial benefits of new technology fully.

I would suppose that change on the scale envisaged would have radical implications for the staff of the department - a major upheaval for people, working procedures, job content and organisation right across the whole social security field.

In these areas my office would be more than ready to help, and to learn, and I should be grateful if Mr B R Morris in the MPO could be kept closely in touch with developments.

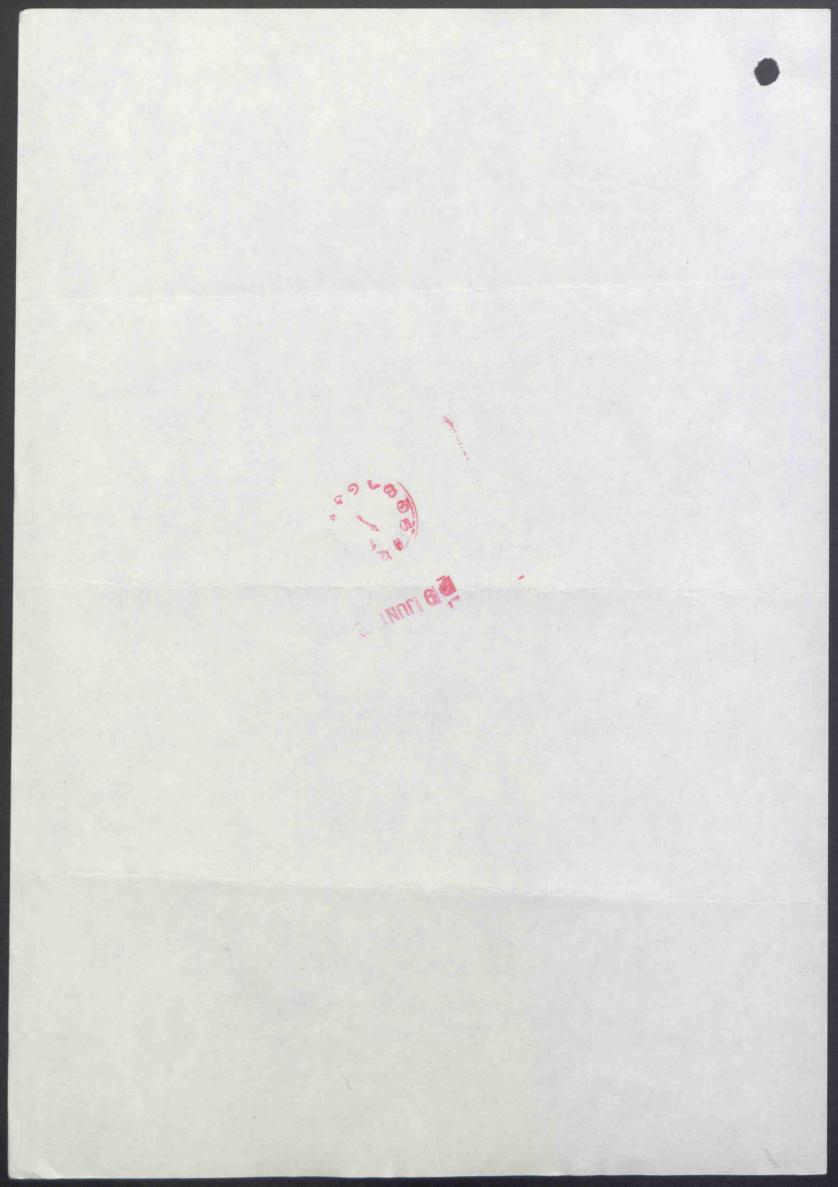
Copies go to the Prime Minister, members of H Committee, Patrick Jenkin, Arthur Cockfield, Derek Rayner and Robert Armstrong.

yours sincerely

Donglers Board (Assistant Private Secretary)

BARONESS YOUNG

(approved by the Lord Pring Leal and signed on her kehalf)



You may be

DEPARTMENT OF HEALTH & SOCIAL SECURITY

inferestion to see

Alexander Fleming House, Elephant & Castle, London SEI 6BY Mr Luces proposal

Telephone 01-407 5522

Ir a consultation document

From the Secretary of State for Social Services on future social security

The Rt Hon William Whitelaw CH MC Secretary of State for the Home Department Home Office

50 Queen Anne's Gate

London SW1

SOCIAL SECURITY OPERATIONAL STRATEGY

operational shritegy. The main elements of the strategy are set out a te summary attached to Mr formers \ June 1982

letter. It looks quite printing whens a greater officer cy and manpaver savings but would require substantial Investment

You may recall that in December 1980 my predecessor published a working paper entitled "A Strategy for Social Security Operations". That paper called for a long-term, strategic approach to the planning of our very large and expensive operational systems; proposed a number of broad objectives (including greater administrative efficiency, improved service to the public and better jobs for our remaining staff); and called for a further consultative paper setting out specific proposals. It was generally well received.

Since then we have conducted a significant exercise in consultation, analysis and design with the aim of preparing specific proposals for a social security operational strategy covering the 1980s and early 1990s. The results are presented in the follow-up document which I enclose, together with a brief guide which presents the bare bones of the strategy, and a one-page summary.

It is clear that the proposed strategy offers major prizes - in terms of staff and financial savings, as well as better service - but requires considerable investment first. I should stress three points:

- the paper provides a general strategic framework within which developments can take place. This seems clearly preferable to a piecemeal approach to the introduction of technology. But it is vital that such a framework should not become a straight-jacket. The paper emphasises that it would be possible to stop off at any one of a number of points over the next few years. It also describes some alternative approaches, which offer less far-reaching advantages, and smaller savings, but require smaller investment. So there is plenty of flexibility, and a wide range of options.

E.R.

- the proposals take account of technological advances, including the trend towards less centralised computer systems; and of the need to ensure confidentiality of personal information.

 We also recognise the important management implications of a substantial enterprise lasting many years.
- although the paper gives broad estimates of costs and savings, we are not seeking approval for any expenditure at this stage. If the strategy approach is adopted, every item of development (the strategy consists of a number of semi-autonomous projects) will have to be justified on its own merits, and approval sought for expenditure individually.

I might perhaps mention that my officials have had constructive discussions with the Prime Minister's Information Technology Advisers, who have welcomed the proposals, and made a few specific suggestions which we have tried to meet in the drafting.

We do not need to reach firm decisions now on any of the specific proposals contained in the paper. My proposal is that it should be published on a consultative basis in the same way as its predecessor, to enable us to discuss our ideas with a wider body of outside knowledge and expertise as well as to give those with a legitimate direct interest, including our staff and Trade Unions, a chance to give their views. I would like to publish in July and allow until the end of the year for public discussion; then we could review the responses, and the progress of more detailed internal planning work, and could reach well-based decisions on the next steps.

I doubt whether we need a formal discussion on this and I would therefore be grateful for your agreement to publication of the enclosed draft on this basis. It would be helpful if I could receive any responses by the end of this month. I am copying this to the Prime Minister, members of H Committee, Patrick Jenkin, Lord Cockfield, Sir Derek Rayner and Sir Robert Armstrong.

all

NORMAN FOWLER

Enc.

SOCIAL SECURITY OPERATIONAL STRATEGY: SUMMARY

Aims

Modernised service with better service for public, cheaper/more efficient administration and better jobs for staff. (Discussed in Working Paper I, published 1980).

Getting there

Key features:

- better use of claimant information;
- common communications network;
- common computer approach across benefits;
- computer terminals for staff;
- 3-tier computer structure supporting staff in ILOs and UBOs.

To be built up by mid-1990s in phased step-by-step approach. Each project subject to joint strategy management but individually costed and justified.

Gains

Public: more efficient service; fewer errors; better advice and information; more "whole person" treatment.

Government: 20-25,000 staff savings; fewer errors; more responsive computer systems.

Staff: shift of focus from paper to people; more job satisfaction.

Costs and savings

Over 20 years, £900 million must be spent on social security computing anyway. Full strategy would cost £700 million extra and would produce extra savings of £1,900 million. Strategy pays for itself by 1993. Financial approval would be sought project by project, starting in 1983.

More limited approaches are possible, but do not provide same level of savings and other benefits. The strategy could be stopped or change direction along the way.

Next steps

Publish Working Paper II for consultation. Review and first implementation decisions early 1983.

MANAGEMENT IN CONFIDENCE

A STRATEGY FOR SOCIAL SECURITY OPERATIONS - WORKING PAPER 2

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I INTRODUCTION

- 1. In December 1980 DHSS published a working paper entitled 'A Strategy for Social Security Operations'* (referred to below as Working Paper I). It pointed out that social security operations were under considerable strain, which was likely to continue, but that advances in computer and telecommunications technology were creating new opportunities for advance during the 1980s. The broad aims which the paper suggested should be followed may be summarised as:
 - to improve operational efficiency, reduce administrative costs and increase the flexibility of the operational system to respond to changing requirements;
 - to improve the quality of service to the public, eg by treating customers in a less compartmentalised benefit-by-benefit manner and more as 'whole persons' with a range of possible social security business; and by improving the provision of information to the public;
 - to modernise and improve the work of social security staff; the paper suggested that it would be important to involve staff as closely as possible as the strategy developed.
- 2. These broad aims were elaborated in a series of more specific desiderata of a future system. The paper recognized that not all the aims could necessarily be achieved in full: the whole person approach, for instance, might in practice prove too expensive and complex if carried to its limit. Trade-offs would be necessary between competing objectives, and a number of important constraints including constraints on finance and manpower were noted. Nevertheless, the paper concluded that a piecemeal approach to improving social security operations was unlikely to meet present and future needs of the system and that an overall strategy was needed into which individual plans and developments could be fitted. The result should be a comprehensive operational system, meeting the broad objectives outlined above, which could be implemented in substance over about the next decade.

^{*}Copies available (price £2) from: DHSS (leaflets), PO Box 21, Stanmore, Middlesex, HA7 IAR

- 3. Although Working Paper I stressed the need for an operational strategy, it did not attempt to specify one. Instead it called for more studies leading up to a further report which should contain proposals with broad costs and savings for an integrated operation including the organisational and human implications; the outline of a phased plan for implementation; and proposals with detailed planning costs for work up to the end of the next review period, including costs and savings for improvements which can be implemented within that timescale. These recommendations were approved and this report attempts to fulfil them. It has seemed best, however, to concentrate on the strategic framework. Detailed proposals about the first projects will be coming forward separately.
- 4. The main activities of the Strategy Study Team, since the preparation of Working Paper I, have been consultation, fact finding/analysis, and design. Additional information on a number of aspects is provided in the Background Papers listed in Appendix 1.

Consultation

- 5. A number of discussions have been held with outside experts and organizations, including:
 - a two-day seminar in January 1981, chaired by Mrs Lynda Chalker MP, the then Parliamentary Under-Secretary (Social Security), at which the participants included individuals from industry, public administration, the computer world, DHSS unions, and the universities; the report is available (Background Paper A);
 - individual meetings with a number of suppliers of computer, telecommunications and peripheral equipment;
 - discussions with organisations concerned with social security claimants' interests. A summary of the main points to emerge is in Background Paper B;
 - discussions with organisations, in both the private and public sectors, who have had experience of introducing large-scale technological change;

contacts with computer experts, at meetings, seminars, etc; discussions with other Government Departments. Many detailed discussions have also been held within DHSS and with the Department of Employment (DE), including consultation with all the main social security policy and operational branches. Discussions have taken place with the DHSS Trade Union Side, who were also represented at the two-day seminar mentioned above. Finally, a number of individual members of staff have contributed their views in response to circulars, in the course of visits by Strategy Study Team members and at training courses and seminars. 7. We are grateful to all those who commented on Working Paper I or contributed to discussions on the strategy. Most endorsed the broad aims, particularly the need to improve advice and information and to provide a more 'whole person' service; and the importance of trade-offs between objectives was recognised. Fact Finding/Analysis A principal activity hs been the analysis of the functions and data for a number of benefits to identify commonalities and duplication of data in the various benefit systems. Allied to this was an examination of the procedures for assessing and paying various benefits, to establish what commonality there was between procedures to achieve similar ends but carried out in different ways in different parts of DHSS and DE. This data and functional analysis work, whose methodology is described in Background Paper C, is not complete but is sufficiently advanced to enable some firm comclusions to be reached about the changes which need to be made, over time, to our existing benefit systems to achieve two particular objectives: improving operational efficiency and moving towards the whole-person concept discussed in Working Paper I. In parallel, the rolling programme of studies of the operational aspects of individual benefits (Working Paper I, paragraph 4.6) has continued. Six studies have been completed covering ten benefits. Total potential savings of about £10 million a year have been identified. 3

- 10. Studies have also been completed on a range of other relevant issues, including recent computer technology; data communications; the views of claimants; and the human and managerial implications of large-scale technological change. Special studies were carried out by Logica Ltd on the location of social security work and by the DHSS Operational Research Service into future scenarios for change, the costs of change and the costs of alternative numbers of computer centres.
- 11. Strategy Sub-Groups have been established to consider the scope for improving advice and information to the public and the needs and role of DHSS Headquarters within the strategy. The Advice and Information Sub Group has presented its first report (Background Paper D).
- 12. Costing the strategy has been a significant exercise in its own right involving projections of future work-loads, sizing of hardware requirements, analysis of staffing activities, assessment of savings potential and the development of a risk analysis model. Substantial assistance was provided by Software Sciences Ltd and Logica Ltd.

Design

13. The Strategy Study Team has also been assisted in the design work by consultants from Software Sciences Ltd. This report presents the main conclusions of that work. In particular, it specifies the features of a proposed strategy for future benefit operations and, in outline, a way open to DHSS and DE for achieving it. It embraces all social security operational matters dealt with by DHSS, together with the administration of unemployment benefit by the DE. Attention has been concentrated on how contributions and claims to benefit are processed and paid, and particularly on the records and communications involved. However, we have also borne in mind the broad functions and requirements of other aspects of social security administration — including advice and information, human factors and management information — and where possible have taken them into account in our conclusions.

II THE FUTURE STRUCTURE

14. When the broad aims outlined in Working Paper I are closely examined in the light of the technology now available and of experience in applying it elsewhere they imply a number of features which we believe should form part of any future operational system. This section describes the most important of them. It will be vital throughout to adopt a 'modular approach' — ie it should be possible for different parts of the structure (data, communications, machines, application software etc) to be amended or adapted separately without repercussions on each other; and for each in turn to be broken down into independent components which can be changed with minimum disturbance of the others. In addition it will be essential to adopt wherever possible nationally and internationally accepted technical standards, to ensure compatibility throughout the social security system and to minimize the difficulty of adapting to meet future needs.

Data

15. The DHSS and DE need to maintain a very large number of records. Many are in computer systems but more are contained in manually operated index systems and in conventional files in local offices. The amount of data held and the number of records maintained is much higher than, theoretically, it need be. The DHSS holds some information for almost everyone in the United Kingdom. Records are kept of children and their parents or guardians for child benefit; details of national insurance contributions are held for the working population; and the elderly appear in the system by way of retirement pensions records. Further records are kept for the administration of each of the other benefits. As a result, more than one record often exists for an individual and the personal data - name, address and date of birth - are frequently replicated. These personal data items are held on average more than five times (excluding dormant records which would considerably increase this figure) for the total population of Great Britain. Furthermore, the information about a person in these various records may be inconsistent as events are recorded in different sytems for different purposes at different times. This situation has arisen largely because the benefit systems were designed to operate independently, each with their own files.

- 16. Procedures have been developed for notifications from one system to another when there is a particular need. For example, details of an initial payment of supplementary benefit may have to be notified to the unemployment benefit system or to the sickness benefit system in order to avoid duplicate payments for the same period. (Some 600,000 notifications were made in 1979). On the other hand, many events which should desirably be notified from one system to others are not. Reliance is often placed on what a claimant chooses to reveal and on what he believes is relevant. For instance, a variation of centrally administered child benefit payment might need a revision of any associated supplementary benefit; but the local office would not be aware of the change immediately unless the claimant himself advised. And there is occassionally acute embarrassment when a letter is sent to a beneficiary, whose death is already known in a different part of DHSS.

 17. Thus existing methods of arranging for information received at one point
- 17. Thus existing methods of arranging for information received at one point in the system to be transmitted to other points where it would be useful are unsatisfactory because:
 - (a) a notification is not usually made at once to other systems; activity elsewhere may therefore be inconsistent and in error;
 - (b) even when some evidence exists to prompt a notification to another record, it may not always be recognised and acted upon because of the complexity of the clerical systems and procedures;
 - (c) when an initiative is taken to pass on a particular item, subsequent changes may not be similarly conveyed, thereby causing discrepancies and confusion;
 - (d) a notification, even when made, can be subject to mistakes in transcription and loss or misdirection in transit;
 - (e) in many instances a response is needed from another system before action can be completed; this introduces delays, double-handling and other inefficiencies.

- 18. Further problems are caused by the variations in the way the same detail is recorded in different systems. For instance, the identifiers used in records typically the name and date of birth are stored in different ways and cannot always be matched with certainty. If the various records for individuals are in future to be linked and readily updated from a single notification, it is essential that data formats should be standardised. The standards would need to be applied throughout DHSS and DE and this leads to the conclusion that it is a task that should be controlled centrally.
- 19. Even if the definition of data is controlled centrally, there are essentially two ways of overcoming the problem of inconsistency. The first would be to continue to hold records in separate files, benefit by beneit, but to introduce an additional notification mechanism to keep them in step by keeping track of the various versions of the data and updating them. introduce this together with the essential standardisation of records would be a formidable task, but it would have the considerable advantage of avoiding upheaval of the existing benefit-related organisational structure. However, it would not address the problem of data duplication, which we see as the main cause of poor data management; it would do nothing to ease the problem of inflexibility; it would contribute little towards the better utilisation of ADP staff; and it would inhibit organisational changes by perpetuating the bias towards having large blocks of work compartmentalised benefit by benefit. The technical problems would include the complexity of the notification mechanism itself and of arrangements to maintain and control it - software is not yet available to perform these tasks; temporary inconsistencies in data increasingly serious as on-line interrogation spreads; and the inflexibility of such a system to meet changing requirements.
- 20. The present data structure, therefore, is not a suitable platform for development. To solve the existing problems and provide greater flexibility for future changes there is little choice but to restructure and rationalise the data. The aims should be to minimise the number of times a particular data item is stored so that we reduce the complexity of maintaining it and increase the availability of relevant information to those who need to use it.

21. These aims could be achieved by different parts of the DHSS and DE sharing the same data instead of each attempting to create amd maintain their own separate records. This concept of collecting data together and then sharing it between different computerised functions is known as the database approach. It forms one of our central proposals. It should be stressed that what is envisaged is a logically unified system, not one held in a single physical location. 22. The benefits of the database approach can be summarised as follows: (a) future options are kept open longer: with a harmonised data system, for example, it would be far easier to make changes in later years - eg in response to legislative change, or towards the wholeperson approach - even if this was not needed immediately. Unharmonised data closes off such possibilities; (b) the data is more compact and accurate, with less duplication. This should result in lower storage costs and fewer errors; (c) the time spent by analysts and programmers in manipulating data should be reduced, which should in turn lead to a reduction in application development timescales and better utilisation of one of our most valuable resources; (d) users can be given direct access to information without using specialist staff; (e) greater flexibility, because the physical layout and the 'logical' organization of the data, and the application programs can be largely independent of each other so that any of them can - to a great extent - be altered without altering the others. 23. In implementing the database approach it will be important to learn from outside experience. The main issues are discussed in Background Paper E. We propose that introduction of the database approach should be gradual, with limited areas of work affected at first so that the techniques can be proved

with minimum risk. This will limit the size of the database in the early years.

design constraints. Relationships between data items will have to be restricted

But implementation even by this route will involve careful consideration of

to allow efficient performance with database usage but still meet as many

requirements as possible for new or changed applications. There may also be parts of the social security information base which are so specialised and

voluminous - aspects of war pensions might be an example - that it would make

8

sense to leave them outside the main database. Implementation should build on continued detailed analysis of social security data and functions, on the lines described in Background Paper C. To avoid excessive size, the database would be divided into geographical segments, linked through a Departmental Central Index (DCI). Strong central data management and new training for ADP staff will be essential. In such ways the unacceptable risks of sudden change and an over-large, over-centralised database can be avoided. To avoid unnecessary complexity, the normal 'key' to provide access to an individual record would be the National Insurance number (which can in turn be obtained from the index if an individual cannot quote it). Other reference numbers for individual benefits would be phased out over a number of years.

24. We conclude that the co-ordination and central management of data, the sharing of data between different applications and the database approach is the right path to follow for DHSS and DE. Implementation could be greatly assisted by new analysis and design techniques and by standard software which is likely to improve in range and quality over the next few years. Within the DHSS there is very little practical experience of the use of database techniques. Priority tasks for the proposed central strategy team, in conjunction with the Central Computing and Telecommunications Agency (CCTA) and others, will therefore be to consider individual data management systems, to identify training requirements and to initiate work designed to prove the techniques in the social security environment.

Communications

- 25. The DHSS and DE use a number of different communications systems and technologies including the post, telephone, telex (for unemployment benefit) and British Telecom's 'Midnight Line' (Datalink). DHSS has also been exploring the use of dedicated leased telephone lines. Each approach is technically incompatible with the others.
- 26. Because of the increasing need to provide a better and faster service at lower cost, modern telecommunications will become much more important. To tackle the communications problem by putting in special links, for example between ILOs and UBOs or between ILOs and the UB processing

centres, without an overall strategic plan, would result in a further proliferation of links and equipment. This would not only increase the problems of technical incompatibility and cost would create difficulties for local office staff, who would be called upon to operate different systems at different terminals. At present the incompatibility between communications systems is masked by the extensive clerical operations surrounding them, but with more variants the problem would be difficult to contain.

27. If the aims of the strategy are to be achieved, a fast, all-purpose, telecommunications network is necessary to link local offices, processing centres and payment centres and to provide appropriate connections to regional offices and Headquarters. The network should eventually encompass all aspects of telecommunications, not just computer data transmission, and thus make optimal use of expensive resources. This is made feasible by the advent of digital technology which enables voice and data traffic to be handled by the same equipment.*

28. The future network:

- (a) Must be realistically achievable with commercially available and proven technology that conforms to appropriate national and international standards;
- (b) must support the probable traffic load with low error rates (to minimise retransmissions); even where the traffic load is low, data rates must be high enough to ensure that staff receive swift responses from the system;
- (c) must be dependable and have good back-up facilities;

^{*}The existing telephone network is predominantly 'analogue', designed to handle voice traffic using somewhat dated technology. Computer data can be sent on this network only by making it look like voice traffic. British Telecom are in the process of converting the telephone system to use modern 'digital' techniques, where voice traffic is encoded as a series of 'blips', a format which is also ideal for computer data and enables much faster and more reliable transmission. A significant digital capability will be available by 1990, but the process will not be completed until after the turn of the century.

- (d) should be capable of progressive implementation, building up over the strategy implementation period.
- 29. The range of telecommunications services on which the DHSS and DE could draw is changing rapidly; the liberalisation of the British Telecom monopoly seems likely to accelerate the pace of change. Recently introduced services based on the public network include the Prestel viewdata system and the Packet Switched Services (PSS or 'Switchstream') for data transmission. A range of services ('X-stream') becoming available through the growing British Telecom digital network, and the first privately run service (Project Mercury) will facilitate fast, high quality telecommunications. The CCTA is also investigating the possibility of a Government Telecommunications Netework to serve the needs of all Departments. The underlying technology is also advancing fast, with such techniques as microwave, fibre-optics, satellites and lasers becoming avilable. However, we regard it as unrealistic for the DHSS itself to attempt to introduce these devices: their value will come as and when they are adopted by the carrier(s) on whom we rely.
- 30. Prestel would not in practice meet our needs. On present tariffs (November 1981), PSS appears more costly than a network of analogue leased circuits, given our heavy and lengthy traffic loads. Nevertheless, it has attractive features, particularly the capacity for rapid and reliable communications without the need to set up a major network. Even at current costs, therefore, it has a potential role as an interim or supplementary method.* Unless the tariff structure were to change, however, the main network at present could be most economically constructed using analogue telephone circuits leased from British Telecom. Nevertheless, as the future trend is towards greater use of digital facilities, as they become available, any future network must be designed with the standards and protocols appropriate to these superior services.

^{*}For example, PSS might be used as a temporary measure, pending completion of the leased network; even when the network is established, PSS might be used for major trunk circuits or other jobs where its technical advantages justified any additional cost.

- 31. The optimal network may embrace more than one type of service. A high-level network linking computer processing centres, where traffic is heavier and flexibility more important, would make better use of digital transmission or PSS than a relatively lightly loaded intermediate—level network linking computer centres and local offices. Within local offices and within computer centres low—level local area networks will be appropriate, using distinct but compatible techniques and interfacing with electronic office technology. Although the detail of the network will depend on the strategic approach adopted, much of the network infrastructure will be independent of it.
- 32. A common all-purpose network will only be achieved in practice if telecommunications are treated, like data, as a corporate resource, subject to central Departmental specifications and strong management. The immediate issue for DHSS and DE if a uniform, integrated communications network is to be established is therefore primarily one of management rather than technology.

Functions

- 33. An innovation of the strategy study has been to consider the things the DHSS does ('functions') in a cross-benefit manner rather than in the more normal benefit-by-benefit way. The advantage of this approach is that it produces a comprehensive and co-ordinated analysis of the work of the 'business' as a whole, rather than the partial picture which concentration on individual aspects inevitably produces. In DHSS, for example, it is conventional to consider individual benefits, or groups of related benefits, in isolation from others: the result is to highlight the idiosyncrasies of particular systems and to reinforce the assumption that separate operational systems must be constructed for separate benefits.
- 34. It should be stressed that the functional analysis concentrates on what has to be done in the abstract (the 'logical' view) and does not describe how these jobs are actually carried out (the 'physical' view). The model produced is therefore highly theoretical. In the context of the strategy, however, this is an advantage since it provides a relatively stable basis for considering the full range of possible ways in which jobs might be carried out, now or in the future. However the function is physically implemented

- for example, clerically, by batch computer, by on-line computer etc and wherever it is carried out, the logical view remains constant. The methodology is described further in Background Paper C.

 35. The analysis so far has concentrated on eight benefits, including the five largest: preliminary studies have also been made of other aspects including
 - 35. The analysis so far has concentrated on eight benefits, including the five largest; preliminary studies have also been made of other aspects, including the system for recording contributions. In volume terms, some eighty per cent of the work associated with benefit processing has been analysed. The work will need to be continued to cover the other benefit systems and extended to other areas of social security administration which fall outside benefit processing eg audit and management information.
 - 36. The analysis has already confirmed a high degree of commonality between different benefits in terms of functions. Processing any benefit, for example, involves three main functions: collate evidence, determine entitlement, and implement decisions. These in turn can be broken down into lower-level funtions including such items as checking existing evidence, obtaining new evidence, deciding whether broad conditions are met, deciding appropriate reviews, notifying and paying. At the lowest levels functions appear that are special to a single benefit, but it remains possible to view all functions for all benefits within a common framework.

37. This approach can help:

- (a) ensure that all relevant aspects of the 'business' are considered and in conjunction with the data analysis described above to ensure that the planned data base will support all functions; it thus provides a central control and support to the data analysis;
- (b) design a system which will be structured in a more whole-person, rather than benefit-by-benefit manner;
- (c) avoid duplication of effort.
- 38. This cross-benefit approach should be carried forward from the current analysis phase into the detailed design of all new systems. Clearly the detailed re-design and programming of the full range of social security business is a massive job which will have to be broken down into manageable parts and carried out over many years. We propose that the primary division should be by function rather than by benefit. One development team, for example, might

prepare a 'payments' package, which all benefits could use; another might prepare an 'assessment' package, again (in principle) covering all benefits. There would not be a supplementary benefit system, a UB system, an IVB system and so on. It will be necessary to define carefully and in detail these functional 'segments', as we have termed them, and this will be a priority task for the proposed central strategy team, in consultation with others, in 1982 (see Section III). Each segment would, of course, utilize the common database and common communications network as necessary. 39. Although each segment should be capable of handling any benefit (unless any benefits are deliberately excluded), it may not be necessary actually to process all benefits together, nor will it be feasible in the early years. It is essential, however, even where a segment applies - at least initially - to one or to a few benefits, that it is designed in a manner which would allow it to be applied with no fundamental adaption to other benefits later. 40. The DHSS is not unique in using this functional approach. Indeed, within Government the CCTA is now encouraging departments to use the techniques involved wherever new or revised computer systems are being considered. Many organisations have decided to use the techniques within the boundaries of an existing sub-system. Where the DHSS is going further is in using the approach to analyse the business as a whole and, in effect, re-define what the subsystems, or segments, should be. 41. One functional area already undergoing technical and procedural changes is that of benefit payment. The administrative cost of social security payments represents about a third of total administration costs. The frequency of payment of some benefits is changing and certain additional beneficiaries will be given the option of having their benefits paid directly into a bank account by automatic credit transfer (ACT). 42. In view of the substantial cost of the payment function and the recently available technical innovations including ACT and automated cash-point machines, we considered the possibilities for major changes in payment methods. The DHSS is not the sole - or even the main - organisation involved in this area, since the payments themselves are made through the Post Office or (under ACT) the banks, building societies etc. Major change therefore depends critically on what is acceptable and practicable for them as well as for DHSS. Our main conclusions are that: 14

- (a) payments should be handled as a separate functional segment, with a common system covering all benefits;
 (b) where more than one benefit is in payment, they should be made together unless there is good reason not to;
 (c) order books, giros and ACT are likely to remain the main payment methods during the 1980's; but eventually depending largely on the speed of Post Office automation it may be possible to offer a cash-point type payment option in post offices*;
 (d) so far as possible, beneficiaries should be offered a choice of payment methods; and
 - (e) in view of the economies of scale which can be achieved in the production of instruments of payment and of the desirability for security purposes of separating payments from assessment, payments should actually be issued from a relatively small number of computer centres, even if the system as a whole is generally decentralised.
- 43. A number of other functional changes, with which the strategy would have to cope, are in prospect. Housing benefit is likely to create new demands, including better communications between DHSS local offices and local authority housing departments. In the longer term there may be changes in the relationship between tax and social security. Already the volume of transactions between the two systems is immense: around 37 million tax and NI contribution records are processed by both Departments; the taxation of certain social security benefits and assistance in establishing individuals' correct NI numbers add to the volume. The time-scales for the computerisation of PAYE project (expected to take most of the 1980s) and the social security operational strategy are similar. It is therefore highly desirable to ensure that data used across the two Departments are in compatible formats from the start of both developments.
- 44. Compatibility would be even more important if there were moves towards tax credits. We assume that the main aim of such a system would be to abolish income tax allowances (which only benefit those in tax) and to replace them with 'credits' payable to those meeting specified criteria. Social security

^{*}This and other possibilities should be pursued with the Post Office. The critical issue will be the extent to which the Post Office can provide such facilities at the 23,000 Crown and Sub-Post Offices which our customers use to draw their benefit. Discussions are taking place about a proposed Post Office cash dispenser experiment, in co-operation with DHSS.

benefits (with the possible exceptions of Child Benefit and FIS) would not be directly affected, but all or most of them would be paid with tax deducted or credit added, according to the individual's eligibility for credits. 45. Such a system would require three main operational changes for DHSS: (a) additional data items - eligibility for credits - would be held on every individual: the database approach would enable this to be done with comparatively little difficulty; (b) a new function - deduct tax/add credit - would be added to most or all benefit calculations: the functional approach should enable this to be done as a standard cross-benefit procedure; (c) there would be a substantial increase in the volume of exchanges of information between DHSS and IR: this reinforces the need for a central index to enable records to be located, and for DHSS (like IR) to use the NI number as the main key to records. 46. Moves towards a tax credits system are by no means certain, not least in view of the high potential cost. Nevertheless, it seems clear that adoption of strategy principles would reduce the practical difficulties. It thus provides one illustration of the greater flexibility which the strategy would provide. Computer Structure 47. The question of the location of work was discussed in Working Paper I, which concluded that there was a clear need for a local interface with the public and that benefit work should be controlled from local offices as far as possible; but that there were very few social security functions for which a particular location was essential. A subsequent study by Logica Ltd highlighted the high cost of transferring work from one location to another and concluded that greater savings could generally be achieved by automating tasks 'in situ' than by relocating and automating them. We have therefore assumed that clerical work should generally remain where it is. 48. Choosing the right computer structure is made more difficult by the rapid pace of technological change. As Working Paper I noted, this will continue apace throughout the life of the strategy. It could well change not only what is technically feasible but also what is cost-effective. Smooth 16

social seurity operations are so essential that prime reliance must be placed on proven technology rather than the latest innovative ideas; but the proven technology of the late 1980s could look very different from that of today. The primary requirement, therefore, is for a computing framework which meets existing needs in a safe and cost-effective manner but which also provides a basis for technical flexibility in the light of future changes both in technology and in the relative costs and performance of differing solutions. 49. The physical location of the computers would make little difference to customers and not much to the staff who served them. Information would be 'input' to the computer through terminals and the 'output' would be received in the same way or printed out and sent through the post. It will be essential to provide a standard and helpful 'interface' between the computer system and the staff who use it. We propose that this should be achieved through: the general use of video terminals as the means of access to the computer system: of the terminals likely to be available over the next decade these offer the greatest versatility and are now cheaper than the older electro-mechanical devices; inter-active working through the terminal as the normal method of work of local office staff: only this will provide the immediate facilities which they require to progress work efficiently and eliminate double-handling; assistance to staff in coping with complicated rules through the use of a supportive dialogue design and a system of 'prompts';

- standardisation of hardware and software facilities eg types of terminal, dialogue conventions, screen lay-outs etc - across social security applications.
- 50. The video terminal will become an essential working tool in the future as ubiquitous as the calculator or telephone today. Many of the advantages of using terminals will be lost if use is restricted to a small group of staff interposed between the clerk handling the claim and the computer sytem. It is important to spread terminals as widely as possible as soon as this can be achieved. In the longer term a benefit clerk might need to make use of a terminal for 30-40% of the time in the peak hour. On this basis sharing would be difficult.* There will therefore be a requirement for many thousands of terminals (on a number of broad assumptions we have put the figure at perhaps 20,000 by the end of this decade, building up eventually to over 30,000).+

^{*}In the computerisation of PAYE project Inland Revenue are planning on the basis of one terminal per clerk. +For further details, see Background Paper F.

- 51. The main computer resources could be located at the existing central offices (where they are currently concentrated), at existing local offices or at an intermediate ('area') level,* or at a combination of these. We have assumed that no more than three tiers should be considered for the main computer structure. This gives 7 theoretical permutations (eg all processing at the centre, or a mix of local and area processing); but most are ruled by practical considerations.
- 52. Some activities must be done from the centre. Because our customers (the entire population) move from time to time, there must be a central index to allow earlier records to be located when people appear in a new locality. The collection and direction to individual accounts of NI contributions must also be a central function, since they are generally paid by employers whose addresses may bear no relation to those of their employees. There are, in addition, specialised functions (including work on a number of small benefits at North Fylde Central Office and the work of the Overseas Branch at Newcastle) which it may always be sensible to concentrate in a few locations and for which some computer support can be provided.
- 53. At the other end of the spectrum there is a clear need for some ADP facilities in DHSS and DE local offices. The question is not whether to place computer power there but how much. The trend in the computer industry is clearly towards more distribution. As a minimum, local office staff will need terminals with communication links to the main computer processors and data, wherever they may be. Such terminals (and their controllers) are, increasingly, small computers themselves which can utilize supporting hardware and software. It will make financial and technical sense to minimise the communications traffic by holding some data and programs locally - at least screen formats, data input validation programs and temporary collections of data prior to transmission. It could make sense to retain and update additional computer records in local offices - eg local indexes, basic personal identification, benefit history data - and commonly used application programs relying primarily on locally held data. In addition there is a growing long-term role for information technology generally within local offices - including microcomputers for specialist tasks (eg work on maintenance payments to beneficiaries from legally liable relatives); word processors (eg to issue better quality and more personal letters to

^{*}We refer to 'areas' to differentiate from 'regions' and 'groups' both of which have specific size and management connotations; there is no necessity for the distribution of ADP resources to coincide with these existing units.

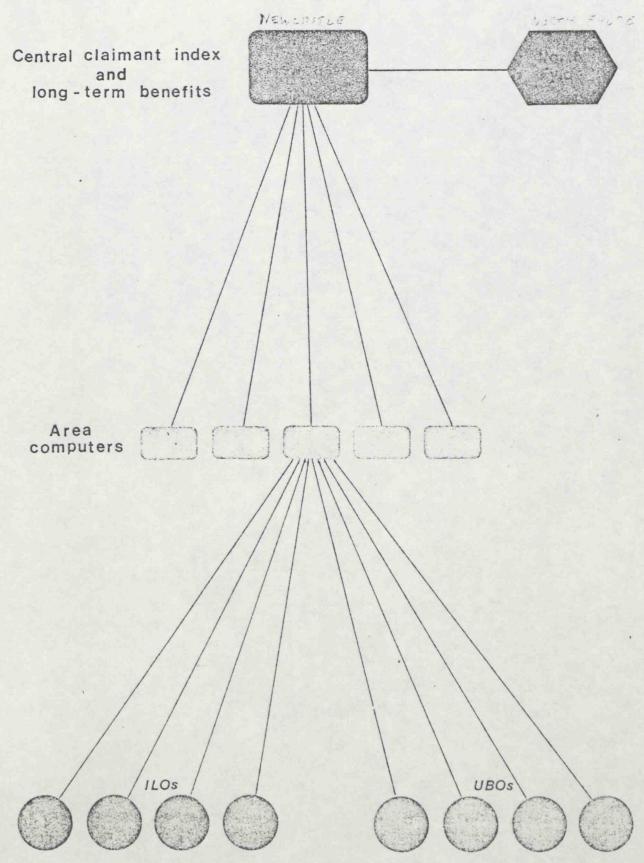
members of the public); intelligent copiers (eg to transmit documents between local offices or between local and regional offices) and - to link all these together - 'local area networks' enabling piece of equipment to be connected or disconnected quickly and easily to enable data to be transmitted between them.

- 54. Some ADP resources must therefore be provided at both local and central offices. It would in principle be possible to have just two tiers. However, we recommend that an additional intermediate tier, which we have called area computing centres, should be introduced. The reason is that a two-tier structure would require very large-scale computing facilities at either central or local level or both. The establishment of intermediate area centres would provide a more balanced structure.
- 55. The main draw-back of even greater concentration of computer resources at one or two central offices would be sheer scale of the enterprise: the Newcastle Central Office is already one of the largest computer centres in Europe and a highly centralised approach in the longer term would mean either a much bigger installation there or the creation of one or two more such installations. The technical size and complexity of a heavily centralised and integrated system (ie not just an assembly of separate systems on one site), supporting local offices for their full range of business, would be formidable with extremely heavy communications and transaction loads and highly complex software. A centrally-held database, for example, could be of the order of 60,000 megabytes - the equivalent of about 115,000 copies of 'The Times'. There could also be additional management problems. Despite back-up arrangements, the vulnerability of the entire social security system to a major failure there would be a serious problem. The concentration of expertise could create staffing difficulties. It would be difficult to overcome a sense of remoteness between the centre and the local offices it served.
- 56. Heavy reliance on local office computing would create different problems. One is the technical capacity of the small machines which would be needed. Although this is a rapidly developing field, we are not yet at the stage when micro-computers can be said to have proven their ability to handle large-scale administrative work of the kind needed for social security operations. Hitherto, they have mainly been used for relatively limited and self-contained functions. A central aim of the strategy, however, is to provide a more

integrated operational system enabling an individual member of staff to utilise a wide range of shared data and programs. Something more sophisticated than the conventional free-standing micro-computer would therefore be necessary. Other areas where, as yet, micro-computers have been weaker than large machines have included the necessary sophisticated supporting software (eg for handling data and communications and for recovery from disturbance or breakdown) and in support and maintenance provison. Dispersal of main computing resources to over one thousand DHSS and DE local offices would create significant logistical problems such as distributing and updating programs identifying and correcting hardware and software faults and organising specialist support staff. In addition, the capital and running costs would be higher at present than in a less radically decentralised approach.

- 57. The creation of area centres, in addition to computing resources at both local and central office level, would provide a structure within which the worst problems of more extreme solutions could be minimised. If main records were held at area level, for example, the chances of locating a particular one quickly would be greater than if they were spread amongst every local office; while the database would be of more realistic size than if concentrated at one or two centres. Area centres would provide a more robust communications network; and a natural location for the payments function (see paragraph 42 above) and for contingency facilities and technical support for local offices. Above all, a 3-tier structure would provide a framework within which maximum flexibility would be provided to meet changing demands and changing circumstances.
- 58. The main draw-back would be the work involved in setting area centres up, although this can be minimised by opting for a relatively small number and by concentrating some together at existing centres and readily available sites. Preliminary analysis of the relative costs of a higher or lower number of centres suggests that the variation is not marked within the range 2-20. There are no overwhelming or managerial reasons for a particular number. Nor need each centre be physically located on a separate site. The more centres there are, the longer it is likely to take to establish a full national network. On the other hand, smaller centres and more of them would permit more manageable units. Further study will be needed in the next stage of the strategy to

PROPOSED COMPUTER STRUCTURE



VDUs/micros in local offices

NOTE: all telecommunications use fast telephone/digital links

establish the optimum number but for illustrative and costing purposes we have assumed that initially there should be seven centres to enable quicker implementation; this would not preclude the possibility of dividing the work between a larger number later. Final decisions about the extent of the centres' ultimate activity cannot be reached until they have been established and the options for further developments, particularly for more processing locally, have been assessed in the light of the prevailing circumstances.

Nevertheless, to provide flexibility and to enable later moves towards a more integrated operational system, the centres should be planned from the outset for a gradually expanding role during the 1980s and 1990s. The broad pattern is illustrated in Figure 1, and the telecommunications implications are assessed in Background Paper H.

59. If the objective of establishing a coherent, efficient and economic organisation is accepted we believe it is inescapable that development should take the direction indicated in this section. Indeed, failing to reorganize social security information, communications and operations along these lines will become increasingly dangerous as the other organizations which interact with ours organize themselves to take advantage of the technology that is available, while our customers become increasingly dissatified with a standard of service that will fall further and further behind current expectations. The area of choice, and of risk, surrounds the issues dealt with in the next two sections — the specific changes to be aimed at, the 'migration path' along which they are planned to take effect, the time scale, the investment required and the returns to be expected.

III A WAY FORWARD

60. This section describes 14 projects through which the strategy objectives can be achieved. The projects are briefly outlined in Appendix 2. It also suggests a sequence and timing for them, summarised in Figure 2. The next section provides estimates of costs and savings calculated on this basis. The proposals, including the selection of the projects, have involved a series of choices, and therefore the rejection of a series of alternatives, as the design work has proceded during the past year. It has not been possible with the resources available to develop alternative courses in equal detail, nor consequently to cost them with comparable accuracy. Section V, however, discusses possible courses which involve less change, less investment and correspondily reduced savings.

61. In framing the proposals in this section we have kept a careful eye on the physical resources - staff, premises and equipment - which are available and on the constraints that they impose, including such factors as the dates by which existing computer equipment must be replaced (shown in Table 1; further information about resources and constraints is provided in Background Paper G). We have assumed that it will generally take 3 years from the development of a major new project to full national implementation and that no more than two major projects should be in process of implementation simultaneously. Management and Control

- 62. Responsibility for social security operations is at present divided between a number of separate commands, united only at the top. This applies even within ADP. Implementing the strategy will involve not only new technical methods but also a more fundamental shift in the perspective of operational planners and managers. The proposed changes can only be achieved with stronger co-ordination and control.
- 63. Building on the functional approach described earlier, particular installations and projects should be charged with designing individual segments of the planned sytem, conforming to uniform standards and protocols. They would thus become development centres - no longer solely concerned with providing a service to their immediate users. It will be critically important to find the most effective way of controlling and implementing the strategy proposals. We understand that it is proposed to take advice from management consultants outside the Department on this. It seems clear, however, that there will need to be a post at a very senior level charged solely with the direction and oversight of the implementation of the strategy; and it is also clear that to ensure co-ordination across Department boundaries, the Department of Employment should be invited to participate in the management of the strategy at a senior level.
- 64. Whatever the management structure for implementation there would need to be a central team, combining the functions of the strategy team and the present social security computer branch. This group's main roles would be:

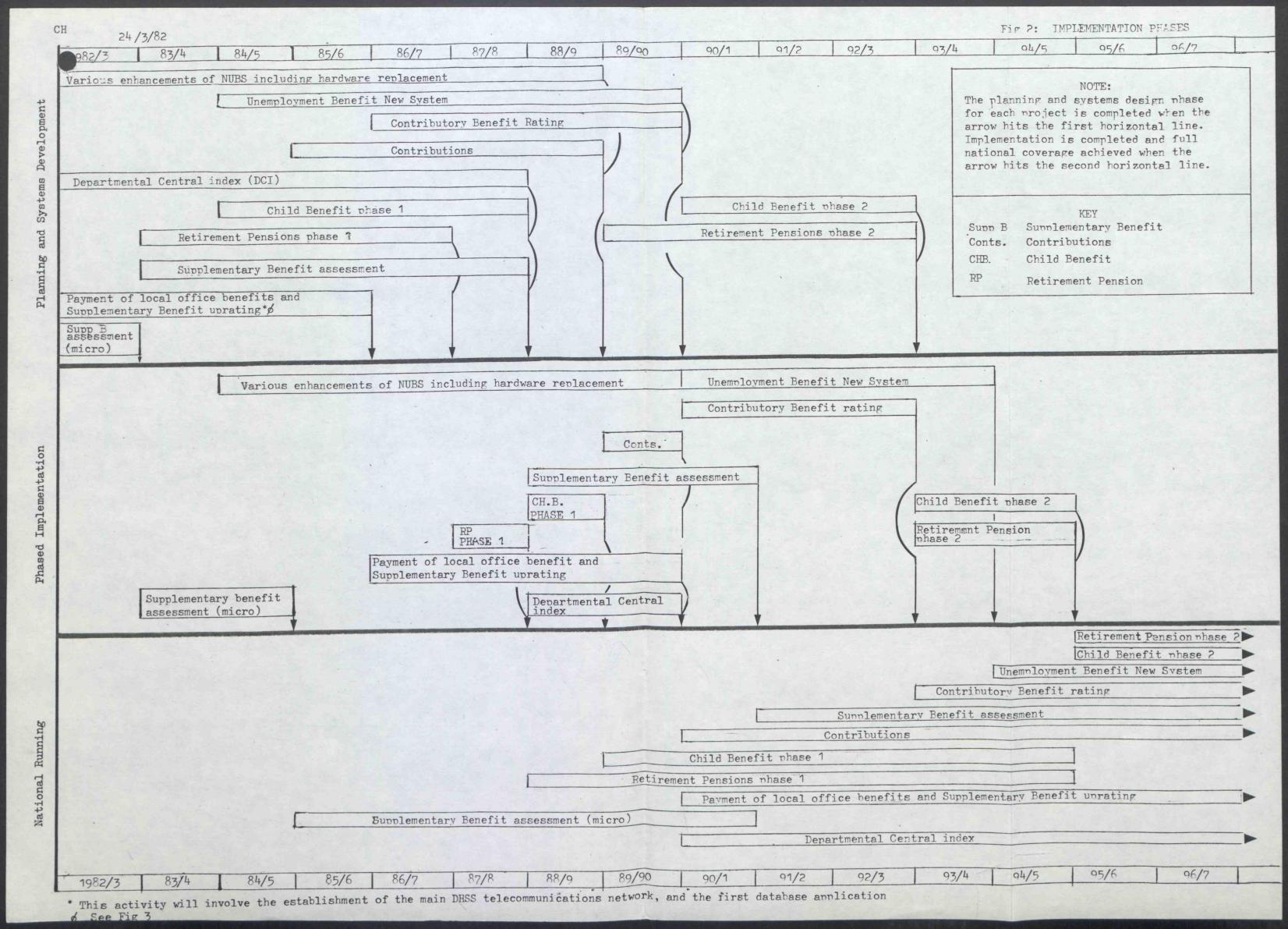


TABLE 1

SOCIAL SECURITY COMPUTERS AND THEIR FUNCTIONS

CENTRE	MACHINE	MACHINE	FUNCTION	DATE ACCEPTED	DATE TO BE REPLACED
	1	GRAFIX I	Computer input of microfilm for contributions recording	3/76	1986
	2	ICL 2980	Payment of Pensions Staff pay and records	9/77	1987
TVI	3	ICL 2980	Payment of Child Benefit. Statistics	4/78	1988
S CENTRAL	4	Twin De la Roux Cros- field OCRs	Optical character readers for girocheque reconciliation	2/79	1989
NEWCASTLE OFFICE	5	2 X SP600	Night line enquiry services to LOs (Datalink)	5/79	1989
NE	6 7	ICL 2980)	Social security contributions recording and enquiry service for local offices	3/79 12/79	1989 1989
	8 9	ICL 2982)	Computerised index, girocheque reconciliation and back-up to machines 6 and 7	1981 1981	1991 1991
			READING		
	10 11 12	ICL 1904S) ICL 1904S) ICL 1904S)	Rating, computation and payment of unemployment and/or related Supplementary Benefits	8/73 8/73 9/76	7/83 8/86 8/86
OYMENT	13	ICL 2956	Development machine for machines 17 and 18	4/81	1991
ENPL			LIVINGSTON		
NATIONAL UNEMPLOYMENT BENEFIT SERVICE	14 15 16	ICL 1904S) ICL 1904S) ICL 1904S)	Rating, computation and payment of unemployment and/or related Supplementary Benefits	10/76 10/76 3/78	1986 1986 1987
NAT	17 18	ICL 2966)	Extra machines for the increased UB workload	1982 1982	1992 1992
N FYLDE CENTRAL OFFICE	19 20	ICL 1904S ICL 1904S	Maintaining files and processing of claims to AA, WP, FIS, MOBA HNCIP/NCIP and IDB	7/74 9/79	10/83 4/83

- to support the head of the strategy programme in overseeing its development generally and rolling it forward. This means inter alia watching the development of technology and of social security, social policy etc and responding with adjustments to the strategy; to take part in the design of different elements of the strategy, making sure that individual projects were in line with common standards, consistent with departmental plans; to this end monitoring progress through established reporting and reviewing procedures; procurement of equipment and associated matters; defining standards for the storage and use of data, communications networks and the interface between the system and the operational staff. It will be necessary to involve people with skills and interests going well beyond ADP in the implementation process. Direct Department of Employment
 - (a) determine the priority functional areas to be tackled and allocate

responsibility to particular development centres for implementing them;

(b) implement the decision to adopt the PROMPT* methodology for monitoring and controlling progress on computer projects throughout DHSS;

involvement will be essential. A number of early tasks can be seen:

- (c) assess the training needs in new ADP techniques and make arrangements for them to be met (see paragraph 66 blow);
- (d) establish a data administration, responsible for data standards and for the form and extent of use of database techniques. (Specific tasks for 1982/83 will include an evaluation of available database packages and their associated application development aids; investigation of aids to programmer productivity and how they might be applied in DHSS; development of a methodology for converting benefit rules into computer code; and continuation of data and functional analysis);
- (e) specify details of the communications network, with particular reference to communications between local offices and area centres;
- (f) specify system interface standards, covering dialogue design, terminal features and environmental factors;
- (g) develop and initiate micro-computer projects (see paragraphs 77-82 below);

^{*}Project Resource Organisation Management Planning Techniques.

(h) assess the potential contribution of new 'electronic office' products, especially local networks, to the part local offices will play in the strategy. These tasks will not be pursued by the central team in isolation: there must be the closest co-operation between them and the existing ADP teams for all strategy activities. 66. A vital question is whether there are sufficient ADP staff with the requisite expertise. DHSS has a considerable number of capable and experienced ADP staff, but the design and introduction of integrated systems using new techniques will be an additional task, superimposed on the continuing development and maintenance of current systems. Furthermore, although a number of our proposals, such as the use of database and the functional approach, should in time limit the need for additional staff, there is at present a lack of expertise in these very areas. We have looked at the scope for achiebing higher productivity through partial automation of systems and programming work; but whilst techniques like end-user programming and application generators may have a significant impact in the long term, they are unlikely to provide early assistance. 67. Some additional resources will therefore be needed, particularly in the early years of the strategy. This requirement can only be met by the deployment of a number of outside consultants and allowance for this has been

made in the costings. A programme of training for DHSS ADP staff will also be needed to familiarise them with the new methods. ADP staffing implications are discussed in more detail in Background Paper G.

Central Index

68. A vital part of the future structure will be a comprehensive central index covering NI contributors and social security beneficiaries and their dependants. This will enable all existing records to be traced quickly and help ensure that they are more accurate. The existing Genral Index at Newcastle has recently been computerised and an individual's NI or pension number can be traced interactively at Central Office from personal data such as name or date of birth. As it stands, General Index does not meet strategy requirements. In particular, it does not provide on-lines access from elsewhere; indicators of where all records relevant to an individual are located; cross references for dependants, aliases, alternative payee etc; or access if necessary via a range of keys (eg other benefit numbers, multiple keys).

- 69. The limitations have already led to consideration of an additional index for child benefit purposes. A feasibility study has recommended establishing a Child Benefit Index by late 1984. This would provide many of the facilities needed for the strategy. There would be merit, therefore, in designing it from the outset as the first stage of a Departmental Central Index (DCI). The development, in outline, could be to design and establish a Child Benefit index by 1984; extend coverage to contributions and RP records by 1987; and include local office records as area computer centres come on stream. The relevant geographical portion of the DCI would be duplicated at area centres, so that only queries not resolved there would need to be chanelled to Newcastle and the index would be immediately available to local office clerks.
- 70. One possibility, which we do not include as a firm recommendation but which appears sufficiently attractive to warrant further study, would be to use plastic cards as a means of accessing this information. DHSS plans to issue new NI numbers in future on plastic cards in place of the present flimsy cardboard and it is proposed that these should be machine readable in the same way as those issued by the banks. They would contain the individual's name and NI number. At interviews etc they could be used to identify the individual to the system and summon up the appropriate record by inserting them into card readers attached to terminals. It is conceivable that the efficiency of the traditional signing—on procedure for unemployment claimants could be improved, and worthwhile staff savings secured, by the use of plastic cards in this manner. However, the practical and other implications would need careful consideration before a decision could be taken.
- 71. The DCI would be a powerful tool, holding or providing access to personal information about virtually every citizen. Controls to ensure privacy and security would be essential but it should be emphasised that the index would not provide any information that is not currently obtainable from the present

system. What it would do is to take summary information much more readily available to staff and thereby make a major contribution to efficiency, accuracy and service to the public.

72. Detailed decisions on how best to maintain the security and privacy of the personal information which DHSS has to hold will be taken as the strategy advances. There are a number of techniques to control access to personal information, including encryption of sensitive data (so that while it is stored or transmitted it is unintelligible), passwords, badges, voice prints and physical barriers preventing public access to the computer. Local office clerks should have access, as now, only to the records of people in their locality. Additional procedures will be needed to access or obtain other records. These could include authorisation by another person, and a report of the access to the manager. Specific records could be 'locked out' unless special authorisation was given. Another important safeguard for the public will be appropriate provision for individuals to inspect personal information held about them on computer.

Local Offices and Area Computer Centres

- 73. The system of linked area computer centres is the heart of the strategy. Their initial function would be to support the local offices, holding records, processing claims and making payments. But once these centres are in place the basis for the structure described in Section II and illustrated in figure 1 will have been laid. Work is proceeding on detailed proposals for the first phase of this project, including the order in which benefits and functions should be tackled, the proposed timescale and estimated costs and savings. For illustrative and costing purposes we are assuming in this paper that there will be only 7 area centres, thus minimising the problems of securing new accommodation and setting them up (see paragraph 58 above).
- 74. On these assumptions we estimate that the first area centre could start to function in 1986 (having completed the steps outlined in figure 3) and the last one in 1990. In parallel, the second phase of functions (which we have assumed to be supplementary benefit assessment) would be developed and implemented: national coverage for this would be achieved by 1991. National coverage of incapacity benefits rating would be achieved by 1993 and full incorporation of unemployment benefit by 1994.

FIG 3: PAYMENT OF LOCAL OFFICE BENEFITS AND SUPPLEMENTARY BENEFIT UPRATING

Expanded version of planning and system development phase in Fig 2.

1982	April											
		Systems specification										
1983	October	· Issue of										
2,0,				Short list								
	April			Discussions								
	October											
	November		-	Memorandum of agreement Invitations to tender								
1984	December											
-704	February	Submission of tenders/evaluation										
	April	Contract										
				Issue of operational requirements (terminals) Issue of operational requirements (communications	May							
				Issue of operational requirements (communications (equipment)	June							
	October		Short list	October								
1985	April	Computer	PROGRAMMING	Discussions								
				Memorandum of agreement	April May							
1983				Invitation to tender	June							
				Submission of tenders/evaluation	August							
				Contract	October							
	November			First delivery	November							
1986	April			Testing								

- 75. A local office group is being set up to work out the changes in working methods that will be necessary as computer assistance becomes available and the improvements that it will make possible in service to the public and the working environment of the staff in local offices. It is clear that the changes could, over time, be dramatic. At present, for example, about 8,000 different forms are used within DHSS (not counting approximately 12,000 which go to claimants and others outside the sytem). Enquiries on VDUs require no input documentation or printed output, so large numbers of these internal forms should go. The bulky volumes of code instructions should be radically reduced, with procedural instructions in particular either replaced by software or presented on the VDU. There would be less need for the rows of filing cabinets which often dominate offices. Indeed, although the DHSS and DE are never likely to have 'paperless offices', there should be a major reduction in the volume of paper used and retained.
- 76. As Working Paper I stressed, getting the right relationship between the technology and the staff who use it will be crucial. The new methods could mean more satisfying work in local offices, with less form-filling and paper-work, fewer frustrations due to the non-availability of records or information or long delays before they can be obtained, and less dependence on other staff in seeing a case or an enquiry to a satisfactory conclusion. Greater emphasis on direct public service with the ability to provide it would be a real benefit to staff as well as customers. Staff would have the satisfaction of using modern tools and not being left behind by comparable outside organisations (banks, building societies etc) and even by claimants themselves. All this will, of course, have implications for the training of local office staff.
- 77. Many factors could vary the illustrative timetable for introducing computer support to DHSS local offices. But on the assumptions listed above, they would not start to receive this kind of immediate help with daily work until the second half of this decade and would not have a full range of support until well into the 1990s. Given the pressures today this is too long. We have therefore considered interim improvements and recommend that a new project, for micro-computers to help with supplementary benefit work, should be launched as a matter of urgency.

78. The purpose would be to provide some computer help quickly to hard-pressed local office staff in one of their more difficult and laborious tasks, calculating supplementary benfit entitlement. As the project would be an interim step, to provide help until better and more comprehensive assistance can be provided in the latter 1980s, it should be a simple scheme which can be implemented quickly. We therefore recommend: (a) the system should merely involve entering details of a claimant's income and commitments and producing a print-out of the calculations. It would not retain records for subsequent interrogation; this would limit the uses of the system but would allow quicker and cheaper implementation; (b) the system should not attempt to cover every conceivable situation; to keep it simple, unusual cases should be reserved for clerical handling (as now); (c) to speed up implementation, the system development work might be done by an outside software house (selected after competitive tender). This work should be completed in the 1982/83 financial year. The system would be used by DHSS staff after the initial information had been assembled through interview or through the postal claim form. In principle, it could also be used by UBO staff in the same way, at least for first and straightforward supplementary benefit claims, although some logistical problems - accommodation, office layout, procedures, training etc - would need to be overcome. 79. An interim system for use by staff would be likely to produce modest financial savings. However, the benefits would go wider. They would include an assurance to staff and the public that DHSS was in practice as well as theory providing computer assistance; a worthwhile improvement in accuracy; a hedge against any delays in the development of the full strategy system; and perhaps most significant, the first practical experience for local office staff in direct working on a routine basis with advanced computer hardware. 80. Other possible uses for micro-computers in local offices - including control of overpayments, liable relative work, direct payments to outside authorities (eg for rent or fuel) and Housing Benefit calculations - are also being explored. One such application is a 'self-service' micro-computer system, 28

designed to enable members of the public to discover for themselves through a straightforward dialogue with the machine whether they may be entitled to benefits. This system is being developed in collaboration with Dr Nigel Gilbert of the University of Surrey, who produced the prototype, and will be tested experimentally in selected locations in 1982 and 1983. If the tests are successful, it could form the basis of a much needed improvement in this aspect of our service. Provision for an 'advice and information project' has been included in the costings.

- 81. A further possibility which appears sufficiently attractive to justify investigation and experimentation would be to develop a modified version of the micro-computer assessment system, to be used by members of the public directly, at least for the collection of initial information. Staff would still need to validate and authorise any payments, and would of course have to determine any discretionary or unusual features. Work on the advice and information micro-computer project will throw light on the extent to which such a self-service approach is feasible, and in the early years of the strategy this approach might turn out to be only moderately successful: however, it could ultimately provide some of the public with a more convenient and cheaper service and should be explored on an experimental basis, perhaps in both ILOs and UBOs.
- 82. Micro-computers and other 'electronic office' equipment could play an increasing role in all kinds of local office work, including administrative tasks outside the processing of benefits. We recommend that the proposed local office group and others should launch further studies in this area. It will be important to maintain co-ordination in the deployment of micro-computers and other office equipment within the strategy.

Implications for the Unemployed

83. One important consequence of these proposals would be the closer integration of the unemployment benefit service — at present run from quite separate computer centres — with the rest of social security administration. This makes sense in both social and technical terms: most UB recipients also claim other benefits, particularly supplementary benefit; and there are major similarities between UB and sickness benefit.

- 84. We have assumed that UBOs would remain the normal contact point for unemployed claimants but that their role should expand, in accordance with the whole person and one office approach, to cover at least straightforward supplementary benefit claims from the unemployed. During the 1980s the present National Unemployment Benefit System (NUBS) would continue to function as an autonomous system serving UBOs alone. Hardware replacement would take place by 1986 as planned and other enhancements would be introduced as necessary. The most important would be the office-by-office replacement of the current teletype terminals in UBOs, as they wear out, with more advanced VDUs; and the introduction of improved enquiry facilities so that UBO staff can readily obtain more information from the NUBS computer centres. As suggested above, by the mid-1980s micro-computers might be used in UBOs as well as ILOs to handle straightforward supplementary benefit claims - used either by clerks or (initially in an experimental way) by claimants themselves. The use of micro-computers within UBOs would raise logistical problems which would need close consideration before a decision could be taken to proceed. The possibility of handling more supplementary benefit work on the NUBS computer might also be explored.
- 85. By 1990 the area computer centres would be established, and would be introducing the full supplementary benefit assessment module to ILOs in place of the more limited micro-computer service. It would be possible to extend this facility to UBOs at about the same time (say, 1990/1992). This would also provide UBO staff with access to the same records and central index as ILO staff; and could provide electronic mail facilities (via the area computer centres) between the offices. UBO staff would use the same VDUs as for NUBS.
- 86. By the early 1990s the present UB software will need to be re-written. In parallel with other activies, therefore, systems design and programming would be taking place in the late 1980s; the new version would be designed not as an autonomous system but as a part of the general purpose benefit processing system provided by the area computing centres in accordance with the functional approach. It would therefore utilize and contribute to the existing database, payments module and other functional segments (eg for other similar benefits) which then existed or were being developed. The revised system could be phased in to the area centres and UBOs over 4 years,

designed to enable members of the public to discover for themselves through a straightforward dialogue with the machine whether they may be entitled to benefits. This system is being developed in collaboration with Dr Nigel Gilbert of the University of Surrey, who produced the prototype, and will be tested experimentally in selected locations in 1982 and 1983. If the tests are successful, it could form the basis of a much needed improvement in this aspect of our service. Provision for an 'advice and information project' has been included in the costings.

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Implications for the Unemployed

83. One important consequence of these proposals would be the closer integration of the unemployment benefit service — at present run from quite separate computer centres — with the rest of social security administration. This makes sense in both social and technical terms: most UB recipients also claim other benefits, particularly supplementary benefit; and there are major similarities between UB and sickness benefit.

- 1990/4. Additional communications links would be necessary where UBOs were not already linked to area centres. The workload of the existing NUBS computer centres would gradually contract as UBOs were taken on by the area centres; in the end they might be upgraded to become area centres handling the full range of social security business.
- 87. The result would be the system illustrated in figure 1, with both UBOs and ILOs linked to and supported by general purpose Area Centres. We have made no assumptions about changes in the role of UBOs, except that the unemployed should be able to make initial claims for supplementary benefit there, to avoid having to visit two separate offices simply to claim benefits. By the early 1990s, once the strategy infrastructure was established, it would be possible to extend the range of service now provided at UBOs quite significantly: any or all of the facilities extended to ILOs might also be provided to UBOs.

Contributions

- 88. The recording of the receipt of contributions is always likely to be a central function. The contributions system has recently been rewritten to coincide with the current replacement of hardware and the next haradware replacement will not take place until 1989. Although the contribution recording system is thus up to date, the strategy will require improvements in the enquiry facilities.
- 89. Local offices will require immediate access to recent contribution records to calculate entitlement to short-term contributory benefits. Such records would be held at area computer centres as part of the data relating to the individual and would supercede the Datalink system by which DHSS local offices now obtain contributions information from Newcastle.
- 90. On line availability of contributions data for long term benefits is also desirable, eg to provide better and speedier information to people below pension age who want to know their pension position. But the difficulties of providing such rapid access are much greater. The whole contributions record is required instead of the recent record and this

can be lengthy and sometimes involve the contributions of more than one person (eg a woman's own record and that of her husband). This kind of rapid access also requires that all contributions details should be held in the computerised record but some are not at present and it would require a major effort to put them on to computer. We recommend that this matter be examined further in the light of the effort required and the latest technology (particularly optical discs) with a view to establishing the costs, benefits and practicability of providing on line interrogation facilities with existing computers.

91. Prior to 1989 the existing contributions system will need to be redesigned on lines compatible with developments elsewhere in DHSS. This will involve taking account of the DCI and its use, and devising an on-line transaction processing system for pensions awarding to bring it in line with the facilities which will have been developed for determining entitlement to other benefits. The question as to whether the replacement machines should be used for contributions work alone, or whether the whole of the computing requirement at Newcastle should be embraced by a single replacement programme, also needs examination.

Pensions and Child Benefit

- 92. The strategy would permit the decentralisation of pensions and child benefit in the longer-term. There are arguments for and against doing so, but it is not a practicable proposition for some time. The area computing network, into which pensions and child benefit could fit, will not be completed until the latter 1980s and it will then be heavily engaged in taking on work related to short-term benefits. What is important is that the option should be left open to enable pensions and child benefit work to be dispersed if that proves desirable at some later stage.
- 93. The pensions and child benefit computers are due to be replaced in 1987 and 1988 respectively. As the systems have been revised fairly recently it would be possible to transfer them onto the replacement machines and defer further development until the beginning of the next decade. However, this would mean that some desirable facilities, such as on-line enquiry (and eventually on-line up-dating), will not be available for a long while and no progress would be being made towards strategic objectives.

- 94. We propose therefore that these systems should be redesigned in accordance with strategy principles by the time of hardware replacement. This would mean that the new systems would be developed in a modular fashion in line with the functional approach; use database techniques for the structuring and storage of records; conform to the agreed protocols and standards; incorporate/enhance relevant modules developed elsewhere; and be designed in such a way that retention of these tasks at Newcastle or distribution to area centres would be practicable. On-line enquiry and updating of records from within Newcastle should also be made possible. We recommend that studies be put in hand to determine the steps necessary to achieve this and to what degree the administration of these two benefits can be combined into a single operation.

 95. In practical terms, the effect of all this would be that the payment
- 95. In practical terms, the effect of all this would be that the payment routines, which would already have been developed, would be used again at Newcastle; the writing of new programs for determining entitlement, changes of circumstance etc would be made easier by use of generalised routines previously developed for these functional areas; and input and validation of data could also be based on routines already developed. Once the area computer centres were installed and linked to the revised Newcastle systems, local office staff would be able to obtain information on-line and input claims and the other information directly to Newcastle via the VDU, but this would not take place until well into the 1990s.
- 96. It is not necessary to specify now the precise phasing of subsequent development of these systems into the 1990s. If it were agreed to move further in the 'area centre' direction
 - Newcastle/Washington would become an area centre (or concentration of several) and one of a number of payment centres for all benefits;
 - the determination of entitlement to child benefit would be undertaken at area centres;
 - consideration could be given to distribution of contribution records and the related pensions awarding function.

Although no decision is required on these matters for a long while, the costings illustrate the effects of decentralisation to areas in 1994/95.

North Fylde Benefits

97. The computer equipment at North Fylde Central Office is shortly to be replaced and arrangements are in hand to transfer the present systems. Around 60 per cent of North Fylde computer work is on health, rather than social security matters. War pensions, which are administered from North Fylde are being reviewed in the 'whole benefit' programme. We do not therefore make any major immediate proposals for North Fylde benefits although any changes should, of course, be made in line with the general strategy. For instance, the concepts of database and functional development should be introduced as quickly as possible and details of social security beneficiaries should be included in the proposed Departmental Central Index when that is created. About the early 1990s summary payment records might be made available on-line to area centres and the full records for some benefits, eg FIS, might be decentralised to area centres, together with the payment aspects of other benefits. We recommend that during 1982 North Fylde should draw up a broad plan for the integration of its benefit procedures within the proposed strategic framework. The analysis should include an assessment of the scope for a unified data base to replace the existing separate benefit files.

Summary

- 98. In summary, the outcome of the strategy would be a major extension of computer assistance to the work of DHSS and DE. It would mean significant changes in the character of local offices and the working environment of staff. The implementation process is summarized in Figure 2. For local offices, the main steps would be:
 - from around 1984 micro-computers would be used for supplementary benefit assessment in ILOs and possibily UBOs;
 - in the mid-1980s staff in UBOs would start to obtain more information directly from the NUB\$ computer centres, using modern VDU terminals;
 - from 1986 the first ILOs, and from about 1989 the first UBOs, would start to use VDUs for inter-active working - initially for a limited range of work but gradually covering more and more functions and benefits.

All local offices should be equipped with some VDUs by 1990, but national coverage of all short-term benefit applications, including unemployment benefit, would not be achieved until 1994. One important spin-off would be to make it far easier for staff in UBOs to process supplementary benefit claims along with claims to UB.

99. In the meantime, revisions of the major benefit systems at Newcastle would allow a decision to decentralise to area centres either the total processing of those benefits or some functions of them. This, of course, assumes that capacity would have been provided at the area level to encompass the work. The range of business of North Fylde Central Office would be less affected but should be brought into line as the strategy progresses.

100. By the early 1990s DHSS and DE would have the infrastructure to effect a major improvement in the quality of service, along the lines proposed in Working Paper I. The information readily available to staff would be greatly improved, enabling more efficient working and speedier resolution of queries and opening the way to a more comprehensive advice and information service to the public, whether they call in person, write or telephone. If the introduction of new computing facilities is accompanied and followed through with organisational changes — eg in the layout of local offices and the organisation of work within them — it will be possible to make real progress towards a 'whole person' service to our customers.

IV COSTS AND SAVINGS

101. More economical administration was one of the major objectives established in Working Paper I. Unless significant administrative savings can be made, the scope for securing objectives like improved service to the public and greater job satisfaction for staff will be severely limited.

102. Whilst it is not possible at this stage to cost with absolute precision and certainty the way forward set out above, broad costings have been undertaken. This need not imply committeen to the whole programme. Review points along the way are essential to monitor progress, confirm that targets

(including costs and savings) are being met and, if not, to raise the question whether to call a halt or change direction. Such a deision might be prompted by a number of considerations - financial, technical, managerial or policy. Additionally detailed costings will be necessary for individual projects and developments within the strategy when approval for them is sought. 103. Costings have been projected forward 20 years (to 2001/2) and are based upon November 1981 prices. A major difficulty has been to determine the baseline against which our proposals should be measured. We have taken this to include those computing and associated costs which DHSS would have had to meet to keep existing systems going in the absence of strategy - some £900 million over the same period. The additional investment necessary to achieve strategy objectives is therefore the critical figure. A financial risk analysis model has been constructed to assess the effect on savings of delay or changes in costs. 104. Table 1 of Appendix 3 presents a summary of costs and savings, and shows that: costs amount to some £700 million for the 20 year period (rather less than 3% of total administration costs over the same period or 0.14% of total benefit payout); savings amount to about £1,900 million gross or some £1,200 million net with a cumulative net present value (NPV) of £550 million (after discounting); yearly savings begin to exceed costs after 8 years and when a 5% discount factor is applied a positive NPV emerges after 11 years (1993/94). In addition to savings there would be substantial added value for the public

In addition to savings there would be substantial added value for the public from improved advice and information and a faster, more accurate and more convenient service.

105. The most important element of these savings arises from a potential reduction in staff numbers across DHSS and DE over some 15 years of the order of 20-25,000, from a total of over 100,000. The exact level achieved will depend on a number of factors including the extent to which savings were ploughed

back into improvements in the quality of service. Staff too would benefit from the improved facilities available to them but we think a proportion of the estimated savings would need to be set aside to provide more tangible incentives. The savings could not be achieved suddenly, but would build up as the strategy was implemented: the aim should be to achieve them through natural wastage. Changes in the nature and quality of work would also raise questions about the appropriate grading of jobs: such issues would need to be considered carefully, in consultation with the relevant trade unions. We have looked at the level of staff savings attained in other large Government computing projects and noted that they tend to fall short of original estimates in extent and timing. If only three quarters of the postulated savings were actually achieved, the strategy would produce net savings of some £700 million.

106. Conversely, our calculations do not take account of variations in relative costs. Computers can be expected to improve dramatically in cost/performance terms; and our economists advise that 2% per annum might be added to staffing costs over the twenty year period. The latter change would increase estimated net savings to £1,750 million. A number of other costings assumptions are deliberately cautious. On balance we think the level of savings assumed is realistic and achievable.

107. A total of fourteen projects have been identified within the strategy, of varying degrees of size and complexity (see Appendix 2). Ten achieve a net saving (in cumulative NPV terms) in their own right. The central team, included as a separate 'project', is a cost of carrying forward the strategy at all. The loss incurred by the remaining projects is modest in relation to the strategy as a whole, and is to some extent due to their position in the strategy timetable; they all contribute to meeting the strategy objectives and their value should be assessed in that context.

108. Ministers are anxious to improve the level of benefit take up, but it is difficult to estimate the effect the provision of a better service and improved advice and information might have on this. The main benefits likely to be affected are supplementary benefit and FIS. If a 5 per cent reduction in the amount of unclaimed benefit were achieved, the additional cost would be £40 million and £7 million per annum respectively.

109. The calculations suggest a strong financial case for moving ahead with a strategy of the kind proposed. As is normal with such developments, significant investment is required before benefits can be expected. However, the benefits would clearly be substantial, and would include considerable savings in addition to a much better, more personal service for the public and a working environment for our staff similar to that increasingly found in comparable organisations. VARIATIONS 110. Earlier sections of this paper present proposals for a cohesive system covering the administration of all social security benefits. They seem to us the most promising way of meeting the objectives and desiderata proposed in Working Paper I. But they are not the only possibility and are open to question on a number of grounds: it might be argued, for example, that they take too long to achieve results, or that they require too much initial investment, are too ambitious and would make unrealistic demands on management. We have therefore explored the extent to which variations or alternative approaches might be adopted without jeopardizing the central purposes of the strategy. 111. There are a number of dimensions of the strategy which might, at least in theory, be altered: Aims. The strategy aims were laid down in Working Paper I and can be summarized as improving service to the public, achieving administrative savings and improving the jobs of staff. It was not within our terms of reference to alter these broad aims, and we hve therefore not considered alternatives which would, for example, provide an even better quality of public service but which would provide no net administrative savings. However, there is scope for altering the balance of tradeoffs between the main objectives and the extent to which they are achieved; we have been particularly anxious to identify variations which would require reduced investment. Degree and type of computerisation. The strategy proposals are for a highly computerised system. A less extensive use of computers could be achieved by: (a) computerising some benefits but not others; (b) within each benefit restricting further the range of cases covered; or 38

(c) within each benefit computerising some functions but not others.

Variations along the lines of (a) or (b) are not incompatible with our main proposals: it would, for example, be possible to undertake some but not all of the individual projects listed in Appendix 2. Variation (c) is touched on below. Variation is also possible in the type of computerisation adopted - eg batch or on-lining working.

Location of computing resources. As explained in Section II above, the strategy involves structuring computing resources in three tiers. To abandon this - eg to opt now for a predominantly local computing structure - would add significantly to the technical risks and uncertainties and has therefore been ruled out. However, the strategy would leave open the precise location, within the three tiers, of individual functions and services; decisions would be reached in the light of the technical and cost considerations at the time.

Common approach to data, functions, communications and system interface. These proposals are central to the strategy: it would be possible to dispense with the common approach in these areas, but we see no substantial advantage in so doing and it would seriously jeopardize achievement of the ultimate strategy objectives, even at a later date. However, there is scope for debate about the precise standards and techniques to be adopted, and how they can be applied most sensibly in individual developments.

Degree of integration. The strategy aims at a modular but highly integrated system. We have considered whether a continuation on less closely integrated lines would enable the main objectives to be achieved at less cost and with less difficulty. A highly fragmented approach would be incompatible with strategy objectives, but a middle way — involving a number of relatively independent systems with some improvement in their capacity to link harmoniously together — would be possible and has been given some consideration.

Sequence/timing of projects. Section III presents an illustrative implementation plan. The details must be regarded as provisional until detailed studies of individual projects have been completed. There is some scope to alter the sequence of projects or to accelerate or slow them down eg to advance the return on investment or spread it over a longer period.

112. Clearly the range of variants possible by altering these dimenstions is immense. Within the time and resources available we have considered a small number of alternative approaches chosen to illustrate the variations most likely to prove worthwhile. The specific aim has been to develop more modest proposals which would reduce the investment required, lower the level of technical innovation and limit the demands upon management. These approaches have not been worked up in the same detail as the full strategy proposals.

113. Under the first of these alternatives a payment system would be developed for locally administered benefits and standard record formats adopted over time for data stored in all social security computer systems. A centralised information source built on the central index concept would be made available through video terminals across DHSS and DE. It would include identity, contributions and benefits in payment data (the last of these supplied by daily update from the payment systems). The central offices would otherwise continue to develop in relative isolation. Micro computers would be used extensively in local offices to provide assistance where there were clear opportunities for staff savings, cost reductions or improvements in effectiveness: some benefit functions would be computerised but by no means all.

114. The second alternative would be rather more ambitious and would concentrate on parts of the main strategy that offer the best return on investment. This would mean going ahead with the modules for payment and uprating of locally administered benefits, supplementary benefit assessment and the calculation of UB entitlement. The first two include computerizing large areas of clerical work; the last involves replacing an already computerised system with a more advanced and integrated one. To this would be added a centralised information source as envisaged for the first alternative. Again, there would be little fundamental change at the central offices. Four variants of this broad approach were devised, with different network of terminals giving access to information held centrally and with different levels of support for staff. More detail about these alternatives and their likely costs and savings is given in Appendix 3.

115. The more modest of these approaches in particular would certainly reduce the technical and managerial difficulty of implementation and would require less investment than the full strategy proposals. The risks - technical, managerial, financial - would therefore be less. However, the benefits would also be reduced. The information readily available to staff and the public would be better than it is today, but would not be comprehensive; there would be severe limits to the extent to which the 'whole person' approach could be achieved. A lot of staff effort would still go into processing paper, maintaining records and trying to obtain information from elsewhere in the system. The financial savings would also be reduced. The calculations summarised in Appendix 3 show that amongst the various costed approaches, the

rate of return improves with the size of the investment. After discounting costs and net savings, the return on investment amounts to 50 per cent for the most limited alternative over the 20 year costing period, but rises to 120 per cent for the most ambitious — a rate which broadly equates to that of the proposed strategy itself. As already explained, the costings of these variants are less precise than those of the main strategy, but we believe they are of the right order.

116. Further refinement of these alternatives and their costings might improve their cost performance, but there seems little doubt about the trend: higher levels of investment appear to provide a better rate of return.

Other alternatives can no doubt be devised and we cannot be certain about their respective performance. But there are a number of reasons why we think this broad relationship would be likely to obtain under most

three large projects (payment of local office benefits, supplementary benefit assessment and unemployment benefit) all show a high rate of return and contribute the bulk of strategy savings. The more of them that are included the better the net return is likely to be;

permutations of the strategy:

- any viable strategy will require investment, eg in computer support to local offices. The more comprehensive variants will provide an infrastructure which could be used more widely. This allows the initial cost to be spread over a larger number of projects; and means that once constructed the marginal cost of incorporating further areas of work falls;
- conversely a limited infrastructure restricts the savings which can be achieved: for example, full computerisation of the administration of a benefit enables the maintenance of paper files (a laborious activity) to be very substantially reduced, whereas partial computerisation means that both computer and paper records are needed and must be maintained;
- . the cost of the cheapest alternative, which relies heavily on micro-computers, is significantly increased by the need to replace these more frequently than the larger machines.

117. We have considered the possibility of variants designed to achive more substantial benefits than the main strategy proposals, or to achieve them more quickly. Cost and practicability are the major constraints. The strategy does involve the use of micro-computers on an interim basis, to bring forward the first gains. We could see no ways of achieving substantial additional benefits, or of achieving them significantly faster, which did not carry with them unacceptable additional costs and/or risk.

118. Consideration of possible variants has confirmed our present view that development along the broad strategy lines suggested in Section II above appears the most promising way forward for social security operations. It is noticeable, for instance, that the most attractive variants in terms of investment return share the same broad direction as the main strategy, even though they do not go so far down the road. However, this is not to dismiss the possibility of further ideas and suggestions — not least in response to this paper — which could lead to the formulation of a preferable approach. Nor is it to suggest that adoption of the strategy should mean the imposition of a rigid or immutable blue—print which must be followed unswervingly. On the contrary, a great many important issues will remain open and will only be decided in the light of experience and the balance of factors prevailing at the time individual decisions are needed.

119. The suggested broad timetable for reaching decision on the implementation of the strategy is illustrated in Figure 4. The empty circles show when decisions to develop particular projects on strategy principles will need to be taken; the full ones indicate decisions on implementing the developed system on the ground. At each point it will necessary to assess the financial and technical implications of proceeding in accordance with strategy principles, including any additional costs and difficulties they might impose, and the possible variations, eg to meet differing circumstances, minimise costs or ease implementation.

120. In addition to these individual decision points, it will be a prime function of strategy management continuously to monitor and report on progress and identify particular problem areas where a change in direction may be needed. Beyond this, however, as suggested in Section IV above, there will need to be a number of formal review points at which the future of the strategy as a whole is considered by top management. Five suggested dates are shown in Figure 4, and we have looked at the possible implications of a decision at each of them not to proceed with implementation of the full strategy proposals. The first, a decision at the end of this year not to go ahead needs no comment. The next would occur in March 1985 when implementation of the supplementary benefit micro-computer system had been completed. Termination at this point would lead to a marginally positive NPV of £9 million over the strategy period, but involve nugatory costs of £15 million mainly for the area centre development work.

	FIGURE 4: STRATEGY DECISION TIMETABLE	Commitment to Strategy	
Year	Decisions Required	N. Fylde CB RP Conts. DCI UB Cont. Ben. rating Supp. Ben. assessment Payment/uprating	Major Review Points
1982/83	 publication of working paper supp. ben. micros trial LOP payment/uprating module development Departmental central index development NUBS enhancement/hardware replacement plan planning for integration of N. Fylde benefit systems 	0 0	*
1983/84	1. advice & information micros implementation 2. supp. ben. micros implementation 3. LOP supp. ben. assessment module development 4. RP phase I development	0	
1984/85	1. NUBS enhancement implementation 2. Begin N Fylde benefit systems integration 3. UB new system development 4. CB phase I development		
1985/86	1. Contributions development	0	女
1986/87	1. LeP-contributory benefit rating module development	0	
1987/88	LOP payment/uprating module implementation RP phase I implementation	•	*
1988/89	1. DCI implementation 2. CB phase I implementation	•	
1989/90	 RP phase II development LOP supp. ben. assessment module implementation Contributions implementation 		*
1990/91	1. CB phase II development		
1991/92	UB new system implementation LOP contributory benefit rating module implementation	•	*
1992/93			
1993/94	 RP phase II implementation CB phase II implementation Key: development = 	O implementation = 0	

By the 1987 review point these nugatory development costs (including piloting the payment/uprating module for local office benefits) would have risen to nearly £60 million.

121. However by the next review point (1989) enough would have been achieved to provide a cummulative NPV of around £190 million over the same period, if projects which had been proved at that stage but only partially introduced were implemented nationally: these would include the payments/uprating system, the DCI and RP and CB phases I. Nugatory costs of around £50 million would need to be set against this. By the next (1991), the cummulative NPV would have risen to around £440 million: by then the supplementary benefit assessment module would have been introduced, but other steps - including the incorporation of UB work at the Area Centres - would not have taken place. Nugatory costs at this stage would be around £60 million.

122. In effect, if a halt were called at one of these review points a more modest variant of the strategy would have been achieved. The drawbacks of achieving a variant this way, as compared with planning deliberately for it from the outset, would be a financial overhead and an opportunity cost (if we had not been going in this direction we might have been developing another). These risks may be regarded as intrinsic to any long-term strategic approach and need to be balanced against the substantial advantages which a strategy can provide. On the whole this exploration of alternatives has reinforced our view that the proposals in Section II offer the best way forward.

VI CONCLUSIONS

123. We have four broad categories of conclusions: the long-term strategy target; the 'systems approach' which should be adopted to achieve it; the management issues which will need to be considered; and specific tasks for the next stage. Finally, we propose the next review point.

The long-term target

124. We recommend that the following should be the main features of the long-term strategy target:

the administration of social security benefits should be viewed as a single operational entity with movement towards the whole person concept, and in particular incorporating a 'one office' approach to the administration of unemployment and supplementary benefit for the unemployed; computer and communications technology should be used to cut administration costs and allow staff to concentrate on work for which human skills are essential; a three tier computer structure; maximum use should be made of all the information which DHSS and DE hold with access available from any point in the system, subject to safeguards to secure confidentiality of an individual's record. Systems approach 125. To achieve this, we recommend that all future social security operational developments should be designed in accord with the following principles: the co-ordinated use of ADP resources (staff, hardware and software) to achieve corporate objectives; the adoption of a modular approach to system construction and accepted technical standards (paragraph 14). the treatment of information as a common resource spanning social security applications and the adoption of the database approach to organizing and using it (paragraphs 15-24); the use of standard communication protocols, facilitating a common network (paragraphs 25-32); the use of the functional approach to application development (paragraphs 33-46); the adoption of a standard user interface (video terminals, dialogue design, ergonomic features etc) (paragraph 49); Management issues 126. Implementing the strategy will necessitate the reorganization of the existing management structure and the creation of new management tasks (eg the common management of data and the communications network). More generally, it will require a greater emphasis on the central direction and control of social security planning and projects to ensure that corporate objectives are achieved. 44

The next stage

127. We recommend a number of specific pieces of work in 1982-83; the main ones are:

Central team - specify system components, standards etc; introduce control and training arrangements, carry forward micro-computer projects (paragraphs 65, 77-82);

LO/Area Centre implementation team - prepare Phase I proposals; commence implementation (paragraphs 73-74);

Newcastle - design prototype DCI;

NUBS/DE - prepare hardware and teminal replacement;

North Fylde - prepare broad plan to bring benefit work within strategy framework.

Next review point

128. The tasks undertaken from now on, including those outlined for 1982 and 1983, will all impact upon the strategy. Particularly important will be the revised proposals for developing the first phase of the area computer centres. Detailed issues concerning costs, savings, procurement of equipment and new demands from systems will continue to arise on individual projects. It is therefore essential to provide regular monitoring and control arrangements to ensure that each aspect remains compatible with the strategy and to take corrective action if not. The consideration and discussion of this paper will take some time and will, we hope, lead to a decision either to proceed with these proposals or to amend them. The whole process will provide something similar to a formal review, and should provide the basis for future reviews.

APPENDIX 1 BACKGROUND PAPERS The following Background Papers may be obtained (single copies only) from: Department of Health and Social Security Room 213 Ray House 6 St Andrew Street LONDON EC4A 3AD Report of a seminar (January 1981) A Consultation with customers' organisations B Data and functional analysis C Advice and Information Sub-Group, first report D Database considerations E Job design and the system interface F Resources and constraints G The communications network H Social security operational strategy: a brief guide J 46

APPENDIX 2

PROJECTS INCLUDED IN THE OPERATIONAL STRATEGY

Fourteen projects have been identified in the operational strategy. Brief details are provided below.

Central Team

A central DHSS/DE planning team, with consultant support, would be essential and has been taken into account in the costing.

Microcomputer based advice and information

It has been assumed that a microcomputer would be installed in each ILO from 1984/85 to assist in providing general information on benefit conditions and rates. This would improve service to the public. It has not been assumed that it will be replaced by the main system.

Microcomputer based Supplementary Benefit assessment

Provision of some 5 microcomputers in each LO has been assumed during 1983-85 to enable claims to be taken and assessments made by clerks operating the microcomputers. There would be no direct links with other computer systems. Printed output would be provided by the microcomputer and the claimant record then deleted in its store. The system would be replaced when the full Supplementary Benefit assessment system was implemented.

Payment of local office benefits

This system would provide for the computation, payment and uprating of supplementary benefit and other local office benefits. It would be based on area computer centres linked to local offices. On average, some 23 VDUs would be introduced at each ILO.

Supplementary Benefit assessment

This system would cover the taking, assessment and maintenance of claims and retain a permanent record. Data would be passed to the payment system to effect payments. A further 9 VDUs would be provided to each LO for use by clerks. The interim microcomputer based system (above) would be superseded.

Contributory benefit rating

This system would provide the corresponding service for the short term contributory benefits. One further VDU would be required in each LO for use by clerks.

Unemployment Benefit

This system would provide an on-line interactive service for clerks in UBOs corresponding to that provided in ILOs. 10 VDUs per UBO would be provided.

Departmental Central Index

An integrated central index would be developed from the general and child benefit indexes at NCO and made available on line to staff both in Newcastle and elsewhere (eg LOs) between 1988 and 1990. It would record, inter alia, the location of all information for an individual held by DHSS. A further 3 VDUs would be provided in LOs for accessing the index.

Child Benefit at Washington

The Child Benefit system would be replaced, at its present location at Washington, when the existing equipment is due for replacement in 1988/89. The costs and savings included in the strategy costings relate to additional features and facilities provided under the strategy proposals.

Child Benefit in Local Offices

Transfer of child benefit work from Washington to LOs between 1993 and 1995 would require a further 4 VDUs in each LO.

Retirement Pension at NCO

The Retirement pension system would also be replaced in its present location-when the existing equipment is due for replacement in 1987/88. The costs and savings included in the strategy costings relate to additional features and facilities provided under the strategy.

Retirement Pension in Local Offices

Transfer of RP work (other than Overseas Branch) to LOs between 1993 and 1995 would require a further 7 VDUs in each LO.

Contributions

Development of the contributions record system can also be expected in advance of replacement of existing equipment in 1989/90. Under the strategy it is additionally proposed that a contributions record should be made available on-line to LO and UBO staff. The strategy costs and savings take into account additional features and facilities at NCO and the provision of 3 additional VDUs in LOs to access the records.

Specialised Benefits at NFCO

Development of systems at NFCO can be expected irrespective of the strategy. The costs and savings included in the strategy costings relate to additional features and facilities.

APPENDIX 3 COSTING THE STRATEGY 1. This Appendix provides background information on the costing of the main strategy proposals and the variant approaches discussed in Section V. The Base Line 2. To distinguish the costs and savings likely to result from the strategy from developments which would probably occur in any case, it was necessary to establish a 'base-line' indicating likely expenditure required in the absence of a strategy. It was assumed that if there were no strategy existing DHSS computers would need to be replaced as they wear out and that a number of relatively modest enhancements would be made. These would include the replacement of teletypes in UBOs with VDUs, providing an enhanced on-line enquiry service; the introduction of VDU-based on-line data input and enquiry services to branches at Newcastle and North Fylde Central Offices; the replacement of Datalink by a VDU service offering ILOs slightly more comprehensive on-line enquiry facilities; and the general replacement of magnetic tapes with discs as the main computer storage medium. On this basis the total cost of maintaining social security computing over the 20-year costing period of 1982/83 to 2002/3 would exceed £900 million (November 1981 prices). Strategy Costs The costings are based on current (1980) workloads and transaction volumes, amended to reflect: (a) changes expected to take place by 1990 following demographic, social and legislative changes and other foreseen changes in DHSS/DE practices and procedures; (b) estimates of additional likely changes as a result of the strategy itself. A number of other possible legislative, social and procedural changes which were thought less likely to occur were also considered to assess their possible impact on 1990 workloads: in only a few cases were these found to have a significant impact on the costings. In view of the uncertainty about future levels of unemployment, costings were based on current levels of around 3 million. (If the level of unemployment were lower both the costs and the savings would be lower: if a level of a 2 million is assumed, the net present value achieved by 2002 would be some 8 per cent lower). Estimates were made of the equipment needed to cope with the volumes and workloads established, when it would be needed, where it might be sited and the consequent telecommunications needs. Allowance was included for some back-up facilities. Other costs taken into account include additional development and operational staff, accommodation and the operational and maintenance costs of the new equipment. Cautious assumptions were made, eg on the availability of existing accommodation, the need for development staff and the opportunity for bulk purchase discounts. 49

Strategy Savings The strategy would provide savings in 3 main areas: staff, payment methods and other non-staff costs. Staff account for some 70% of social security administration costs, and therefore provide the greatest scope for savings. Savings were estimated by: (a) calculating staff requirements in 1990 in the absence of a strategy by reference to the transaction volumes etc indicated above; and (b) revising these calculations in the light of estimates of the impact of the strategy proposals on specific staff functions. The scope for savings in other areas, including payment methods, is relatively limited in view both of their smaller proportion of total costs and of saving measures already being taken - eg standardisation of order books, four-weekly payment of child benefit and the introduction of ACT. In general, the estimated savings are deliberately cautious: examination has focused on areas where the stretegy is expected to have a major impact and savings can be readily identified. No savings have been assumed in other areas where the strategy is considered likely to have smaller impact or where it is more difficult to assess the extent of savings. Whether additional savings can be found in such areas will emerge in the course of further, more detailed analysis. Timing 10. The timing of expenditure and savings depends on the sequence and timing of the individual projects which between them comprise the strategy. The timings indicated in Figure 2 of the paper were assumed for costing purposes. Totals 11. The total estimated strategy costs and savings are summarised in Table 1. Both costs and savings are additional to the 'base-line' costs discussed above. It should be stressed that all figures must be regarded as broad estimates: further detailed refinement will be needed project by project. Approval would not be sought for strategy investment on a global basis but for each project individually. Risk Analysis 12. Many factors could alter the estimated costs and savings, eg relative price changes, delays, non-achievement of savings etc. A micro-computer-based risk and sensitivity analysis model has therefore been developed. This enables costs and savings to be separately identified in up to 750 related tasks within 25 projects over a period of 20 years. The impact of a wide range of variations in assumptions can therefore be assessed. Review Points 13. Implementation of the strategy will require comprehensive monitoring and control arrangements and a number of major review points. Five are suggested in Figure 4 of the paper. The first would have little significance in costing terms. The others are: 50

at March 1985, prior to decisions to develop the contributions and contributory benefit rating modules; at March 1987, prior to implementation of the payment of LO benefits system throughout the country but following its initial trial; at March 1989, prior to implementation of the supplementary benefit assessment module; at March 1991, prior to implementation of the contributory benefit rating and unemployment benefit systems. 14. To assess the financial implications of the worst possible situation at each of these review points, it was assumed that a decision would be taken not to proceed further but simply to consolidate on elements which had already been implemented or substantially so at that point. The results are shown in Table 2. 15. As the 1985 and 1987 review points fall during the initial development phase, a decision to stop at either of them would only lead to a marginal postive net present value (NPV) by the end of the strategy period, against which nugatory development costs would need to be set. The position improves markedly, however, in subsequent years when major elements of the strategy would be implemented and would provide a growing return on the investment. Variations 16. Section V of the paper briefly describes the study undertaken of possible alternative approaches and the conclusions reached. Those considered are set out below: ALTERNATIVE 1 computerised payment system for locally administered benefits; the introduction over time of standard record formats into all social security computer systems; development of a centralised information source built upon the central index concept and available through video terminals across DHSS/DE, containing for all claimants identity, contributions and benefits in payment data (the last through daily updates from payment systems); extensive use of micro computers in local offices to assist in supplementary benefit assessment, liable relatives work, control of the movement of papers, code interrogation and other areas likely to lead to staff savings, cost reductions or improvements in effectiveness. 51

TABLE 1: BROAD ESTIMATES OF COSTS AND SAVINGS (£ million)

Year	82/ 83	83/	84/85	85/ 86	86/87	87/88	88/ 89		90/	91/ 92	92/ 93	93/ 94	94/ 95	95/ 96	96/ 97	97/ 98	98/ 99	99/2000		2001/2002	TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Total Costs	-	10	15	10	40	50	40	55	55	55	45	45	35	30	35	45	35	40	35	45	720
Savings	-	-	5	5	5	5	15	45	90	110	125	145	160	165	165	165	165	170	170	170	1880
Net Cash Flow	-	-10	10	-5	-35	-45	-25	-10	35	55	80	100	125	135	130	120	130	130	135	125	1160
Discount Factor (5%)	1.000	.952	.907	.864	.823	.784	.746	.711	.677	.645	.614	.585	•557	.530	.505	.481	458	436	.415	- 395	
Annual NPV	-	-10	10	-5	-30	-35	-20	- 5	25	35	50	60	70	70	65	60	60	55	55	50	
Cumulative NPV	-	-10	20	-25	-55	-90	-110	-115	-90	-55	-5	55	125	195	260	320	380	435	490	540	

TABLE 2: Financial implications of termination at review points

	Projects alrea				
Review Point	NPV* achieved by 2002	Year positive NPV* achieved	Nugatory Expenditur Incurred		
	£m		£m		
March 1985	10	1992/93	15		
March 1987	10	1992/93	55		
March 1989	200	1992/93	50		
March 1991	450	1991/92	65		

^{*} Net present value

ALTERNATIVE 2 development of a local office network to cover the payment and uprating of all locally administered benefits, supplementary benefit assessment and the calculation of unemployment benefit entitlement; construction of a centralised information source as in alternative 1 but with a common database shared between it and the local office network; within this approach 4 variants were identified, in ascending order of investment:

Option A making use of a restricted system dialogue (eg no prompts) and fewer terminals than proposed for the main strategy with a separate limited network in local offices accessing the centralised information

source.

Option B again a restricted dialogue and fewer terminals but these now switchable between systems to provide easier access to centralised information.

Option C making use of a comprehensive system dialogue with similar assumptions about numbers of terminals as the main strategy but still with a separate limited network to access the centralised information source.

Option D again a comprehensive dialogue and full set of terminals but these now switchable between systems.

17. The results of the calculations are summarised in Table 3.

Table 3: Costs and savings of alternative strategies

	ALT		Churchan				
	1	Option A	Option B	Option C	Option D	Strategy	
Total Cost	£450m	£510m	£510m	£620m	£620m	£720m	
Total Savings	£780m	£870m	£990m	£1410m	£1590m	£1880m	
Cumulative NPV*	£150m	£150m	£220m	£360m	£460m	£540m	
Year positive NPV* achieved	1992/93	1994/95	1993/94	1992/93	1992/93	1993/94	
Return on investment/	50%	50%	70%	100%	120%	120%	

* Net present value

The return is calculated by dividing the net savings by the costs (both discounted at the recommended rate of 5 per cent) and multiplying by 100.

APPENDIX 4

GLOSSARY

ACT Automatic Credit Transfer

Analogue telephone circuit Normal way of sending speech over the telephone system, gradually being superseded, in computer

use, by digital transmission (q.v.)

ADP Automatic data processing

Batch computer Computer system where work is processed in batches and results may be returned within

hours rather than minutes or seconds

Bit a binary digit

bps bits per second

BT British Telecom

Byte a number - usually 8 - of bits

CB Contributory Benefit

CCTA Central Computer and Telecommunications Agency

CHB Child Benefit

Conts Contributions

Data and functional analysis The study of data required by an organisation

to fulfil its business; and the study and identification of the functions the business performs (associating the data items) in achieving its objectives, irrespective of the

organisational structure

Database A pool of data available to different users

Data input validation Program to prevent misinformation being

program entered into a system

Datalink DHSS computer system to enable local office to obtain contribution records using over-

night telephone calls

Dedicated leased telephone A telephone line leased from British Telecom (eg for computer traffic) used exclusively

(eg for computer traffic) used exclusively by the lessee; also know as a private

circuit

DCI Departmental Central Index

DE Department of Employment

Department of Health and Social Security DHSS Telephone (or other) circuits where the Digital transmission transmitted signal is encoded as a series of pulses which can be represented as numbers Economic advisers' office (of the DHSS) EAO Encoding of data to prevent unauthorised Encryption access Family Income Supplement FIS General Index GI The physical pieces of equipment that make Hardware up a computer Integrated local office (run by DHSS) ILO Facsimile copying through the telephone system Intelligent copier One in which the user enters data in response Interactive system to questions by the system Inland Revenue IR Invalidity Benefit IVB Local office LO One million bytes Megabyte Non-contributory invalidity pension NCIP North Fylde Central Office NFCO National Insurance NI Net present value NPV National unemployment benefit system NUBS A terminal remote from but connected to On-line the main computer so that it can communi-

ORS

cate with it

Operational Research Service (of the DHSS)

PAYE Pay-as-you-earn Post Office PO Prestel Information held on computer database accessed through public telephone network for TV display Project resource organisation management PROMPT planning techniques PSS Packet Switched Services. (British Telecom's PSS is known as Switchstream One) Retirement Pension RP SB Sickness Benefit Software A set of instructions for the computer See PSS (q.v) Switchstream Apparatus for transmitting messages to Terminal and from computer TUS Trade Union Side UB Unemployment benefit Unemployment benefit office (run by DE) UBO VDU Visual display unit (television screen display of computer information) Widows' benefit WB X-stream The range of British Telecom's digital

Switchstream (q.v))

communication services (including PSS/

SOCIAL SECURITY OPERATIONAL STRATEGY

U

A brief guide

INTRODUCTION

This paper provides a brief guide to the social security operational strategy including its origins, the main proposals now put forward in Working Paper II, the costs and the returns. A glossary of terms is at the end.

SOCIAL SECURITY TODAY

The scale of social security operations is huge:

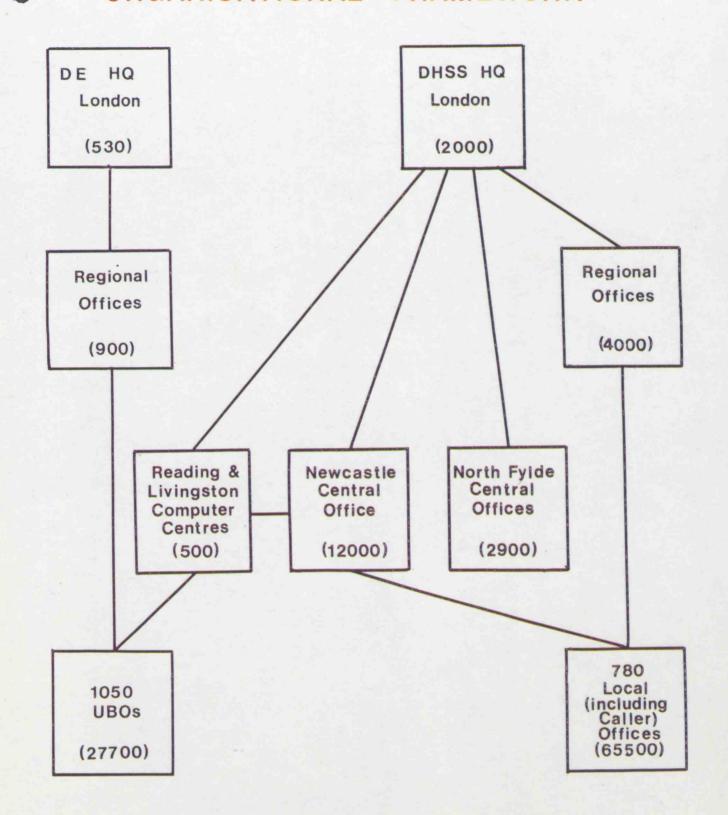
- . 25 million claims a year;
- 24 million beneficiaries at any one time;
- . 1,200 million payments a year;
- . 117,000 staff in the Department of Health and Social Security (DHSS) and the Department of Employment (DE) - predominantly clerical staff working outside London;
- f1,400 million administration costs
 (1981/82).

The work is highly complex: over 30 benefits are paid (10 introduced in the 1970s); staff rely on over 100 bulky instruction manuals - closely printed, frequently amended and full of cross-references.

DHSS and DE already rely heavily on computers, housed at four centres. Newcastle is one of the biggest centres in Europe. Almost £40 million is invested in computers and there are around 3,000 ADP staff.

Figure 1 shows the organizational structure of the whole system, in both DHSS and DE. The Reading and Livingston computer centres are linked to a separate network of Unemployment Benefit Offices (UBOs) - run by DE - and pay benefits to the unemployed. Newcastle Central Office records contributions for the whole working population and pays Retirement and Widow's Pension and Child Benefit. North Fylde Central Office pays War Pensions and various disablement benefits. At all these points in the network computers play an important part.

ORGANISATIONAL FRAMEWORK



Staff nos. shown in brackets (October 1981)

Figure 1

DHSS local offices, however, are purely clerical with millions of paper records held in rows of filing cabinets. These offices are the initial contact point for the public. Half the staff work on calculating and paying supplementary benefit, while the rest are concerned with sickness, invalidity and other benefits and other local work.

WHY A STRATEGY?

A combination of <u>concerns</u> about the state of operations, allied with an awareness of new technical <u>opportunities</u>, surfaced together in the late 1970s and led to work on a strategy for operations for the 1980s and 1990s.

The problems included reliance on paper and on more and more clerical staff - expensive and inefficient methods. Staff numbers, administrative costs and supplementary benefit error rates all rose sharply in the 1970s. Complexity increased and standards of efficiency and service to the public seemed to decline.

The computer systems were not able to give direct and immediate help to front-line local office staff in DHSS and, through them, to the public.

Meanwhile, computers and telecommunications were generally becoming cheaper, faster, more reliable and able to handle more work. This opened up quite new opportunities. Things which had been technically impossible or too expensive to contemplate began to seem feasible.

The present DHSS computers have to be replaced during the 1980s and this offers an opportunity to introduce a more coherent system providing real improvements - for the public, the taxpayer and the staff.

WORK SO FAR

The work started within DHSS in the late 1970s. The pace quickened in 1980, when a new Strategy Team was set up and the Secretary of State for Social Services announced the work in Parliament:

'Piecemeal changes can never be enough. We need a more radical approach if we are to modernise the way we run the system and give the public a quicker and more accurate service. We also want the staff to have more worthwhile jobs with greater satisfaction.' (Hansard 21 November 1980.)

The first Working Paper was published in December 1980. It explained the reasons for the strategy and stressed as key issues the need for economy and efficiency; the need to improve service to customers, particularly by treating them more as 'whole persons' with a range of social security requirements; and the need to involve staff and pay particularly close attention to the relationship between people and machines. Working Paper I invited discussion and called for a further paper with specific proposals for a strategy to meet these needs.

In January 1981 the Parliamentary Secretary (Social Security) chaired a two-day seminar at Sunningdale, at which the strategy was considered by a group of well-informed outsiders - including people with extensive private sector computing and management experience. The broad approach was welcomed, but the scale of the undertaking and the need to avoid undue risk was stressed. Since then wide discussions - inside and outside Government - and analysis work have led up to the proposals contained in Working Paper II.

THE PROPOSALS

More Economic and Effective Use of Claimant Information

Collecting, storing and using information about contributors and claimants lies at the heart of social security operations. At present the information is poorly organised. Several separate records may be held about one individual. It is difficult to keep them up to date and consistent and for staff in one part of the organization to get relevant information held elsewhere. This causes inefficiency and waste and a risk of overpayments to which the Public Accounts Committee has drawn attention:

'We urge the Departments [DHSS and DE] to pursue their investigations to ensure that full advantage is taken of the facilities offered by computers to cross-check and supply information at the point at which a claim is decided.' (PAC 9th Report, 1976/77)

This highlights a central issue: either DHSS and DE continue to hold large numbers of separate records in a form not easily accessible to local office staff, or they link them together and make them readily available to the staff who need the information. Technology now makes it possible to pursue the second alternative and we propose that the records should be re-structured to minimise duplication of information and make it accessible to the staff who need it. There will be fears about privacy, and strict safeguards to control access and prevent abuse will have to be built in. But to take any other course would mean opting for less efficiency and less control of public money and foregoing opportunities to improve standards of service.

Cross Benefit Approach

In the past each benefit has been administered largely in isolation. The strategy work has sought to identify functions which are the same irrespective of benefit. Printing order books or giros is a clear example. We recommend that so far as possible common approaches should be used for all benefits, to achieve economies and a less confusing system.

Common Communications Network

As telecommunications become more important, it is essential to prevent the spread of different, incompatible networks, which would restrict flexibility and confuse staff. We recommend a common, general purpose network spanning all social security offices.

Terminals for Staff

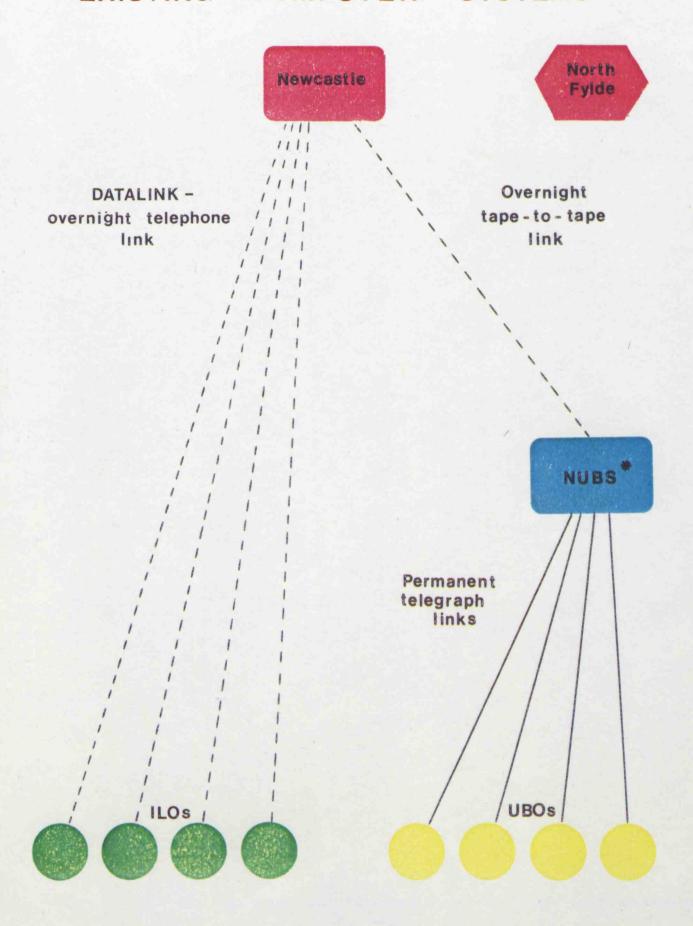
Computer terminals on the desk would give staff access to the information they need and to computer assistance. We recommend the widespread use of such terminals: they would replace paper and pens as the basic working tool for benefit clerks.

New Computer Structure

To put these proposals into practice, DHSS and DE would have to move from the present computer structure to a more modern and integrated one.

Figure 2 illustrates the present arrangements. They reflect the constraints of the 1960s and 1970s when they were designed. For example, both sickness

EXISTING COMPUTER SYSTEMS



National Unemployment Benefit System computer centres at Reading and Livingston

benefit - administered in DHSS integrated local offices (ILOs) - and unemployment benefit - administered through UBOs and the National Unemployment Benefit System (NUBS) computers at Reading and Livingston - rely on national insurance records at Newcastle; yet these closely related benefits are administered quite separately and rely on separate and rudimentary communications links to access these records.

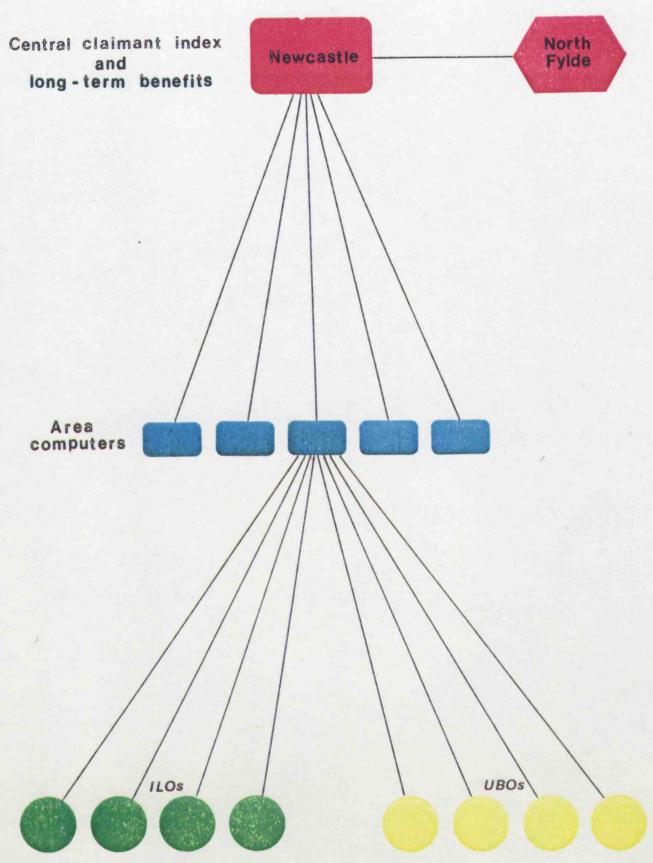
Figure 3 shows the proposed long-term computer structure. To concentrate computer resources at either central or local offices would mean excessive size and concentration at the centre and/or unrealistic demands on local processing facilities. The addition of area centres would enable a more balanced structure.

Ultimately, each area computer centre would:

- support a number of ILOs and UBOs, making the same information and computer resources (eg facilities to calculate benefit entitlement) available to both;
- provide quick communications between local and central offices and between local offices themselves;
- hold the main information about claimants living in their area;
- provide natural locations for fast, efficient payment centres.

The structure would build up gradually. In the 1980s the Area Centres would be established, holding information and computer programs and with links to ILOs and Newcastle. Among the first activities which they would support would be the payment and uprating of local office benefits, and the calculation of

PROPOSED COMPUTER STRUCTURE



VDUs/micros in local offices

NOTE: all telecommunications use fast telephone/digital links

entitlement for claimants to supplementary assessment and sickness benefit. In parallel, a new central index would be developed at Newcastle; and the existing large computer systems there would be modernised.

Meanwhile, UBOs would continue to be supported by the NUBS computers, but improvements - notably the introduction of visual display units to improve links between the offices and the computer centres - would be introduced.

In the early 1990s UBOs would be linked to the area This would make attainable the objective that unemployed claimants should not have to deal with both DHSS offices and UBOs: the network would enable the full range of benefit transactions for the unemployed to be handled through 'one office'. The North Fylde system would also be more closely integrated and an option would exist to distribute pension and child benefit administration from Newcastle Central Office to area centres and local offices to further the 'whole person' concept by making the local office the point through which all social security benefit transactions for an individual are handled.

However, all this will take time and local offices need computer help now. We propose that micro-computers should be introduced into local offices as an interim step - starting in 1983.

Implementation

The proposed new structure could not be implemented as a single exercise: it must be broken down into individual projects developed within a strategic framework. Figure 4 shows the most important ones and the suggested dates for systems development and implementation.

MAIN STRATEGY PROJECTS

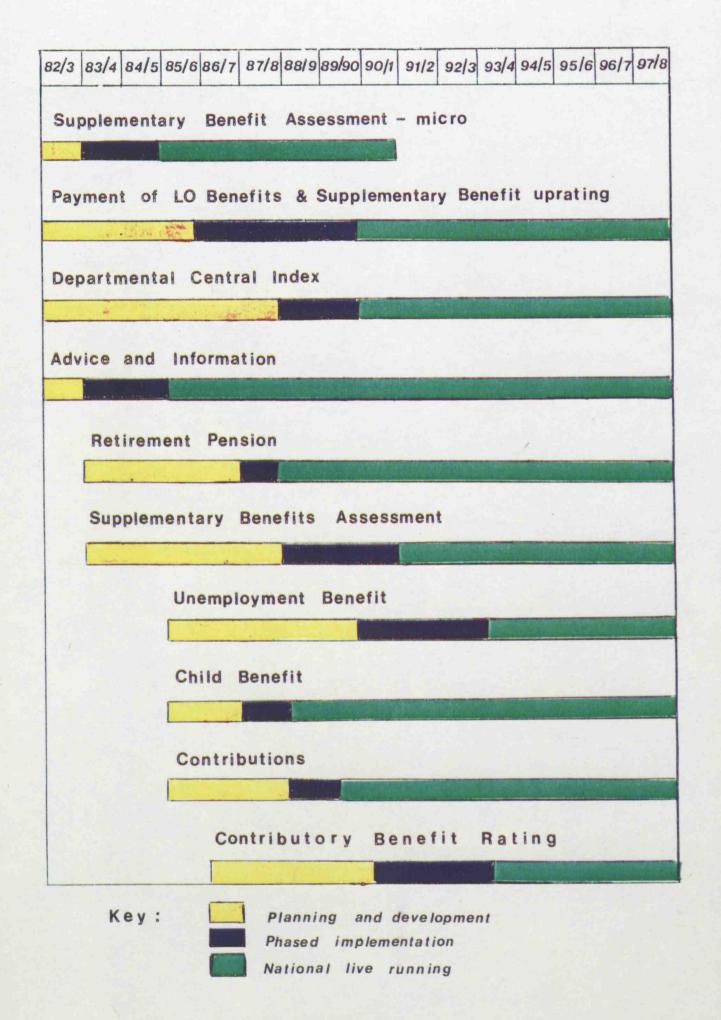


Figure 4

The first and fourth projects are relatively small-scale micro-computer systems which could be implemented quickly. The second and third are particularly important, as they will together established the frame-work (central index, area centres, communications network, database) on which subsequent projects will build.

Managing these inter-dependent projects will be a complex and difficult task. Strong central management will be essential.

THE GAINS

The proposals would enable a better service for the public. As local office staff would have ready access to all the information they need to deal with a case they would be able to provide better information to customers and a quicker and more efficient service. As computers shoulder more of the burden of calculations and ensure that all the right questions are asked, errors should be reduced and calculations speeded up. As staff would be less burdened by procedural and arithmetical work each of them would be able to handle a wider range of social security business, instead of requiring claimants to contact different counters at different offices. It would then be possible for them to treat customers as 'whole persons'.

The Government would achieve substantial staff and financial savings (discussed further below); fewer complaints about inaccuracies, overpayments etc; better controls against abuse due to improved cross-referencing of available information; and a computer structure which was more responsive and adaptable to change than the present systems and more able to cope with additional demands than the present over-stretched manual systems. (The difficulties of introducing a tax credits system, for example, would be reduced.)

The staff too would benefit. The focus of their work could shift from processing paper to dealing with people and resolving their problems. By having the information on which they depend readily available they would be able to do a better and satisfying job. The frustrations of not having information available, of depending on others elsewhere to complete a task, and of relying on complex and voluminous instruction manuals should all diminish.

COSTS AND SAVINGS

NET CASH FLOW OVER STRATEGY PERIOD

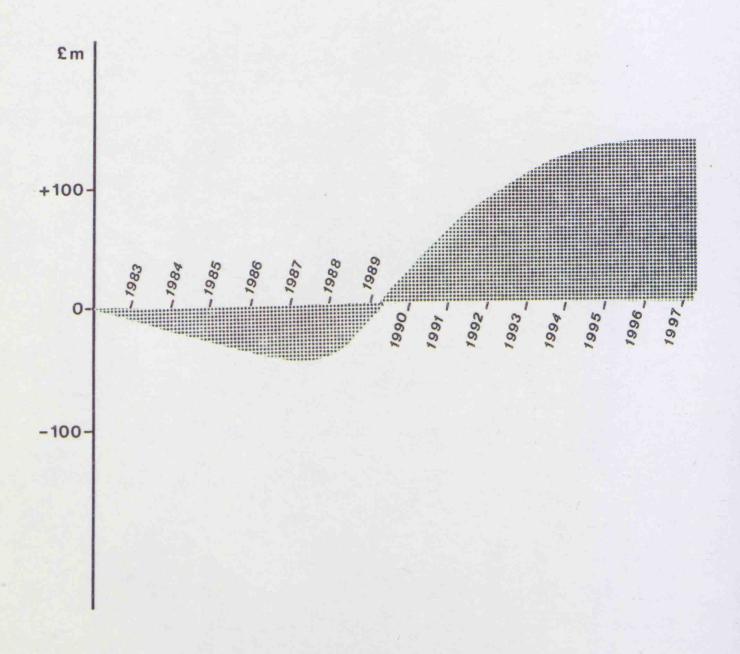


Figure 5

COSTS AND SAVINGS

DHSS will need to spend around £900 million* (November 1981 prices) over the 20 years 1982/2002 simply to keep the current computer structure running with minimal improvement.

Implementation of the full strategy proposals would cost an additional £700 million* and would produce gross savings of £1,900 million* over the same period: a return of 123%. The internal rate of return (the discount rate at which savings would equal expenditure) is 27%.

Figure 5 shows the cash flow: net annual expenditure in the 1980s turns to net annual savings after 1990. In net present value terms the strategy will have paid for itself by 1993.

Most of the savings would come from fewer staff in DHSS and DE, particularly in local offices. The build-up of staff savings is illustrated in Figure 6. Savings would start in 1984, would build up gradually at first but more sharply from the end of the decade. By 1995 they would have reached 20-25,000. The aim would be to achieve these savings through natural wastage.

The strategy would thus facilitate continued reductions in the size of two major Government Departments; would provide a planned framework for achieving them; and would enable this to be done while improving the level of service provided.

^{*} At this stage the figures must be regarded as order of magnitude estimates.

STAFF SAVINGS

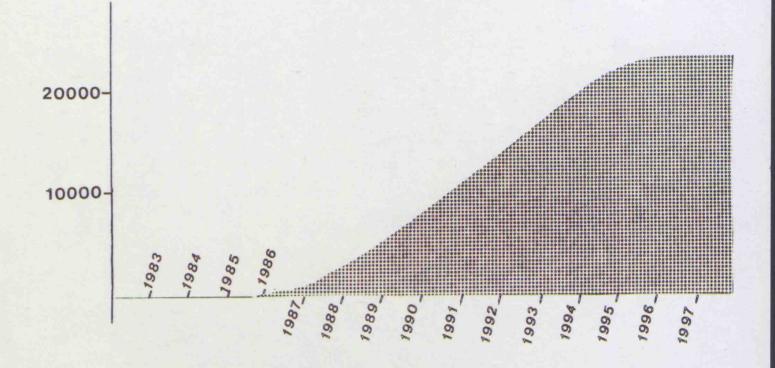


Figure 6

It is not necessary to seek global approval for the total investment needed to complete the strategy. Each project within it would be individually costed and decisions on investment would be taken one by one, in the light both of their individual justification and their contribution to the strategy as a whole. During the time the strategy is developing technology will advance and the demands on the system may change: this reinforces the need for a flexible approach, with constant reappraisal.

KEY REQUIREMENTS

Success is only possible if a number of key requirements are met.

The strategy must be <u>flexible</u> and responsive to change - not a straight-jacket. It should be seen as a framework within which individual projects are justified and carried forward. Constant monitoring will be necessary. In addition, several review points are built in at each of which it would be possible to stop or change direction. Working Paper II also outlines several variants, which would be less comprehensive and less expensive but would offer smaller savings and lower attainment of strategy objectives.

Privacy and security must be safeguarded. The strategy does not require any additional personal information to be held by the Departments: it proposes that it should be used better. Forthcoming legislation will provide the framework for data protection. Access to sensitive information would be controlled (eg by passwords, badges, voice prints, special authorisation procedures, etc). Significant back-up support to cope with machine failure would be needed and has been included in the costings. The extent of security controls and back-up provision will be determined in the detailed planning of the individual projects, in the light of the possible risks and costs involved.

Effective management will be essential:

- to ensure unity of purpose throughout the planning and implementation process;
- to ensure that necessary resources (including skilled technical personnel) are available and efficiently deployed; and
- to maintain momentum and proper control.

CONCLUSION

The proposed strategy would enable DHSS and DE to provide a modernised and more efficient service at lower cost. It would also have wider implications for Government:

- it would continue the Government's drive for greater efficiency and lower Civil Service staff numbers, beyond 1984;
 - it would give practical expression to the Government's determination, in Information Technology Year, to take full advantage of modern technology in its own directly run services;
- it would make a major contribution to technological advance in the UK, generating high technology business and jobs.

GLOSSARY

Department of Employment DE Department of Health and Social Security DHSS ILO Integrated Local Office Local Office LO Newcastle Central Office NCO North Fylde Central Office NFCO National Unemployment Benefit System NUBS PAC Public Accounts Committee Unemployment Benefit Office UBO VDU Visual Display Unit

COMPIDENTIAL



Social Senne

2 MARSHAM STREET LONDON SWIP 3EB

My ref: H/PSO/17346/80

Your ref:

70 October 1980

Der Patrick

SOCIAL SECURITY OPERATIONAL STRATEGY

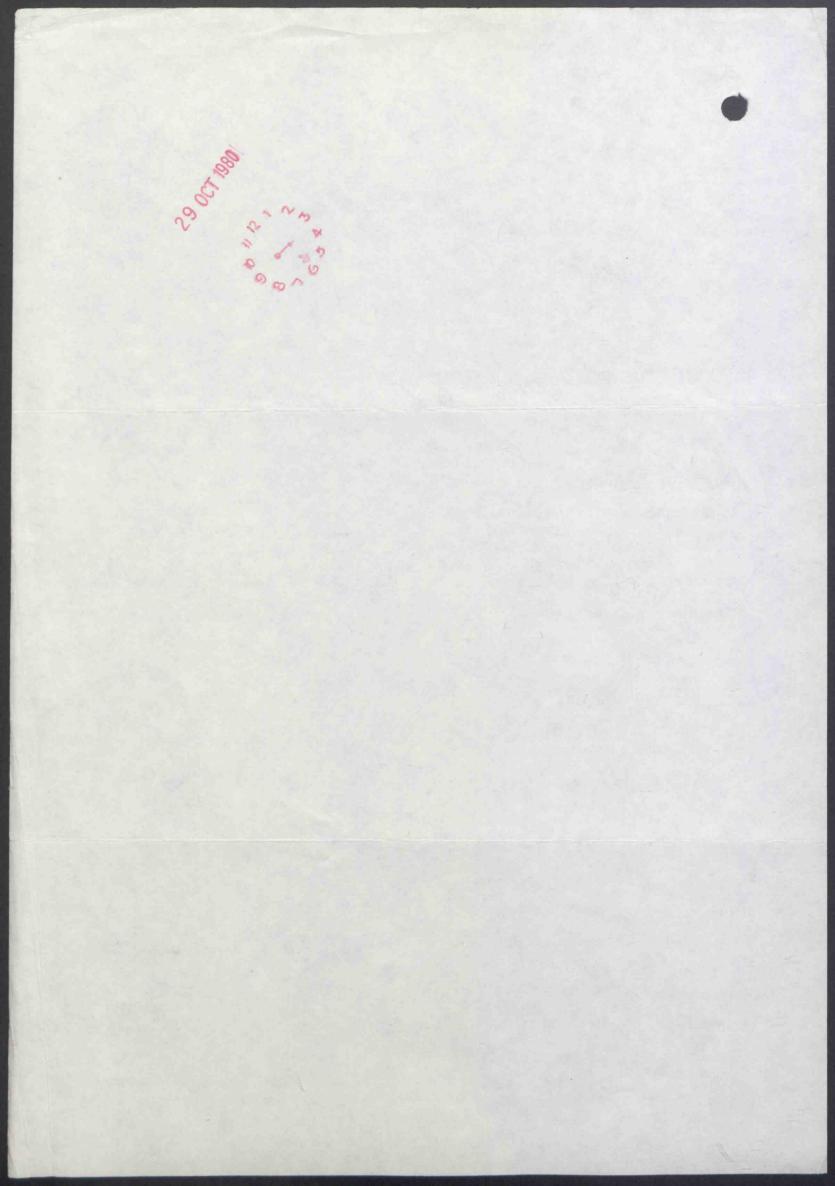
I have seen your letter of 26 September to Willie Whitelaw, and agree that the Strategy document should be published. As you point out, public discussion of these matters is a necessary part of the process of change.

I note that there are implications for local government in your proposals but any increase in the efficiency in the DHSS service to claimants will no doubt ease the burden on local authority social service departments. I take it the local authority associations will be invited to join discussions on the exercise.

I am sending copies of this to the recipients of yours.

MICHAEL HESELTINE

The Rt Hon Patrick Jenkin MP



ARRANGEMENTS FOR PAYING SOCIAL SECURITY BENEFITS

Patrick Jenkin has now received comments from colleagues on his draft consultation paper about Social Security benefits, arising from last year's Rayner Project.

As I mentioned to you several weeks ago, there is one fundamental issue remaining. This is the question of frequency of payment of retirement pensions. You made it clear some time ago that compulsion should be ruled out. Mr. Jenkin wants to interpret this to apply not only to present pensioners but also to everyone who becomes eligible for pension in the future. Derek Rayner believes strongly that it would be a mistake to make a binding commitment about future pensioners, and he sees real advantages in proposing to switch new pensioners to fortnightly payment from some specified date in the future.

Even without this change, the Project is still likely to be worth savings of some £40 million, but the additional change could add considerably in the long term. As you know, Ireland is the only other EEC country which still pays its pensions once a week. I attach a copy of Derek Rayner's letter on the subject.

Do you wish to support Derek Rayner on this point, or to support Patrick Jenkin, or to stay out of the argument?

ms. MAD

Treasury Chambers, Parliament Street, SWIP 3AG Rt Hon Patrick Jenkin MP Secretary of State Department of Health and Social Security Alexander Fleming House Elephant & Castle London SE1 8BY 15 October 1980 Dear Patrick, SOCIAL SECURITY OPERATIONAL STRATEGY Thank you for sending me a copy of your letter of 26 September to Willie Whitelaw. Obviously it is desirable that your massive social security operation should function efficiently and economically, and thus it is clearly right that your Department should be examining its possible development over the next decade or so. I agree, too, that given the importance of the matter, and the necessary involvement of your staff, and the very many other interests that are likely to be concerned, it would be sensible to "go public" in the way you propose. That said, however, I think we should be careful about how fast we proceed down the path you suggest, and in particular how far we should either raise expectations now that dramatic changes are in the offing, or allow ourselves to become committed to any particular system or development without being quite sure that that is what we want. This means that it must be clear that the next stage is, as you propose, merely the design of a strategy, leaving all the options open. There are a number of reasons why I think we should proceed gently. The first and obvious one, of course, is the question of the money and manpower resources that would be involved. I can understand why the draft document is, if I may say so, rather thin on these matters at present. But clearly given present public expenditure and manpower constraints we shall have to be very careful indeed about the worthwhileness of any increased public expenditure on the administration; indeed all our efforts should be bent in the other direction. I hope, therefore, that 1.

the draft document can make it clear that cash and manpower constraints may, when they come to be quantified, necessarily mean that developments that might otherwise be desirable will not be feasible, or at least not immediately feasible.

Second, there is the question of the cost-effectiveness of the exercise. I can understand the desirability of having the quality of service given to beneficiaries as high as possible, but this has a cost and needs to be judged against the efficiency (in the sense of cutting the cost of delivering benefits) that can be achieved. And there may be some room for argument about what is meant by "quality" - the nub of your proposal is, as I understand it, the "whole person" concept but, quite apart from considerations of administrative cost and privacy, it will have to be shown that this does give a better and fairer service to the individual than the present benefit by benefit approach.

Thirdly, I am concerned about the question of flexibility and the need not to over-fossilize the system whether during the period of development of the new strategy or for later. Our efforts must be bent to simplifying the basic social security system rather than building an administration which enshrines the complexities. And we must continue to bear in mind the possibility, at some stage in the future, of a closer link with the tax system - at the moment we have no alternative to two large administrations one taking money from people and the other giving it to them, but this might not have to be so forever.

At the end of the day, or indeed as we go along, there will of course be trade-offs between the various desiderata involved; for instance cost versus manpower, cost or manpower versus speed or efficiency, speed or efficiency versus flexibility, and of course speed and efficiency versus vulnerability. I am not sure that your paper completely recognises that these trade-offs exist and will have to be looked at as the exercise proceeds. We do not want to find ourselves unknowingly stuck with a system which gives the various factors the wrong weights.

As I say, I agree that it is right for you to look at your long term stategy, and I am content for you to proceed as you propose by way of announcement and publication of your plans. On the substance, I am sorry to appear to be so cautious, but there are a number of points which appear to need watching and which we shall have to consider as planning develops. I hope it will be possible for your paper, or perhaps your introduction to it, to reflect some of these points and, more generally, the fact that the strategy is still very much at the planning stage.

I am copying this letter to those who had copies of yours.

JOHN BIFFEN

Willes Billes



with compliments

MINISTER OF STATE

MAP

CIVIL SERVICE DEPARTMENT Whitehall London SW1A 2AZ Telephone 01-273 5563/4086



Minister of State

Civil Service Department Whitehall London SW1A 2AZ Telephone 01-273 3000

The Rt Hon Patrick Jenkin MP
Secretary of State for Social Services
Department of Health & Social Security
Alexander Fleming House
Elephant and Castle
LONDON SE1 6BY

15 October 1980

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SOCIAL SECURITY OPERATIONAL STRATEGY

You sent Christopher Soames a copy of your letter of 26 September to Willie Whitelaw about this. Since you ask for urgent comments Christopher Soames, who is away today, has asked me to reply on his behalf. I welcome the general thrust of the paper. But I do think we should give more emphasis to the need for economy. In paragraphs 7-13, surely our objective must be cut the cost of administration, not simply to limit growth. We need a paragraph somewhere making this point clear.

In addition to your long-term work, I hope DHSS will now press ahead where possible with short-term simplification. This is important both as part of our strategy to cut the Civil Service and also since the simpler the system the simpler it will be to computerise it later, as suggested in the paper.

I agree that it would be useful to publish the document. There will of course be a mass of work to be done in the next year or so, and I would be grateful if our officials could keep in close touch.

I am copying this letter to the Prime Minister, Willie Whitelaw, Geoffrey Howe, Keith Joseph, the members of H Committee, Sir Derek Rayner, Sir Robert Armstrong and Mr Ibbs.

/-,

PAUL CHANNON

CABINET OFFICE 70 Whitehall, London swia 2As Telephone 01- 233 13 October 1980 The Rt Hon Patrick Jenkin MP Secretary of State for Social Services Alexander Fleming House Elephant and Castle London SE1 ARRANGEMENTS FOR PAYING SOCIAL SECURITY BENEFITS enclosing a draft of the Command Paper.

- 1. Thank you for copying to me your letter to Willie Whitelaw of 26 September
- 2. You and Linda Chalker have both given much personal consideration to the Warner Report's recommendations for improving the efficiency and effectiveness with which social security payments are made. If I may say so, I am grateful to you for sticking to the subject.
- 3. I am glad that you have been able to accept those recommendations which relate to administrative procedures, the method of payment and, in the case of child benefit, the frequency of payment. The savings of £40,000,000 per annum, achievable by 1987-88, are well worth having. I am glad also that Keith Joseph has agreed to amend the Post Office Act, so enabling these changes to be effected without conflicting with the Government's commitment to preserving the post office network at about its present level.
- 4. I am disappointed however that changes are not contemplated in the frequency of payment to retirement pensioners, widows and those in receipt of smaller volume benefits, except where they are paid direct into a bank account.
- 5. I do of course recognise that pressures may be applied against such changes. On the other hand the Command Paper is extremely convincing on the case for change. For example, in paragraph 13, it is argued that many pensioners, especially the younger ones and those reaching retirement age during the next decade, would be willing to receive their payments less often than weekly and it is noted that, with the exception of Eire, the United Kingdom is unique among EEC countries in paying pensions as often as once a week.

6. The Command Paper is accordingly a persuasive vehicle for reform, opportunities for which might be very difficult to recreate in the future. Certainly, if present opportunities are lost, the penalty in terms of unnecessary administrative costs will be high. 7. If the Command Paper were to envisage a change to fortnightly payment for all new pensioners, starting say 1985, it would secure the future, even though immediate savings would be relatively small. Moreover it would enable change to be sufficiently gradual for the sub-postmasters to adjust within their new found freedom from the shackles of the Post Office Act 1969. I do hope that this opportunity can be taken. 8. I am copying this to your copy addressees. DEREK RAYNER

14 OCT 1980



Stud tence

10 DOWNING STREET

From the Private Secretary

13 October 1980

BF 27.10/80

The Prime Minister has seen your Secretary of State's letter of 26 September about a long term strategy for social security operations.

She is concerned about the proposal for a single reference number throughout the social security system. No matter how clear cut the present Government's intentions, there could be nothing to prevent some future Government abrogating whatever safeguards were now built into such a system.

Mrs Thatcher would therefore like to be kept informed of the way in which your Secretary of State proposes to touch on the strategy during the Debate on the Address, and she would not wish the Government to feel committed to any particular decision on the single reference number point until the work now in hand on data protection is complete.

I am sending copies of this letter to Stephen Boys-Smith (Home Office) and David Wright (Cabinet Office).

M. A. PATTISON

Don Brereton, Esq., Department of Health and Social Security.

CORFIDENTIAL

PRIME MINISTER

DHSS have been working on a long term operational strategy for social security. The work was begun under the previous Government, but Mr. Jenkin was happy to continue it. He is now ready to broaden consultation. He would like to touch on the matter during the debate on The Queen's Speech and make a consultation paper available shortly afterwards. If any discussion is necessary, it will take place in H Committee.

Mr. Jenkin's letter below (A) draws attention in particular to the proposal that everyone should have a single reference number throughout the social security system. This will certainly get a bad reception from those who fear the Government's ability to centalise all available information about individuals. But, equally, such rationalisation is a logical part of efforts to rationalise the system.

The document is quite long. There is a one page resume at Flag B and the full paper is at C. The specific decisions eventually reached in this field will be an important test of sensible use of computers and other advanced technology. In general, the paper seems to me to cover thoroughly the issues which have been under study. But you may think there is a gap, in the lack of any real discussion of rationalising the existing range of instructions on entitlement to social security benefits. This may well draw comments from other recipients of the paper.

MAR

2 October 1980

CONFIDENTIAL





DEPARTMENT OF HEALTH & SOCIAL SECURITY

Alexander Fleming House, Elephant & Castle, London SEI 6BY

Telephone 01-407 5522

From the Secretary of State for Social Services

The Rt Hon William Whitelaw CH MC MP Secretary of State for the Home Department Home Office 50 Queen Anne's Gate London SW1

26 September 1980

year Willie,

SOCIAL SECURITY OPERATIONAL STRATEGY

I enclose a copy of a paper about a long-term strategy for social security operations, with a brief synopsis. The work on which this paper is based was started under our predecessors. I welcomed it when we took over and have aimed to keep the momentum going despite staff cuts at Headquarters.

The paper reflects the general concern about the growing cost and complexity of social security operations in recent years. It identifies some of the main requirements for an improved operational system, reviews the opportunities offered by the rapid development of computer and communications technology, and proposes a work programme for improving and updating our systems. The next step, to be completed by the end of 1981, is the design of an overall strategy; it would be followed by a phased and gradual implementation programme, probably extending over the rest of the decade and beyond.

I am convinced over the next few years we must improve the efficiency and the quality of the social security service. I have accordingly given the go-ahead for the next phase of the work programme.

So far, however, work on the strategy has been confined almost entirely to the DHSS. I think we have now reached a stage where something should be said in Parliament so that MPs (and others) can offer their views. There is nothing intrinsically sensitive or secret about it and, in the end, success will be prejudiced if plans are kept too long under wraps. I would wish, therefore, to refer to the subject during the debate on the Queen's Speech (if I am one of the speakers), and to make the document publicly available a week or two later, probably by means of a written Parliamentary Answer and press conference. The purpose of this letter is to seek your agreement, and that of the other members of H Committee, to the publication of the paper in this way.

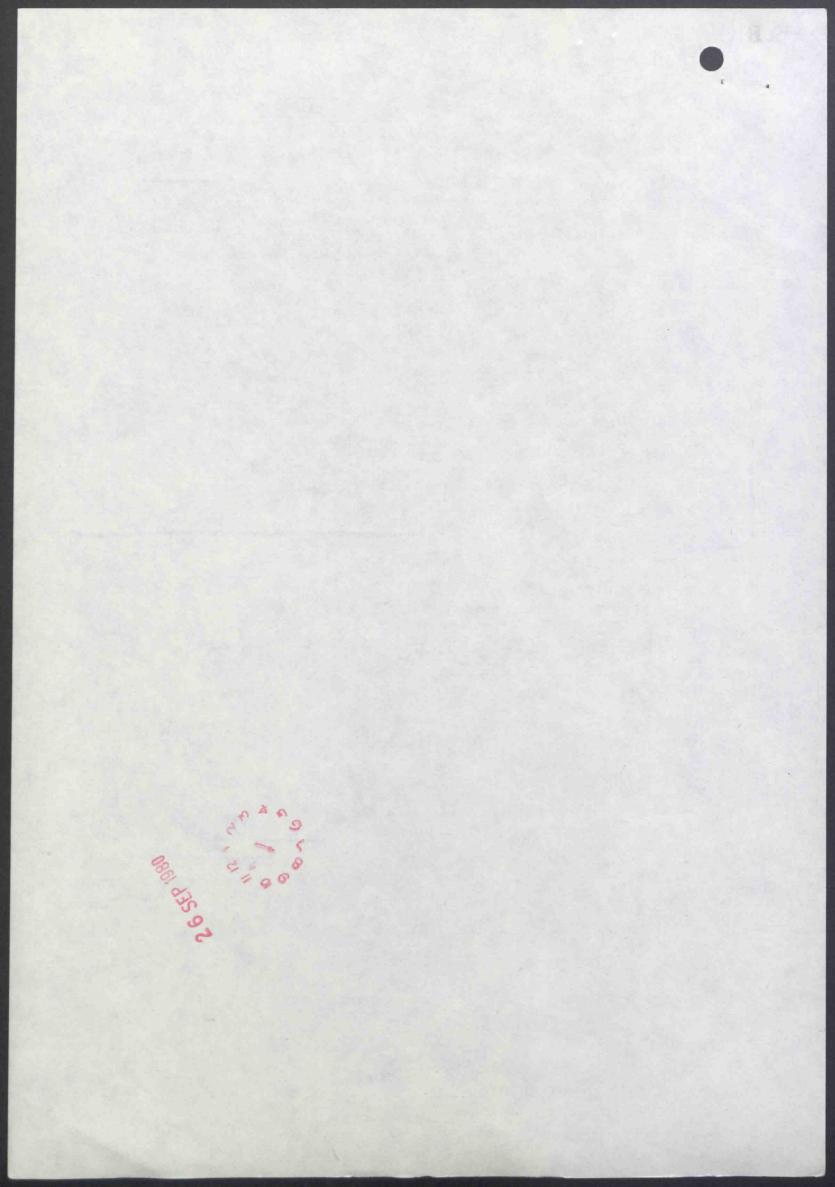
There are one or two matters to which I should draw your attention. One objective of the strategy is to ensure that the future system enables the Department to treat people, as far as possible "in the round", so that all their social security business can be handled together instead of, as at present, benefit by benefit. This implies both an improved and modernised communications system and a re-organisation of our records systems, so that up-to-date information can be made available at the point where it is needed. The key to this is the use of a reference number for each person throughout the social security system. As I mentioned to you in my letter of 28 July, in the context of the Lindop Report, we intend to use the familiar national insurance numbers for this purpose. Although this is nothing but commonsense and does not involve our holding any additional information, or making the information we hold more readily available to outsiders, it may be criticised as giving the Government new opportunities to bring together and manipulate personal information. Critics may refer to the apparently approving way in which the Lindop Committee noted the DHSS's inability to link different benefit records (paragraph 29.16 of the report) even though the Committee made no specific recommendation on that score.

Subject to your own views, I would propose to respond to any such criticism by stressing the considerable advantages a more coherent system should afford the public; the modest nature of the step itself (merely a more rational approach to information already held); the absence of any specific recommendation by Lindop on the use of the NI number for internal DHSS purposes; and the importance which we attach to incorporating adequate checks and safeguards against unauthorised disclosure of information - including safeguards on who within DHSS itself will have access to records. If by then you have announced the Government's intentions with regard to the general issues raised by Lindop, I would also refer to that.

Although I would not propose to make much of this in public, I see it as one of the prime requirements of an improved system to minimise the vulnerability of our operations to deliberate or accidental disruption. It is too early to specify what this will mean in detailed system design terms, but I am anxious to ensure, if possible, that local offices are able to continue to provide a service even if other parts of the network cease to function. I have asked officials to give this high priority at the next stage.

The attitude of our own staff in the field could well be critically important in determining the success or failure of the strategy. Senior managers from our central offices and regions have played an important part in producing the present proposals. I am told that some interest is already being shown among the staff generally and we shall make sure that they get an early sight of the planning document and an opportunity to make their contribution. We are about to open up a dialogue with our Trade Union side; their initial reaction has been less unfavourable than one might have expected. One of our objectives, obviously, will be increased productivity. But the time-scale is long enough to make it possible for unions and management to see a common interest in improving the reputation of the Department and the quality of the jobs it provides.

Publishing the planning paper will give interested people outside the Department an opportunity to contribute their views on the exercise. I propose to arrange a seminar early in the New Year for people who have some special interest or contribution to make, such as other large scale computer users, academics and scientists, management experts and so on. Informal bilateral discussions will be held with



computer companies, particularly ICL and other British companies, and later on we may want to involve outside consultants.

I should welcome any comments which you or others may have on these proposals. It would be helpful if I could receive them by 15 October so that we can get the paper to the printer in time for publication in late November. I am copying this letter and the enclosures to the Prime Minister, Geoffrey Howe, Keith Joseph, the members of H Committee, Sir Derek Rayner, Sir Robert Armstrong and Mr Ibbs.

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RESUME OF PLANNING DOCUMENT Sections I & II - objectives and need for a strategy Set out the aims and objectives of the strategy - a coherent, flexible, efficient system satisfying policy makers, the public and the staff, with a target period 1980-1990 (requirements of the system are developed further in Appendix 1); point out the weaknesses of current system-complexity, staff pressures, technical backwardness, compartmentalisation etc; suggest costs of new system may be no more than that of preserving the old system (parall). Important constraints to be taken account of in planning: the need for the capacity to exchange data with Inland Revenue; the preservation of confidentiality and security; financial and manpower constraints (para. 12). Section III - operational tasks Suggests need for improved service in the area of advice and information (para 16); in respect of location of functions points out that very few need be carried out in one particular place but there is a need for a personal service at local level (paras 22-23). Outlines options for providing a computer communications capability involving degrees of centralisation/decentralisation (paras 25-26). Stresses the importance of dealing with claimants as far as possible "in the round" so that all their business with the Department can be handled together instead of in a number of separate benefit by benefit transactions (paras 27-29). Section IV - people and machines Stresses importance of involving staff with the strategy. Crucial issues include relationship between man and machine, implications for job satisfaction, training requirements and phasing of change to minimise disturbance in the service and allow staff time to assimilate new work (para 36). Section V - what technology has to offer Outlines recent and prospective technological advances which could produce an improved system. Potential benefits include more accurate and comprehensive advice on entitlement, less duplication of work and records, speedier settlement of claims, reduction in overpayments where these arise from failure to match information in different parts of the system (paras 43-44). Section VI - proposals Outlines future work programme. Key element is design of modern communications system which will with proper safeguards against improper use allow ready access to data at present held in central and local offices from any location (para 47a). The next stage of the strategy will be preparation of proposals for an integrated operational system including broad costs and savings and organisational and human implications, to reach Ministers by around the end of 1981 (para 50). importance of wider consultation with all the agencies who will be affected by changes in social security operations is stressed (paras 51-52).

DRAFT FOREWORD

This document is concerned with social security operations: the system by which contributions are recorded, advice provided, claims to benefits taken, the amount to be paid calculated and the payments made; and the essential back-up operations involving record-keeping, controls, management and technical support. It is not concerned with social security benefits themselves and their possible future developments.

Such a focus is unusual, since most public debate on social security is concerned primarily with the adequacy or inadequacy of the benefits, not with the system through which they are paid. However, it is justified since the operations themselves have been coming under increasing strain. At the same time, new technical possibilities are opening up. If used sensibly and imaginatively, they should enable us to develop an improved system and to provide better service for the public, more interesting work for the staff, and greater efficiency for the tax-payer.

The work of analysing the present system to see what improvements might be made is still at an early stage. This document outlines why a strategic approach to the administration of social security benefits is necessary and explains how we propose to develop detailed proposals. We see wide consultation as an essential part of the exercise, and as a first step I invite comments on the issues raised in this document from anyone, whether expert or layman, who has views to offer or a contribution to make.

PATRICK JENKIN

DEPARTMENT OF HEALTH AND SOCIAL SECURITY

SOCIAL SECURITY OPERATIONAL STRATEGY

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GLOSSARY OF TERMS

AA Attendance Allowance

CAMELOT Computerisation and mechanisation of local office tasks

CB Child Benefit

CBI Child Benefit Increase

CSA · Child's Special Allowance

Ceefax Information held on computer database, transmitted by BBC

television signal, for TV display (ITV equivalent is ORACLE)

CO Clerical Officer

Dis. Ben Disablement Benefit

FIS Family Income Supplement

GA Guardians Allowance

HNCIP Housewives Non-Contributory Invalidity Pension

ICA Invalid Care Allowance

ICL International Computers Ltd

IIB Industrial Injury Benefit

ILO Integrated Local Office

IVB Invalidity Benefit

LO Local Office

LO II Local office equivalent of Clerical Officer grade.

MA Maternity Allowance

MG Maternity Grant

Mob A Mobility Allowance

MSC Division Management Support and Computers Division

NCIP Non-contributory Invalidity Pension

NI National Insurance

PAC Public Accounts Committee

PCA Parliamentary Commissioner for Administration

Prestel Information held on computer database, accessed through

public telephone network, for TV display

RNI Reconstructed National Insurance

RP Retirement Pension

SA Supplementary Allowance

SB Sickness Benefit

Supp Ben Supplementary Benefit

SHA Special Hardship Allowance

SP Supplementary Pension

VDU Visual Display Unit (television screen display of computer

information)

Viewdata General term covering information retrieval systems like Prestel

WA Widow's Allowance

WMA/WMA(P) Widowed Mother's Allowance/Widowed Mothers Allowance (Personal Rate)

WP Widow's Pension

OBJECTIVES AND BACKGROUND The Social Security Strategy Study began in 1977. It represents an attempt to look at social security operations as a whole and to plan the medium to longer-term future in a unified way. Such an exercise represents an essential management task if the Department's operational efficiency is to be sustained and improved. This paper reports on progress, outlines the main issues as they appear at present and makes proposals for the next stage of the study .. The overall aim and particular objectives were defined in 1977 as follows: 2. "(1) OVERALL AIM: To review and, if appropriate, to table a plan to improve the operational methods in use for the administration of Social Security benefits taking all relevant factors into account. (2) PARTICULAR OBJECTIVES: (i) To develop operations into a coherent comprehensive system satisfying policy-makers, management, staff and the public we serve. In particular, the service to the public should be improved; (ii) To ensure the operational machine as developed is flexibly responsive to changing Ministerial policy, public requirements and initiatives and to changes in attitudes of staff and Staff Sides; (iii) To improve efficiency, and in particular to reduce relative manpower costs, by the most effective use of all resources; (iv) To ensure in particular, in relation to (iii) that best use is made of available equipment for our operational needs,"

3. We have reviewed the aim and objectives and have concluded that in the main they should stand. In certain respects, however, our study has led to some reconsideration: we consider that additional emphasis should be given to the co-ordination of human and technical resources, and the implications for staff (see section IV); and to cost considerations (see paragraphs 9 -11): the timescale should be broadly the decade 1980 to 1990; finally, we do not envisage a single detailed plan covering all aspects of our operations: rather, we envisage the development within the next 18 months of an overall strategy, into which individual planning operations can be fitted. The result should be a comprehensive operational system which can be implemented in substance during the 1980s. Although the aims are ambitious and far-reaching, they represent a necessary approach to the Department's task. The main activities so far have been: 4. the development of a check-list of desiderata for the future 4.1 operational system - listed in Appendix 1. (It will be clear from this report that certain of the desiderata have been, or may need to be, reconsidered as work advances); a series of special studies into particular aspects of the 4.2 operational system. The most significant ones (on issues discussed further below) relate to the future location of the Department's work, the achievement of the "whole person" concept (treating people in a comprehensive manner rather than on a fragmented benefit-by-benefit basis), and the management of change; Visits have been made to the United States and other countries 4.3 to examine the technology which is or may become available and to consider what may be learned from foreign experience in social security operational planning; a special study is in progress on the scope for more efficient 4.4 contributions arrangements; two important operational areas have been or are being studied 4.5 under the auspices of Sir Derek Rayner: methods and frequency of social security payments and the administration of benefits for the unemployed; - 2 -

a rolling programme of studies of the operational aspects of individual benefits is under way, with two studies completed and two more launched; a new Branch, MSC6, has been established to carry forward 4.7 detailed work on the study. This document marks the end of one phase of activity and the start of the next - the beginning of detailed work by the new branch designed to prepare specific proposals for the future strategy, with as much detail as possible, including estimates of cost and timescales. Implementation of proposals must inevitably proceed in stages, with review and consultation at each one. It is intended that at each stage of the project detailed proposals for the next, within the overall strategy, will be submitted for approval. Implementation must likewise be gradual and phased - the drawbacks of "big bang" changes are well known. THE NEED FOR A STRATEGY II 6. During the 1970s the Department faced many changes and additional pressures. In general, it has adapted reasonably successfully to meet these challenges and coped efficiently with the huge and complex task of making 22 million payments week in and week out. Nevertheless, strains on the Department's operations became increasingly apparent. Amongst the particular factors which convinced the Department and Ministers of the need for an operational strategy for the future were:concern at the increasing complexity of social security (a) operations. 10 new benefits were introduced during the 1970s, bringing the total to 34. Each has its own special rules and each multiplies the complexity of the total structure. The 1970s also saw the introduction of New Pensions, the complete re-casting of the earningsrelated contributory system under RNI, and increased reliance on means-tested benefits - particularly the highly staff-intensive supplementary benefit scheme. Some further changes are listed in Appendix 2.

concern at growing volumes of work; changes in the (b) numbers of claims, benefit recipients and benefit payments are illustrated in Appendix 2. concern at the apparently growing pressures placed (c) on the Department's staff. This problem was aggravated by high staff turnover, particularly amongst the crucial junior grades and especially in the London regions, where annual CO/LO II wastage rates have been running at 24%, compared with 14% in the other 9 regions. (d) growing concern, expressed by knowledgeable outsiders such as the PAC and PCA as well as within the Department, about standards of efficiency, accuracy and service to the public. (e) concern that the Department's existing computer systems, despite their increasingly important role within social security operations, were not making full use of the newly available technology. The equipment will need to be replaced in the 1980s, but simply to replace and upgrade it in isolation from the rest of the Department's operations was seen as unlikely to make the optimum use of such technology. (The computer systems are described in Appendix 2). (f) awareness that a major cause of the weaknesses of the Department's operations lay in their heterogeneous and relatively unco-ordinated nature. While improvements were possible in particular areas - and are being actively pursued, eg simplification of the supplementary benefit scheme, the introduction of the project on computerisation and mechanisation of local office tasks (CAMELOT), and the computerisation of the Newcastle Central Index - the full potential for improvements was unlikely to be achieved unless an overall strategy was devised into which the various operational components could be fitted. (g) finally, an awareness that pressures for change were likely to continue in the future, and that in the longer term a more flexible operational system was needed to cope with changing demands.

It was concerns such as these which led to the establishment of the operational strategy study and the formulation of the aim and objectives identified on the first page of this document.

In the absence of a well-based operational strategy, the Department has 7. in the past had little option when faced with the need to implement change (often at short notice) but to rely on the provision of more staff - this is illustrated in the graphs included in Appendix 2 which show marked increases in staff numbers and administrative costs in the mid 1970s. Clearly, in the current economic climate and with the present Administration's aim of reducing civil service manpower to the lowest post war level, it is essential, when there is a cost benefit, to take advantage of up-to-date technology to reduce, or at least hold down, the costs of DHSS social security administration; to create an improved environment in which the staff will work, in order to improve working conditions in offices and to attract and retain staff (because they can see that the Department is keeping pace with modern technology); to restore for the public, despite increased complexity, the accurate and speedy service which was given in the late 1940s and 1950s; and to improve information and advice services. These objectives can only be achieved, and future complexities and demands coped with, if a new operational strategy is developed, which, while utilising modern techniques, has clearly in view all the human factors involved in operating such a system.

Simplification

Effective simplification could assist significantly in the creation of a more efficient and comprehensible system. Policy simplification lies outside our terms of reference. However, simplification remains a general objective and we would welcome any that may become possible; for example the study of contributions arrangements (paragraph 4.4) may suggest ways in which the NI contributions system could be simplified. However, simplification should not override other main objectives of the strategy, and we recognise that it is frequently necessary to strike a balance between this and other aims. In the past complexity has often arisen as a result of a desire to achieve a specific aim for a particular group, while minimising the total financial cost: the result has been a need for complex and tightly drawn benefit rules. The pressures for additional complexity are likely to continue in future - a recent example would be the decision to tax further benefits. Simplification alone, therefore, is unlikely in practice to resolve the operational problems. One advantage of a more advanced future system, making greater use of computer power, would be that the administrative cost of complexity should be reduced.

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Costs, Savings and Constraints Whatever happens, the Department will be obliged to invest significant sums during the 1980s and 1990s, if only to maintain the existing computer capacity. Over the next 4 years some £17.3m is due to be spent on computer replacement at major sites. The main Newcastle computers will reach the end of their working lives in the second half of the 1980s: firm decisions on replacement will be needed by 1985. It is estimated that from 1985 to 1995 around £86m (at current prices) would be needed to replace and enhance the Department's computer equipment, plus a further £65m for systems and programming. This expenditure would maintain the Departments present systems and capacities, but would not represent a significant improvement or development. 10. We think that the initial cost of a new and more comprehensive system should not be any greater, and might even be less, than that of keeping the present system afloat. Indeed, savings may be possible in a number of areas: 10.1 The present compartmentalised ways of holding data involve considerable duplication. By reducing this, not only would work on amending records be saved but also accuracy would be improved. 10.2 A fast modern communications system would save overpayments and reduce opportunities for fraud. 10.3 It should be possible to simplify, automate or eliminate many existing manual procedures, reduce the need for forms and paper, eliminate certain clerical drudgery and give staff more satisfying work. 10.4 Staff wastage might be reduced if technology were used in ways which increase job satisfaction. 10.5 Considerable improvements in efficiency could result from changes in paying benefits, and further improvements could be made by increased use of automated methods. - 6 -

10.6 By increasing the scope for policy and administrative changes at a lower staff cost, the growth in manpower due to new policy initiatives should be limited. How far these, and other potential areas of saving, were actually achieved would largely depend on how far-reaching were the changes to the present system. 11. It is not possible at this stage to estimate the precise cost and benefits of a new system, since this will depend largely on its nature. Estimates will be produced before firm decisions on whether to proceed are sought. However, if the initial cost is similar to the alternative of simply replacing existing machinery with more of the same when its life expires, and if a modern system merely manages to reduce the rate of increase in the total cost of administration a cost which rose from £523m to £805m during the past decade (1978 prices) - it will represent extremely good value for money. Planning must take into account a number of important constraints: 12.1 The future DHSS operational system should be able to exchange data with the Inland Revenue's new computer system. Already the DHSS and IR systems are linked together for the collection of contributions; any future move towards a tax-credits type of regime would require increasing collaboration between the two systems. 12.2 The future system should include adequate safeguards consistent with cost-effective expenditure of public money - to prevent fraud; to preserve confidentiality and prevent unauthorised access to information; and to preserve security and limit vulnerability. 12.3 Planning must take account of current financial and manpower constraints - but should recognise that in some circumstances short-term investment would secure longer-term savings through improvements in efficiency and effectiveness.

12.4 During the period of transition there should be no deterioration in reliability or standards of service; changes should be phased in gradually; and there should be full consultation with staff and other interests about the transitional arrangements. 13. Social Security operations are under strain today, and without substantial change things are likely to get worse in future. Piecemeal improvement is unlikely to suffice: for example, while the efficiency of the computer installations could be improved through the introduction of more advanced machines and better communications within and between them, the cost could be significant, while operations as a whole would remain cumbersome if large blocks of work were to remain clerical. It is because of the limitations of such partial approaches that the need to tackle the problems more broadly and develop "a coherent comprehensive system" (para 2 above) was identified. The aim should be a more efficient system, able to respond to changing demands in a changing environment, making the best use of technology to handle those parts of the work appropriate to it and releasing staff resources for those essential functions which only people can perform. III THE OPERATIONAL TASK 14. The ultimate purpose of social security operations is to deliver a service to the public, and the need to improve this service was identified (Section I above) as a particular objective. It would be prudent to assume the public will increasingly expect a more efficient, more comprehensive and more helpful service than they receive at present, but that no additional resources will be available. With this in mind, we have analysed our operations from three angles: (i) Operational stages (ii) Location of work (iii) The "whole person" concept (i) Operational stages 15. Most social security business consists of five main elements: Provision of general advice and information; Receipt and checking of claims; Assessment and determination of rate payable;

Payment of sums due: Maintenance of records, review etc. These elements, which leave on one side particular specialist tasks such as contributions or liable relative work, prescribe the fundamental characteristics of the operation. 16. General advice and information: it is accepted that there is a need for substantial improvement in the provision of advice and information to the public. The main obstacle is the potential high staff cost (with around 500 local offices the cost of even one additional person per office is high). This problem might be eased if substantial staff savings could be achieved in other areas of work. The potential of less staff-intensive methods must also be examined. Possibilities to be studied include: - a telephone enquiry service, providing freephone access to an enquiry point, probably in a Regional Office; improved provision of advice and information through outside agencies such as local authority Social Services Departments; provision of information through Viewdata systems such as Prestel: establishment of "advice units" in local offices (such a system would only be possible if the necessary staff resources could be provided); - low cost methods of enhancing the appearance of local office public waiting areas. 17. Claims and assessments: for understandable reasons present methods of taking claims and making benefit assessments vary from benefit to benefit both in the method and time taken. It will be essential in future to give the local office staff a facility which would help them to resolve queries and process claims quickly. A balance will need to be struck between what is best done locally, and what could most conveniently be undertaken elsewhere. Offices will need terminals which allow rapid access to claimants records possibly supported by training aids and an information retrieval system to replace or

supplement printed codes of instructions. 18. Payments: a separate Rayner review has recently been completed on methods and frequency of payments. Discussions on its conclusions are continuing. It may be necessary to review this area again at a later stage, following experience of post-Rayner changes and the introduction of CAMELOT. 19. Records: the system must provide for holding and giving access to basic social security data (eg name, date of birth, correct NI number, contribution record) for the whole of the insured population. Much of this information should be quickly accessible at the point of claim, which in the majority of cases will be a local office. Because benefits overlap, access to the records of other benefits is also important. Comprehensive records are critical to sophisticated benefits such as New Pensions. Under present arrangements. basic records are in some cases held centrally for the whole country (eg NI pension payments, NI contributions, Child Benefit, War Pensions) and in others distributed throughout local offices (eg sickness and unemployment benefits. supplementary benefit). Whether records are kept manually or mechanically, they absorb resources. Resources can be released if records can be kept more economically and duplication eliminated. Factors which have to be balanced include the operational needs and the costs of data storage and of standards of accuracy and speed of access. The needs of the other Government agencies (eg the Inland Revenue, which has a traffic with DHSS of over 60 million items per year) are another important factor. (ii) Location of work The present distribution of social security work between central, regional and local offices is the result of organic change over many years. The current programme of local office integration will, when completed, produce 484 ILOs. Even so, the unemployed have to attend Job Centres and Unemployment Benefit Offices (administered by the Department of Employment) to claim contributory unemployment benefit and then (some 50% of them) attend a quite separate DHSS office to claim supplementary benefit.* Further, some benefits are administered almost entirely from Central Offices, eg child benefit from Newcastle and FIS from North Fylde. Some benefits involve both local and central offices, eg retirement pensions and short-term benefits. * A scrutiny of the delivery of unemployment benefit and supplementary benefit for the unemployed is currently taking place, under the auspices of Sir Derek Rayner. - 10 -

Apart from the history of particular benefits, some more general considerations underlie the present distribution of functions: 21.1 Specialisation: as social security operations have become more complex it has become difficult for staff to master and administer more than a limited proportion of the total rules of the systems. Such specialisation is a cost-effective way of working and can provide reasonable job satisfaction to the staff involved. 21.2 Dispersal of employment: because particular operations are specialised, fairly discrete and on a small scale (eg disability benefits, FIS, HNCIP) the work can be centralised and located in accordance with the employment policies of the Government of the day. 21.3 Technical considerations: centralisation can be a costeffective way of doing the work, compared with distributing it around local offices. This was particularly true when the Department's present computer systems were first introduced. Large computers can handle complex, high volume activity, based upon centrally accumulated data. Once such centres were established at Newcastle and North Fylde it was cost-effective to attach new benefits where they required computer processes and where postal communication with beneficiaries was acceptable. 21.4 Benefits related to personal circumstances: supplementary benefit calls for complex assessment of highly individual personal circumstances and entitlement can be immediately affected by changes. Localised administration is the only practical operational approach for some aspects of such a benefit, even when reference to remotely held data is necessary. 22. It cannot be assumed that the present distribution and location of work will necessarily remain appropriate in the future, although proposals for change should be treated cautiously. A study of this issue has confirmed that there are very few social security functions for which a particular location, whether - 11 -

local, regional or central, is clearly necessary. It does show, however, a clear need for a local interface with the public. The public expects most of its problems to be sorted out locally rather than at a distant central point, and although leaflets are useful, and telephones and other electronic systems may have an expanding role to play, they can never replace face to face contact where personal circumstances have to be assessed or where personal advice is sought. Similar considerations apply to visiting, interviewing and examination of records in connection with the collection of NI contributions: and to specialised functions such as investigations of individual cases of fraud and abuse, liable relative work and unemployment review activities. In some cases there is a balance of advantage in siting work in one place rather than another: an analysis is presented in Appendix 3. The need for a local interface does not mean that detailed records need be held in every local office, or that calculations cannot be done by remote computers linked directly with the local office. It does mean that we need a continued and significant local presence. This being so, it makes sense to make these offices as useful as possible. A major objective should be to vest control of social security benefit activities in the local office wherever possible, unless there are compelling arguments of cost and efficiency in favour of more remote administration for particular benefits. 24. The future system will need to collect, retrieve, selectively change and store massive quantities of information; carry out calculations based on this information; and provide the necessary outputs. A design assumption for such a system is that local office staff must have ready access through terminals to the information needed to resolve claims or queries presented to the Department. Even in advance of the detailed analysis yet to be carried out, it can be postulated that response times of no more than a few seconds will be required at individual terminals; in fact CAMELOT (see paragraph 6(f)) above is being so designed. Subsequent processes - eg making payments and updating records - might not need as rapid a response. 25. Approaching the problem from the established base of the current or planned computer installations, it is possible to identify a number of theoretical options for providing a computer communications capability, all of which take account of developments in technology over the next few years: - 12 -

25.1 Centralisation: the concentration of all computer and associated processing at a few large centres, with direct data transmission links to local offices. 25.2 Regionalisation: the distribution of data to regions (or areas within regions) each with transmission links to a group of local offices. The aim would be to minimise traffic to any central computer which might be required for, say, index work or the maintenance of contribution records. . 25.3 Two tiers: a mixture of the central and regional approach which utilises all present or planned computer installations. 25.4 Decentralisation: the location of computers in every local office holding records for claimants dealt with at that office and linked to a central computer, the primary function of which would be to hold a national index and distribute contributions data. Each of these options has within it a number of possible variants, and it could be that after detailed consideration of objectives, constraints, practicability and cost the most feasible system outlined will exhibit some characteristics of more than one of the theoretical options. Each approach will have advantages and disadvantages and more work on their implications will be needed before a firm decision can be reached. This is the central issue to which the work of the new branch mentioned in para 4.7 above will be directed over the coming months, with appropriate independent specialist assistance. (iii) The "whole person" concept An early study suggested that a major drawback of the present organisation of work is the tendency to treat individuals in a compartmentalised, benefit-bybenefit way, rather than as a "whole person" who may have a range of entitlements. The ideal would be that one claim would lead to the combined payment of all the benefits to which that person was entitled; that advice about all benefits would be available at a single point; and that information about changes of circumstances reported to one specific point would be applied without further action by the beneficiary to all processing points.

28. Such an approach, however, would require an excessively complex and expensive system and would make unrealistic domands on the experience and training of staff. Experiments with multi-purpose means tests have shown how difficult it is to deal satisfactorily with the needs of different benefits in one claim form. The need for an ideal system may be fairly limited in practice, since most claimants have entitlement to a limited number of benefits at any one time. In numerical terms the most important area of benefit overlap is that between supplementary benefits and other benefits. Around 60% of supplementary benefit recipients are also in receipt of national insurance benefits and over 40% of supplementary benefit recipients below pension age receive child benefit. 29. There are, however, a number of ways in which it should be possible to approximate more closely to the "whole person" concept. The need for improved advice and information has been discussed above. Suggestions have been made for extending combined payments of benefits and this will be considered further. A major step forward would be greater integration of contributory and supplementary benefit work, so that claimants did not have to attend different parts of the office (or even different offices) for different benefits: one possibility might be a "client group" approach, in which all the main benefits, whether contributory or non-contributory designed for a particular group (the retired, disabled, unemployed, sick etc) might be administered together. It is by no means clear that this approach would resolve the issue; but however done, improvement in this area is a central aim of the strategy study. Such changes would be primarily organisational rather than technological - although it might be unrealistic to expect counter clerks to cope with a significantly expanded range of matters until they have considerably greater technical assistance. Technological developments, however, should very greatly assist in improving this aspect of service: the main requirement will be comprehensive data bases and a modern communications system allowing easy access to them. Bringing together the results of the three analyses it seems clear that we should aim at a system that will -(a) provide the public with ready local access to the whole system: (b) provide the staff at the local office with ready access to data bases: - 14 -

(c) ensure that data bases are up to date and comprehensive; (d) ensure that benefit payments are made accurately and promptly. The point of contact with the public is critical. Where claims are assessed, and payments made and recorded, is much less important. IV PEOPLE AND MACHINES If the computer had not been invented we should still need an operational strategy. The objectives would not be very different from those set out on page 1 of this paper. It might be a little more obvious that the co-operation of the Department's staff was indispensable for a successful strategy; that management could not hope to get far without consultation with them: and that the contribution they could make extends far beyond the mere acceptance of plans imposed from above. Technological progress has made no difference to these truths, but it has made it rather more difficult to keep them steadily in view. 32. In the last five years the prospect of increased computerisation has created a great deal of anxiety. At the same time, a number of promising computer applications encountered greater difficulties than had been expected at the implementation stage. Unions felt forced to take up defensive positions. Just recently however, there have been signs of better understanding on both sides. Computer manufacturers, for example, emphasize the critical importance of the staff dimension in their literature and sales talk. Some union leaders have begun to encourage employees to take part in joint development committees. In their 1979 report on "Employment and Technology" the TUC agree that industry has no option but to adapt to new technology as quickly as possible. However, they are naturally concerned about the effect on employment and they stress that introduction of new technology should be preceded by full consultation with the work force. Management and unions are realising increasingly, not merely that they cannot afford to ignore technological advance, but also that neither can take full advantage of it without careful study followed by consultation and agreement with each other. The main question for both sides is that of the degree of computerisation to be aimed at. For management, the limitations are both practical and human ones: those of cost, efficiency, reliability, and so on, and problems of handling the impact of new technology on staff and unions. For the Civil Service unions

the prime considerations are human ones - will the machines be paid for by reducing staff numbers; and will pay, conditions of work and the content of the job improve? Both management and staff stand to gain from computerisation, and both face risks. But both have to move forward, because in the long run. the public will not accept a service which is inferior to the service provided by other agencies, or by social security administrations in neighbouring countries: and in the long run there will be no jobs for clerks who cannot use computer terminals. The acceptance of change by the staff is critical to success. It can be achieved only by their continuous involvement and consultation from the beginning of the planning stage. DHSS has a better record than most of co-operation with the unions. We have now taken a new step with the Departmental Staff Side in establishing a Joint Committee - chaired by a Deputy Secretary - with the following terms of reference: "To provide a forum for consultation between management and staff interests on the long term social security operational strategy study". The Committee will not formally negotiate or decide on specific matters already dealt with elsewhere such as pay, grading or the application of new technology; it would, however, be able to identify any problems of this kind arising from the new operational system and remit them to the appropriate negotiating forum. Its main purpose will be to enable staff and their representatives to take part in the process of developing a new operational strategy and to agree arrangements for keeping all members of staff who might be affected by changes in touch with progress. The issues to be discussed in this forum will range wider than "people 36. and machines" but under this head it would seem sensible to start with basic questions such as "Is any further automation required?" before proceeding to others like - what is the right relationship between man and machines? - in what specific ways can machines be used to improve job satisfaction? what are the training requirements? - 16 -

how can changes best be phased to minimise disturbance and to allow staff time to assimilate new work? There is considerable interest in the new strategy among staff in the 37. field as well as at Headquarters and the Central Offices. This interest is an important asset which must be cultivated and conserved. It is essential to provide opportunities for people to learn what machines can and cannot do. Nevertheless it would be unrealistic to expect all staff to welcome change openly. The best way for senior management to earn the trust of staff is to involve them in the design and implementation of the change and to ensure that it is introduced in a sensible and coherent manner. This may require from management and staff representatives an alteration in their approach to negotiation and discussion in this area. It is better to recognise this and involve staff from the outset. WHAT TECHNOLOGY HAS TO OFFER The present generation of computer equipment will reach the end of its working life over the next decade. In the absence of any across-the-board reconsideration of the Department's operations the present generation would be replaced with more modern technology, but within broadly the same overall operational structure. This would lose the opportunities for greater efficiency, economy and service to the public discussed above. What technical advances can be drawn on to contribute to these improvements? The pace of technological change, as it affects data processing, will continue 39. unabated during the next decade. Automated systems are likely to become cheaper and offer new and more flexible methods of dealing with administrative problems. Particularly noticeable recent trends have been: increased computer power; - improved reliability; - increasing miniaturisation: - growing convergence between the hitherto separate fields of computers, telecommunications and office equipment; - immediate and random access to and retrieval of data; - rapid transmission of data; - growth in the use of remote terminals: - 17 -

- less reliance on electro-mechanical and more on electronic output devices; - more reliable, comprehensive and flexible software: international moves towards standardisation. Although the price/performance ratios of computer hardware will continue to improve through the 1980s, assessments of the overall cost of future computer systems are more difficult to make because of uncertainty about two major components - software and data transmission. Expenditure on software and services is likely to increase substantially as a proportion of total computer system costs. The Post Office are planning substantial improvements in data communication facilities: these will involve heavy capital investment, and until pricing policies are announced for the new range of facilities cost comparisons with existing methods cannot be made. It is, however, both the aim and expectation of the Post Office that unit costs will fall in real terms. It is already clear that the existing range of computer facilities used in the Department will be available at lower cost in the future; less clear at present, although the signs are favourable, is the extent to which new facilities can be introduced within the present or a reduced level of administrative expenditure. 41. There are a number of specific areas in which technical advance could greatly assist the operational system: 41.1 With the growth of micro-electronics the cost of Visual display units (VDUs) has fallen steadily. It is now possible to site within a local office a number of VDUs with a small but powerful controller which offers routine validation, correction and transmission facilities. Storage, printing and some programme functions may be added to provide a degree of autonomy. Advances in memory and logic will make this type of device even more powerful, and should permit the data to be processed locally, for example at the point of enquiry or claim. 41.2 Improved data transmission will provide a speedy, universal and high capacity method of passing data from one location to another. Developments in communications equipment will provide more accurate and secure transmission. High speed - 18 -

facsimile and text processing, communicating copiers and communicating word processors will permit advances in office administration in the future. 41.3 The replacement of mechanical components by electronic ones will make printers and paper handlers more reliable; the laser "page" printer should be able to cope with the varied Departmental computer output. Text processing devices could be used to notify claimants of all but the most exceptional and complicated decisions. . 41.4 Even today magnetic disc is price-competitive with magnetic tape as a medium for data storage. Data on disc can be organised to permit rapid and selective access for computer processing and terminal display as opposed to the slower, sequential access to data held on tape. This allows systems such as CAMELOT to be designed with response times at individual terminals of a few seconds. Larger and more expensive "mass storage" systems are capable now of searching millions of data items and retrieving a single one in about 10-15 seconds. Speed of retrieval depends upon many factors such as the number of terminals linked and the amount of traffic being handled, but the technology already exists to permit a shift from serial "batch processing" operations to more responsive systems that allow immediate access to data and permit the remote user to interrogate and alter central records. The association of routine validation, swift communications and fast access to data, coupled with distribution of computer power, is the most marked trend in computing today, and the advantages it can offer in meeting the needs of the Department are potentially very great indeed. 41.5 Television based information services such as Prestel and Ceefax will influence our methods of dealing with social security clients (see para 16 above). Micro-electronic technology will have a much greater impact by the mid-1980s. "Chip" technology provides two of the most formidable characteristics of the computer - its memory and its logic. Advances in this technology will

enable the computer to retain more data in its memory store (reducing reliance on other storage media such as disc) and offering the designer more scope for "built-in" facilities. Greater capability and miniaturisation should permit micro-processors to be linked together in ... configurations which can make the most efficient use of computer power. 43. In the present part-clerical, part- mechanized system, claimants and others who have dealings with the Department have to contact different offices depending on the nature of their business. Retirement pensions are paid from Newcastle, child benefits are paid from Washington and war pensions from North Fylde. Then there are the benefits paid and recorded locally. A properly comprehensive system using the well-established national insurance number and allowing access to all social security information about an individual will be a sensible step forward. It should make possible the further step of using a single notification from a member of the public to amend the record relating to all his dealings with the Department. With the sort of technological advances outlined above, new systems could provide: - more accurate and comprehensive advice on entitlement; - collection of all necessary information at one interview; - speedier and more accurate settlement of claims; - reduction in the need for beneficiaries to notify changes of circumstances to several points in the Department; - more scope for combined payment of different benefits to one individual or family; rapid advice on claims and payments; - reduction in paperwork and consequent delay; - reduction of overpayments where these arise from failure to match information in different parts of the system. 45. How might this technology affect specific activities? The following examples illustrate some possibilities which are or may become technically feasible over the next few years. We include them as illustrations of possible change, not as firmly recommended proposals. - 20 -

45.1 VDUs could be used interactively to "prompt" local office staff through complex administrative processes such as supplementary benefit assessments. Such prompts might operate at different levels to assist staff with varying degrees of experience. 45.2 Using display screens and data transmission facilities. information about recent child (or other) benefit payments could be provided within a few seconds to assist local office staff in determining title to, say supplementary benefit. At present it may take them a week or more to obtain such information. 45.3 Looking further ahead, it is not inconceivable for claims to benefit to be made from the home by the use of simple input devices linked to TV screens and connected to the telephone system for transmission to Departmental computers. Technology is the tool, not the master, and should certainly not be introduced simply "because it is there". It is clear, however, that recent and prospective advances do open up important new possibilities which could very greatly assist the achievement of the overall objectives of the strategy study. VI PROPOSALS Previous sections of this paper review the results of a substantial number of studies representing extensive work over a long period. We believe that this groundwork will prove to have been justified, but it is now becoming urgent to draw it together into practical proposals. The studies have, on the whole, confirmed and underlined the general desiderata listed in Appendix 1. Closer consideration has made us doubtful whether it will be practicable to implement the "whole person" concept in its totality within the time-scale on which we are working. In other respects the studies have done little more than underline the desiderata earlier established. We have no doubt, though, that there has been an important shift in the weight to be given to the cost/benefit criterion. Where possible, it may be sensible to experiment with pilot schemes before - 21 -

finally committing resources. We believe that it must be accepted as a basic condition for progress with the strategy that the result should be to provide a better service, and a more satisfactory job for the staff, while at the same time increasing productivity. Factors outside the strategy will determine whether increased productivity means meeting the present needs with fewer staff, or meeting greater needs without a proportionate increase in staff numbers. 48. None of our studies has suggested a need for sudden, fundamental change. On the contrary, several have underlined the special importance of a smooth transition when changes are made. We think that the time has come to break the total planning task down into more manageable sectors -We think that the critical sector is the creation of a communication system which will, with proper safeguards against improper use, allow access to the data at present held in central and local offices from any location and, as part of that activity, the determination of the appropriate location of information. There is no doubt of the need for a network of local offices where the public can get advice and help and where queries of all kinds can be resolved. But a study of the location of work, summarised in Appendix 3, suggests that there are relatively few functions which must be performed either locally or centrally, while modern communications and computer technology has reduced the need to bring records together physically in order to cross-reference them efficiently. Work on this sector will therefore lead to a more effective use of the Department's human and computer resources, and of the data we hold. Social security operations will continue to centre on the local office. It is there that the worst strains fall now, and that the most obvious opportunities exist to call technology to the relief of hard pressed staff. Unless we can improve the service provided from local offices, other improvements will make little impact. Within an integrated framework the aim should be to improve the availability of information to local office staff, so that the number of

contact points for individual claimants is reduced. Although there are obvious overlaps with a. and c, the local office sector is a separate one and its development should be separately planned. It will be particularly important to concentrate on the human factors involved in the man/machine interface and on the working conditions of staff. The third sector is the provision of information and advice to the public. There is a good deal wrong here at present, and we are heavily criticised for ineffective publicity, leaflets that are difficult to understand, unattractive reception areas etc. Technology is offering new channels of communication, such as Viewdata, and other people's computerbased advice systems. But although some improvements may be possible, for instance by reorganising reception arrangements in local offices, it is not easy to see how we can improve this aspect of our service without additional cost. Nonetheless, provision of advice should feature in the development of the communication system envisaged in (a) above and, as far as cash resources permit, experiments in the use of modern techniques should be undertaken. One third of the cost of administering social security benefits is incurred in making payments. A recent study by DHSS officials under the auspices of Sir Derek Rayner proposed economies here and provoked much public controversy. It is difficult at this stage to forecast the effect of this development on the long term. It seems certain, however, that substantial economies will eventually be made by adopting, as new patterns of public behaviour emerge, more modern payment methods. A separate study of arrangements for collecting social security contributions is under way. It offers various possibilities of reductions of work, but these depend on changes in policy which may or may not prove acceptable. A separate scrutiny under the auspices of Sir Derek Rayner, into the validation of national insurance records, is also taking place this year. - 23 -

These divisions into different blocks of work are not sharp and clean and there is an obvious need for a general strategic co-ordination. Nevertheless, while we have no immediate proposals to make about sectors (c)-(e), work is proceeding on them and submissions will be made as appropriate. The main thrust at the next stage will be on the activities at (a) and (b) and we see the following programme of work. 1980-81 - produce a clear statement of current proposals for introducing and replacing equipment to meet known operational needs. Determine present constraints on retrieval of data and its transfer between installations. Analyse social security data to identify total data requirements and items common to more than one installation. Identify processes. Determine the role of existing installations in the "Future System" and produce broad systems specifications for their development. Consult with staff and others. Produce a "blue print" for a departmental communications system and the distribution of data and work. Provide estimates of costs and savings. - Outline the systems objectives for assisting local office staff (ie determine what further local office work should be undertaken by the future system and how). - Produce, by the end of 1981, a further planning document setting out proposals for the next phase and resource requirements. 1982 onwards - Implement computerisation of Index (during 1982) - Review CAMELOT and agree on national coverage (1982) - Produce detailed specifications for system components (1982-83) - Plan procurement, conversion, installation and implementation (1983 - 1984)- Procurement, installation, programming, training, etc. 1985 -- 24 -

Success with a planning activity of this kind, which seeks to evolve a future system by a step-by-step rationalisation of various separate operations and their integration within a Departmental frame work, requires a change from the present policy of devolved autonomy in the development of computer systems. A central authority is required responsible for defining data, programming and documentation standards for the Department as a whole, and to be a design authority whose agreement would be required before any computer development could take place. The authority should be located within MSC Division which should also design and lay down standards for communications facilities involving data transmission. As preparation of the plan proceeds improvements which would be immediately worthwhile may be identified. Appropriate approval for their introduction will be sought in advance of the submission of the next planning document which, at this stage, it is proposed to submit towards the end of 1981. That plan itself will include: a. A proposal with broad costs and savings for an integrated operation including its organisational and human implications. b. How and within what timescale phased implementation might be achieved. Proposals with detailed planning costs for work up to the end of the next review period, including costs and savings for improvements which can be implemented within that timescale. The review process should be undertaken when the next planning document is produced and should include a re-examination of the assumptions on which the planning had been based. Publicity and Consultation Changes in social security operations will have to be carefully planned so that they can be introduced systematically over a long period without detriment to standards of service during the process. The Department is taking steps to strengthen its capacity for planning, designing and implementing the major programme of change discussed above. 25

53. Changing social security operations in this way will affect a lot of people: staff, public, employers, trade unions, banks, the Post Office. computer manufacturers, voluntary organisations, local authorities and other Government Departments. It will also involve the expenditure of large sums of public money over a number of years. To be successful, the process will need the broadest possible measure of understanding and assent from all those affected. It will be important therefore, to make information about the strategy widely available, and to try to secure a broad consensus about the main features so that it can develop consistently over the period needed for its implementation. It will be necessary to embark on a process of consultation with the agencies who will be affected, and to draw on the experience of other countries and organisations operating on a scale comparable to ours who have undertaken major technological and organisational changes. The importance of involving staff and consulting with their representatives from the outset has already been stressed (Section IV). It should also be made clear that the Department is interested in hearing the views from any quarter - and particularly from the public whom the social security system exists to serve. As well as approaching others for information and ideas, we should publicise the strategy in a way that may stimulate a wider public to react and to volunteer opinions. It should be clear that we are not only anxious to promote understanding of the strategy, but also receptive to any ideas that may help to shape it in a way that will give it the widest possible measure of public support.

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This appendix sets out the various desiderata contained in the second report of the Social Security Operations Strategy Study Working Group as amended by the then Steering Committee.

1. The Whole Person Concept

- 1.1 All relevant data about the person concerned held by the Department should be readily accessible at the point of enquiry or claim.
- 1.2 The records of spouses (and other people with adult dependants) should be suitably cross-indexed, care being taken to avoid criticism of interfering or of obtaining unnecessary information.
- 1.3 Child Benefit records should be cross-indexed to the records for both spouses or other appropriate adult.
- 1.4 Notified changes of circumstances should be relayed where appropriate to all related payment, awarding or record points.
- 1.5 Records should be arranged and communications developed so that .1 to .4 become possible.
- 1.6 Where from the Department's stand point it would be more economical to combine payments then this should be done: otherwise it would be necessary to ascertain what the customer wants and needs and the cost of providing it.
- 1.7 The ability to give a claimant advice and information about a wide range of benefits (perhaps not only DHSS benefits) should exist.

2. Service to the Public

- 2.1 Coverage must be such that for people who need, or whose claims require, a face-to-face contact, a contact point is within reasonable distance except in remoter parts; for the rest, a good telephone enquiry service should be provided. (Note: this criterion by definition embraces unemployment benefit)
- 2.2 The standard of accommodation and furnishings, particularly in the caller areas, where contact with claimants occurs should be improved.
- 2.3 At a minimum, each contact point should be able to give accurate up-to-date advice on all social security benefits and contribution aspects. In the longer term, the same contact point should provide advice on DHSS and Local Authority administered benefits. Procedures and contact points should remain as constant as possible.
- 2.4 The speed and accuracy of response to enquiry, claim, etc, should with due regard to cost-consciousness aim to match the best given by other large scale organisations and in cases of hardship or emergency should be very rapid indeed. What kind of contact points should be provided, how staff can have access to information, and how staff can be trained to match this aim all require very close consideration.

2.5 Standards of performance should be defined as far as possible and performance monitored with special reference to comprehensiveness of advice, courtesy and humanity. 2.6 Staff should be given adequate training, supervision, and equipment so that set standards can be met. 2.7 Departmental leaflets and forms should be as simple and straight forward as possible and efforts should ensure that the public at large is better advised than now of the benefits and services available and how they may be obtained. More generally, the system should be capable of adjustment to match any marked trends in what the public regards as acceptable: this may at times allow for a lessening of official work. 3. Efficiency/Use of Resources 3.1 Future operational systems must involve improved communications; investment is essential even though the immediate effects may not show a positive cost/benefit result. Account should be taken of the opportunities offered by recent developments in the computer world so that, in the longer term, the system would be less labour intensive. 3.2 The systems must have due regard to cost consciousness as well as effectiveness. For example, within the existing complex of central, regional and local offices and with due regard to the needs of the public - work should be located where it can be most efficiently done. 3.3 Proper regard must also be paid to security of information in the interests of the individual citizen, prevention of fraud, and the provision of back-up facilities against breakdown, whether due to acts of providence or of the staff. 3.4 Arrangements should exist for the regular review of the procedures involved in each benefit, of the way it fits into the general procedural and organisational structure and the costs of the operations involved in each benefit. 3.5 It follows that much more information on the costs of administering benefits, as a ready tool of management control and review, must be developed. 4. Staff Relations 4.1 To involve staff and Staff Side in developments from an early stage. 4.2 To encourage, obtain and maintain staff support for the changes which are proposed. 4.3 To structure change so as to improve, or at least not to reduce, job satisfaction, to provide and use equipment so that, as far as possible, machine assists man rather than the converse, and to space out changes to allow staff adequate time for proper assimilation of new work. 4.4 To provide training which explains the Department's aims and the advantages of the new technology so as better to equip staff to advise the public. 4.5 It is important to give staff sufficient time to assimilate changes in instructions: a slower and more orderly introduction of new procedures might, therefore, achieve better results.

5. Fraud

- 5.1 When developing systems both clerical and ADP safeguards should be built in as may be necessary to prevent the incidence of and scope for fraud and incorrect payments.
- 5.2 All local office staff should be alert to fraud possibilities, and specialist staff (at LO and/or RO) should develop expertise to assist the prevention and identification of fraud.
- 5.3 All relevant Social Security information held within the Department should be accessible at the point of claim.
- 5.4 The development of a central index and the use of a single reference number (ie the NI number) for all dealings with the Department is considered to be essential.
- 5.5 Every encouragement should be given to developing systems for paying benefit direct into bank accounts.

6. Payment Arrangements

- 6.1 The frequency of payments should be examined with a view to securing a reduction where this would be acceptable and operational savings would result.
- 6.2 The Department should concentrate on developing a system of payment by direct bank credit and encourage people to adopt it. In doing so, however, the effect on the Department's encashment arrangements with the Post Office needs to be borne in mind: order books will still be needed, at least as a fall-back method of payment, for the foreseeable future.
- 6.3 Where sensible, payment of benefits paid to one person should be combined; but care would need to be taken to ensure that adequate explanations of the make-up of the payment were issued.
- 6.4 Any payment system needs to be quickly responsive to notification of changes of circumstances.
- 6.5 With due regard to the above and to operating costs, the Department should provide the public with a reasonable choice of method of payment.
- 6.6 A responsibility for overall policy on payment matters should be allocated in Headquarters.

7. Relations with other Government Departments and other Public Agencies

- 7.1 To develop and, where necessary, to establish working contacts in other Government Departments and Agencies, so that the development of the DHSS system takes account of their situation, problems and intentions.
- 7.2 To identify areas in which the impact of such matters is (or should be eg Local Authority Social Services Department) significant in our affairs, so as to ensure that allowance is made for it.

APPENDIX 2

1. This Appendix provides certain basic information on recent changes in DHSS staff numbers, computers, workloads and administrative costs.

STAFF NUMBERS

2. Changes in DHSS staff numbers over recent years are illustrated in graphs 1 and 2.

COMPUTERS

- 3. The Department's use of computers for Social Security tasks dates from 1959. Major installations have been established at Newcastle Central Office (covering installations at both Newcastle and Washington), North Fylde Central Office, Reading and Livingston. The growth in ADP staff is illustrated in graph 2, and the growth in computer-made benefit payments is illustrated in Tables 1 and 2.
- 4. Newcastle computers maintain the contribution record of 47 million insured persons. 37 million items of contributions information are received and processed each year, and the computer file is searched daily to answer queries received from local offices. These currently average 60,000 per day. The records of some 92 million pensioners are also processed daily to give effect to changes and to maintain continuity of payment. About 100,000 pension order books and 20,000 payable orders are produced each day. The Newcastle machines also handle the work of accounting for the 100,000,000 or so Giro orders issued each year in payment of social security benefits (Table 2) and process the payroll for the Department's 94,000 staff.
- 5. The Washington Computer Centre deals with Child Benefit awards and payments, paying allowances to more than 7 million families and maintaining records of more than 13 million children. It is also responsible for producing 15,000 Social Security statistical tables each year.
- 6. The installations at Reading and Livingston are primarily involved with the payment of Unemployment Benefit and associated Supplementary Benefit. The Centres are connected on-line to local Unemployment Benefit Offices (administered by the Department of Employment).
- 7. The North Fylde Central Office has two ICL computers carrying out a variety of tasks. In addition to major tasks on the Health side of the Department, they issue payments for War Pensions, Attendance Allowance, Mobility Allowance, Housewives Non-Contributory Invalidity Pension, Invalid Care Allowance and Industrial Death Benefit.
- 8. A further current project (CAMELOT) is concerned with the application of computers in local offices for the payment of sickness, invalidity and supplementary benefit. It is envisaged that the pilot project should go live in 1981, with a view to possible national implementation during the mid-1980s. The Newcastle Central Index of contributors is also being computerised and should be operational by April 1982.

DEPARTMENTAL WORKLOAD

9. Tables 1 to 3 below illustrate changes in certain aspects of the Department's workload:

TABLE 1: ORDER BOOK FOILS ENCASHED BETWEEN 1971-72 AND 1979-80 -

MILLIONS

	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80
Total Foils Encashed	741.3	752.9	762.5	787.7	798.3	788.3	918.9	967.4	919.4
Foils Produced Manually	310.0	314.0	319.3	329.2	325.7	329.9	450.2	502.7	174.4
Foils Produced By Computer	431.3	438.9	443.2	458.5	472.6	458.4	468.7	464.7	745.0
% of Computer Produced Foils	58.2	58.3	58.1	58.2	59.2	58.2	51.0	48.0	81.0

x Estimated

The introduction of Child Benefits in April 1977 largely accounts for the increase in manually produced order book foils in 1977-78 and 1978-79. The production of Child Benefits order book foils by computer was phased in from April 1979. This explains the marked percentage increase in computer produced foils in 1979-80. However, the figures are based on estimates and should be treated with caution.

TABLE 2 : GIROCHEQUES ENCASHED BETWEEN 1972-73 AND 1978-79

MILLIONS

						The second secon			
		1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	
To	otal	56.3	68.5	78.0	98.5	113.5	116.1	113.1	
(1	Description of the contract of	2.7	2.4	3.5	10.7	14.7	23.7	35.4	
Me	unually Produced	53.6	66.1	74.5	87.8	98.8	92.4	77.7	
	Produced by omputer	4.8	3.6	4.5	10.9	13.0	20.0	31.0	

TABLE 3 : CLAIMS TO BENEFIT AND NUMBERS OF BENEFIT RECIPIENTS 1970 TO 1978

	1 1970	1971	1972	LLIONS 1973	1974	1975	1976	1977	1978	
Claims to Benefit During Year	23.7		100 1 100							
V	17.2									

Sources: Social Security Statistics and the Department's Annual Reports

10. Statistics of the Department's "inputs" (claims) and "outputs" (payments), however, give only a partial indication of the changes in the Department's total workload, and make no allowance for crucial changes in the nature and complexity of work. Changes with significant operational implications in the 1970s included:

- introduction of 10 new benefits;
- recasting of contributions work under RNI;
- recasting of the pensions scheme under New Pensions;
- replacement of Family Allowance with Child Benefit;
- introduction of annual (sometimes more frequent) benefit upratings;
- introduction of various temporary schemes (eg butter tokens, fuel schemes);

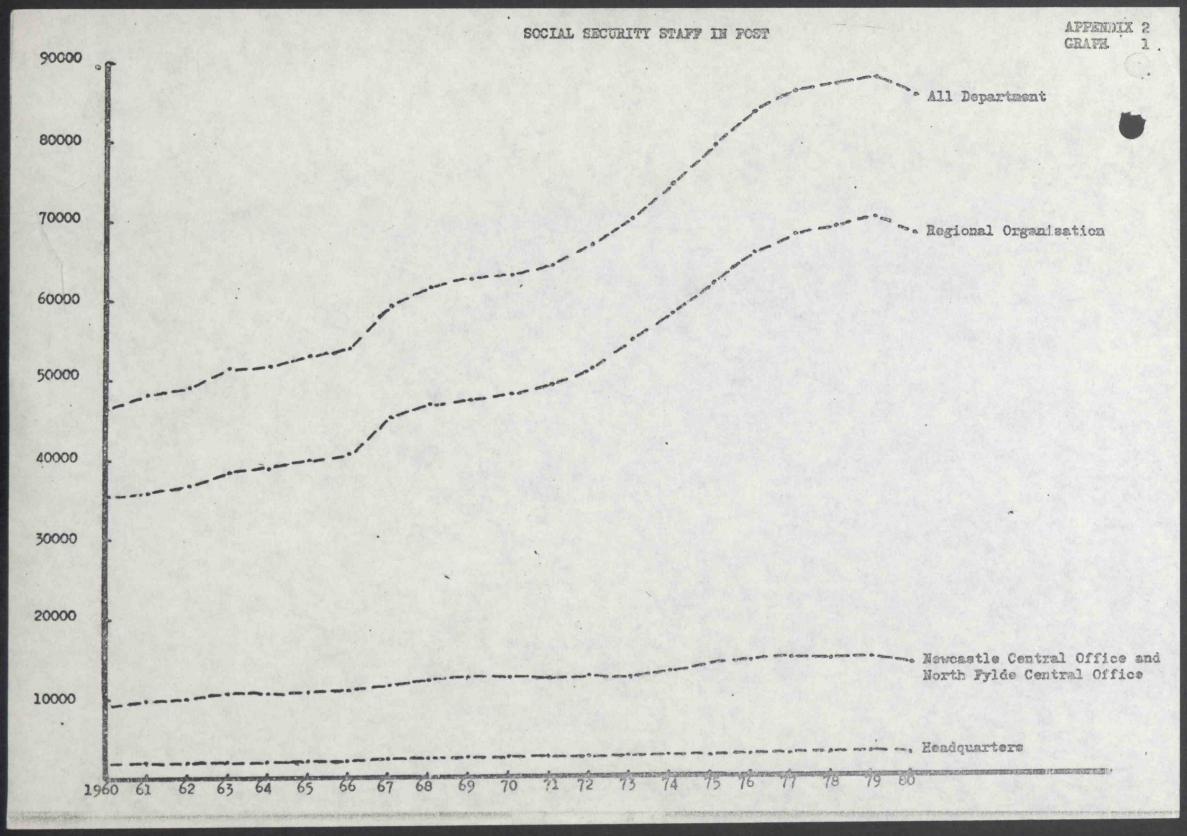
- replacement of Milk Assisted scheme;

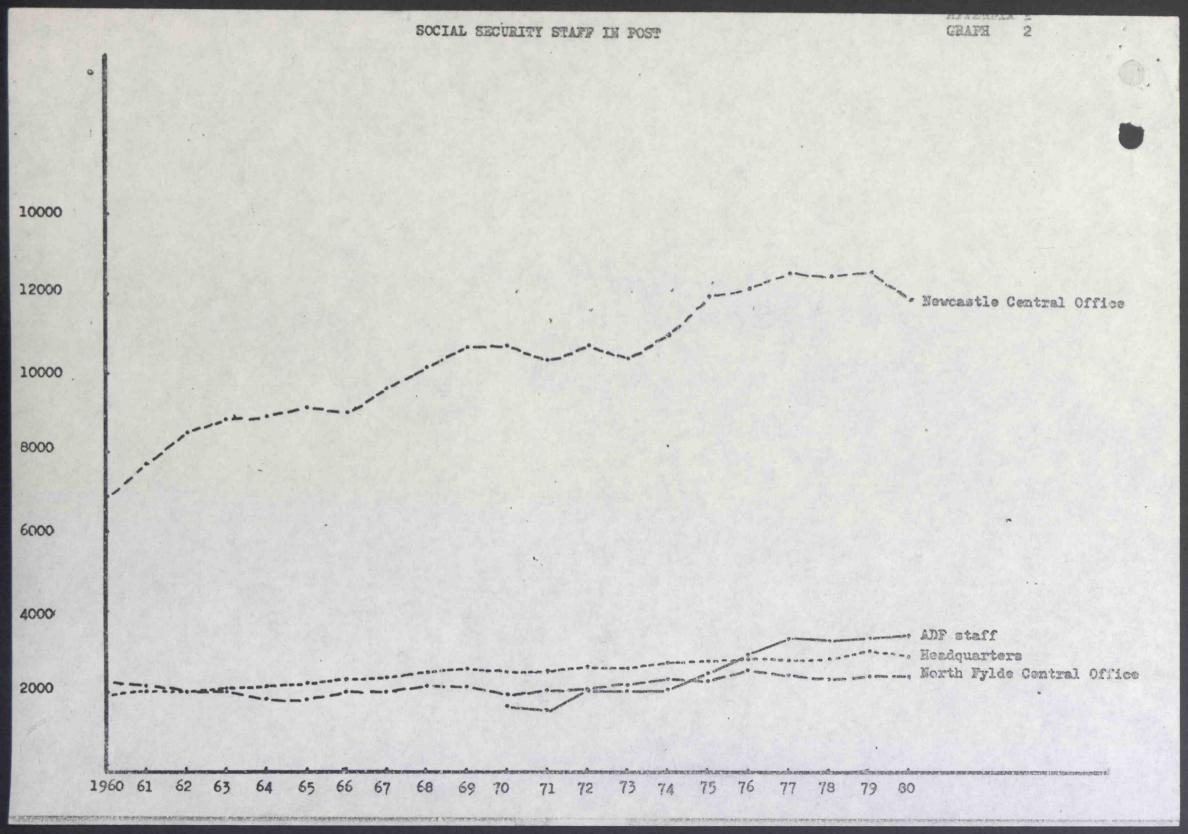
- changes from manual to computer methods, especially at Central Offices.

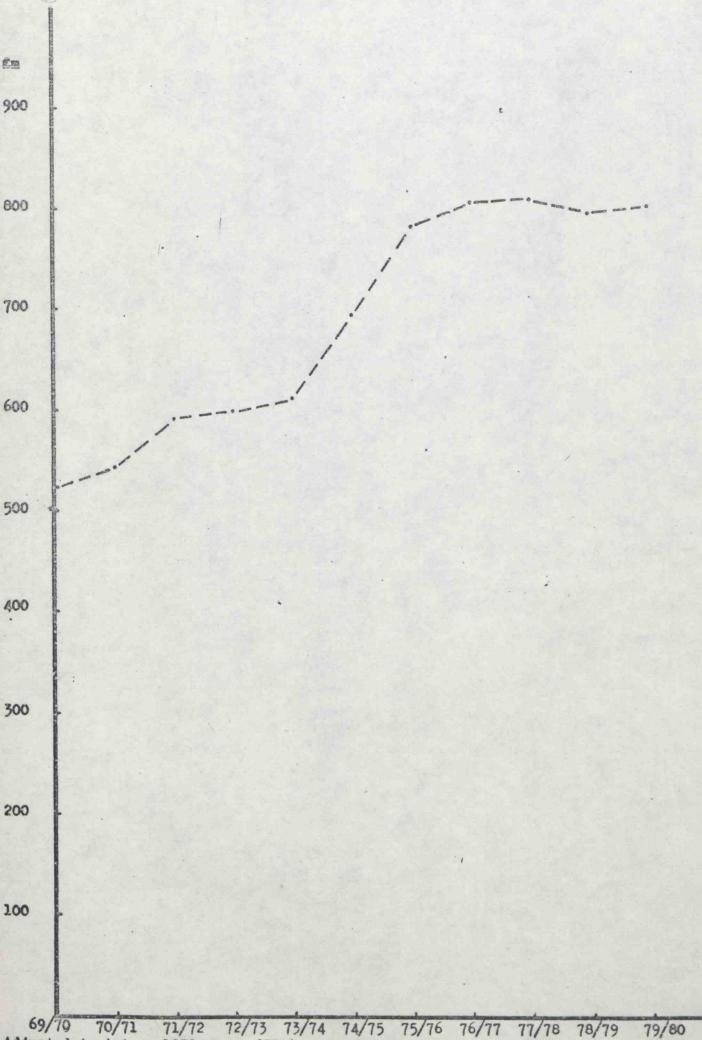
These are just some of the more striking changes which have occurred. The effect has generally been to increase the complexity of operations and in many instances to add to the overall work of the Department.

ADMINISTRATIVE COSTS

11. Changes in the Department's overall administrative costs are illustrated in graph 3.







Adjusted to Autumn 1979 pay and prices
Figures include DHSS pay, DE pay, other DE and DHSS costs and other Government
Department costs

The following tables give an at-a-glance summary of the location needs of each of the principal stages of the various benefits and contributions processes. The detailed argument supporting the conclusions is given in the report where the item is of major significance, otherwise it is contained in Appendices B - I (which are available under separate cover).

The symbols used in this summary are as follows:

- a. Compelling reasons for processing locally -
- b. Balance in favour of processing locally -
- c. Compelling reasons for processing centrally -
- d. Balance in favour of processing centrally -
- e. Could be located anywhere (clerical process)-
- f. Could be located anywhere (computer process either now or anticipated within the next ten years)

1. MEANS TESTED BENEFITS

	Supp	Bén.	
Function	SA	SP	FIS
Claim investigation * Verification Assessment Computation Payment	}	0.2.2.0	
Review/ changes			-
Special aspects/ difficult cases			0

2. CONTRIBUTIONS

Registration

- investigation
- verification
- creation of record

Collection

Sorting to record

Location of record

133

1









*NOTE: The term "Claim investigation" is used in this summary to cover the collection of information necessary to decide entitlement (other than contribution record).

Queries on contributions record

- which can be resolved by a check of the file/index
- which require local investigation but not necessarily by visit or interview
- which can only be resolved by visit or interview

Compliance work







3. SHORT TERM BENEFITS

Function	SB	IVB	RCIP	MA	MG	IIB
Claim investigation		Δ	Δ		Δ	
Shuttle	0	←	Ö	0	0	(SB)
Rating		Δ				
Computation	19	[19	(A	IA	SA.	(A
Payment	1,0	10.			(4	10
Review/ changes		Δ			-	
Special aspects/ difficult cases					-	9

4. CHILDREN'S BENEFITS

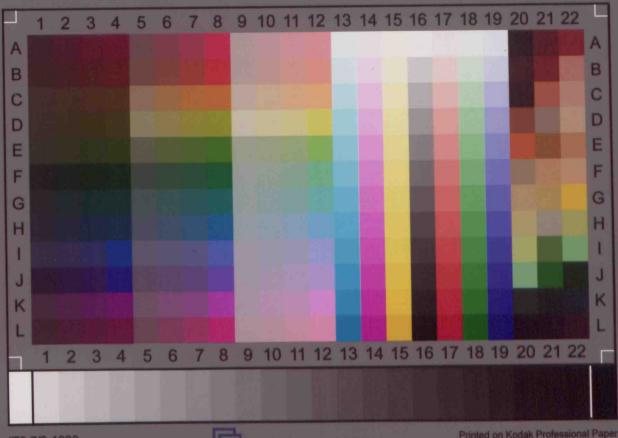
	Function	CB/CBI	GA	CSA	
	Claim investigation	Δ	Δ.	Δ	
	Documentation* Rating				*NOTE: The term "Documentation" is used in this
	Computation	10	}0	}0	summary to cover sight of certifi- cates etc needed to support the
0	Review/changes		9	4	claim.
	Difficult cases	4		1	

	No. of Contract of the Party of	
REFER	MIT/WIDOWS	BENEFITS

Function	RP	AW	WMA/WMA(P)	WP
Claim investigation			\ \rightarrow \tag{.}	Δ
Documentation		D	-	-
Shuttle)	A)
Rating	ILA			
Computation	10	19		
Payment)	10)
Review/ changes		1		
Special aspects/ cifficult cases	6		0	9

6. WAR PENSIONS/BENEFITS FOR THE DISABLED

	1				
Function	War Pension and Supps	AA/ICA	MobA	HNCIP	Dis Ben (inc SHA etc)
Claim investigation	9			Δ	
Medical criteria	. 0	0	d	.0	4
Rating	0	0	0	0	
Computation	}A ·	19	10	19	19
Payment	,0	,0	,—	1	,0
Review/ changes	0	0	9	6	
Special aspects/ difficult cases	0	4	0	4	6
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