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TRADE UNION POLICY AND NEW TECHNOLOGY:
THE CIVIL & PUBLIC SERVICES ASSOCIATION

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DOCTOR OF PHILOSOPHY

THE UNIVERSITY OF ASTON IN BIRMINGHAM

JANUARY 1988

This copy of the thesis has been supplied on condition that anyone who consults it is understood to recognise that its copyright rests with its author and that no quotation from the thesis and no information derived from it may be published without the author's prior, written consent.
The introduction of a micro-electronic based technology to the workplace has had a far reaching and widespread effect on the numbers and content of jobs. The importance of the implications of new technology were recognised by the trade unions, leading to a plethora of advice and literature in the late 70s and early 80s, notably the TUC 'Technology and Employment' report. However, studies into the union response have consistently found an overall lack of influence by unions in the introduction of technology. Whilst the advent of new technology has coincided with an industrial relations climate of unprecedented hostility to union activity in the post-war period, there are structural weaknesses in unions in coming to terms with the process of technological change. In particular was the identification of a lack of suitable technological expertise. Addressing itself to this perceived weakness of the union response, this thesis is the outcome of a collaborative project between a national union and an academic institution. The thesis is based on detailed case studies concerning technology bargaining in the Civil Service and the response of the Civil and Public Services Association (CPSA), the union that represents lower grade white collar civil servants. It is demonstrated that the application of expertise to union negotiators is insufficient on its own to extend union influence and that for unions to effectively come to terms with technology and influence its development requires a re-assessment across all spheres of union activity. It is suggested that this has repercussions for not only the internal organisation and quality of union policy formation and the extent, form and nature of collective bargaining with employer representatives, but also in the relationship with consumer and interest groups outside the traditional collective bargaining forum. Three policy options are developed in the thesis with the 'adversarial' and 'cooperative' options representing the more traditional reactive and passive forms of involvement. These are contrasted with an 'independent participative' form of involvement which was a 'pro-active' policy option and utilised the expertise of the Author in the CPSA's response to technological change.

Key words: Technology bargaining; Industrial relations and technology; Union policy and technology; Technology, social aspects.
To Jane and Samuel
ACKNOWLEDGEMENTS

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<td>ACARD</td>
<td>Advisory Council for Applied Research and Development</td>
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<td>ACAS</td>
<td>Advisory, Conciliation and Arbitration Service</td>
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<tr>
<td>ACTT</td>
<td>Association of Cinematograph, Television and Allied Technicians</td>
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<td>ADP</td>
<td>Automatic Data Processing</td>
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<tr>
<td>AGSRO</td>
<td>Association of Government Supervisors and Radio Officers</td>
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<td>AIT</td>
<td>Association of Tax Inspectors</td>
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<td>AO</td>
<td>Administrative Officer</td>
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<td>APEX</td>
<td>Association of Professional, Executive, Clerical and Computer Staff</td>
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<td>ASTMS</td>
<td>Association of Scientific, Technical and Managerial Staffs</td>
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<td>AUEW</td>
<td>Amalgamated Union of Engineering Workers</td>
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<td>AUEW/TASS</td>
<td>AUEW Technical Administrative and Supervisory Section</td>
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<td>BEC</td>
<td>Branch Executive Committee</td>
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<td>BIFU</td>
<td>Banking, Insurance and Finance Union</td>
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<tr>
<td>CA</td>
<td>Clerical Assistant</td>
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<tr>
<td>CAITS</td>
<td>Centre for Alternative Industrial and Technological Systems</td>
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<td>CASE</td>
<td>Co-operative Awards in Science and Engineering</td>
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<td>CBI</td>
<td>Confederation of British Industry</td>
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<td>CCSU</td>
<td>Council of Civil Service Unions</td>
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<tr>
<td>CCTA</td>
<td>Central Computing and Telecommunications Agency</td>
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<tr>
<td>CD</td>
<td>Clerical Drivers (DVLC, Swansea)</td>
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<tr>
<td>CHAS</td>
<td>Catholic Housing Aid Society</td>
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<td>CHAR</td>
<td>Campaign for Single Homeless People</td>
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<td>CO</td>
<td>Clerical Officer</td>
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<td>CPSA</td>
<td>Civil and Public Services Association</td>
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<td>CPU</td>
<td>Central Processing Unit</td>
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<td>CSU</td>
<td>Civil Service Union</td>
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<td>CV</td>
<td>Clerical Vehicles (DVLC, Swansea)</td>
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<td>DE</td>
<td>Department of Employment</td>
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<td>DEA</td>
<td>Department of Economic Affairs</td>
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<td>DEMOS</td>
<td>Democratic Planning and Control in Working Life (Scandinavian translation)</td>
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<td>DHSS</td>
<td>Department of Health and Social Security</td>
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<td>DLR</td>
<td>District Land Registry</td>
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<td>DoE</td>
<td>Department of the Environment</td>
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<td>DoT</td>
<td>Department of Transport</td>
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<tr>
<td>DP</td>
<td>Data Processor</td>
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<td>DUE</td>
<td>Democracy, Development and Electronic Data Processing (Scandinavian translation)</td>
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<tr>
<td>DVLC</td>
<td>Driver and Vehicle Licensing Centre</td>
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<td>DVLD</td>
<td>Driver and Vehicle Licensing Directorate</td>
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<tr>
<td>EEC</td>
<td>European Economic Community</td>
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<td>EETPU</td>
<td>Electrical, Electronic, Telecommunications and Plumbing Union</td>
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<td>EO</td>
<td>Executive Officer</td>
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<td>FDA</td>
<td>First Division Association</td>
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<td>FMI</td>
<td>Financial Management Initiative</td>
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<td>GATT</td>
<td>General Agreement on Tariffs and Trade</td>
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<td>GMWU</td>
<td>General and Municipal Workers' Union</td>
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<td>GPC</td>
<td>General Purposes Committee</td>
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<td>HM</td>
<td>Her Majesty's</td>
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<td>HMSO</td>
<td>Her Majesty's Stationery Office</td>
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<td>HOTUS</td>
<td>Home Office Trade Union Side</td>
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<td>Acronym</td>
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<tr>
<td>HQ</td>
<td>Headquarters</td>
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<tr>
<td>IIP</td>
<td>Integrated Input Procedures (DVLC, Swansea)</td>
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<td>IPCS</td>
<td>Institute of Professional Civil Servants</td>
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<tr>
<td>IRSF</td>
<td>Inland Revenue Staff Federation</td>
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<tr>
<td>JST</td>
<td>Job Satisfaction Team</td>
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<tr>
<td>KDH</td>
<td>Key Depression per Hour</td>
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<tr>
<td>MIS</td>
<td>Management Information Systems</td>
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<tr>
<td>MOD</td>
<td>Ministry of Defence</td>
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<tr>
<td>MOT</td>
<td>Ministry of Transport (Car Test)</td>
</tr>
<tr>
<td>MSC</td>
<td>Manpower Services Commission</td>
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<tr>
<td>MSTC</td>
<td>Management, Science and Technology Committee (Prison Department, Home Office)</td>
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<tr>
<td>NALGO</td>
<td>National and Local Government Officers' Association</td>
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<td>NATFE</td>
<td>National Association of Teachers in Further Education</td>
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<tr>
<td>NEC</td>
<td>National Executive Committee</td>
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<tr>
<td>NGA</td>
<td>National Graphical Association</td>
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<tr>
<td>NTA</td>
<td>New Technology Agreement</td>
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<td>NUJ</td>
<td>National Union of Journalists</td>
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<tr>
<td>NUPE</td>
<td>National Union of Public Employees</td>
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<tr>
<td>OC &amp; A</td>
<td>Observation, Classification and Allocation (Prison Department, Home Office)</td>
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<td>PCK</td>
<td>Punch Card Keying</td>
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<tr>
<td>POA</td>
<td>Prison Officers' Association</td>
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<td>POEU</td>
<td>Post Office Engineering Union</td>
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<td>PROMPT</td>
<td>Project Resource Organisation Management and Planning Techniques</td>
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<tr>
<td>PSA</td>
<td>Property Services Agency</td>
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<tr>
<td>QWL</td>
<td>Quality of Working Life</td>
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<td>REPI</td>
<td>Registration of Title Evaluating Project: Phase I</td>
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<td>REPII</td>
<td>Registration of Title Evaluating Project: Phase II</td>
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<td>SCPS</td>
<td>Society of Civil and Public Servants</td>
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<tr>
<td>SDM</td>
<td>Structured Design Methodology</td>
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<td>SDP</td>
<td>Senior Data Processor</td>
</tr>
<tr>
<td>SEC</td>
<td>Section Executive Committee</td>
</tr>
<tr>
<td>SERC</td>
<td>Science and Engineering Research Council</td>
</tr>
<tr>
<td>SOGAT</td>
<td>Society of Graphical and Allied Trades</td>
</tr>
<tr>
<td>SSADM</td>
<td>Structured Systems Analysis and Design Methodology</td>
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<td>TGWU</td>
<td>Transport &amp; General Workers Union</td>
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<tr>
<td>TPU</td>
<td>Technology Policy Unit</td>
</tr>
<tr>
<td>TUC</td>
<td>Trade Union Congress</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
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<tr>
<td>UTOPIA</td>
<td>Training, Technology and Products from the Quality of Work Perspective (Scandinavian translation)</td>
</tr>
<tr>
<td>VAT</td>
<td>Value Added Tax</td>
</tr>
<tr>
<td>VDU</td>
<td>Visual Display Units</td>
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CHAPTER ONE

TRADE UNION POLICY AND TECHNOLOGICAL CHANGE
PART I. TRADE UNION RESPONSE TO THE NEW TECHNOLOGY DEBATE

1. The public debate over the social implications on the use and application of micro-electronic based technology gained considerable prominence in 1978 following the first broadcast of the Horizon documentary film 'Now the Chips are Down' (1) and publication of several influential government reports. (2) Attention focused on the pervasive potential of the technology giving rise to a considerable body of literature describing the technology, analysing its usage and predicting a diverse range of future social scenarios. (3)

2. The trade union movement, acknowledging the potential of the technology for employment levels and the nature of work itself, promptly became involved in this debate. At the 1978 Trades Union Congress (TUC) the importance of micro-electronic technology for the UK formed a major debate with the General Council being called upon to:

   carry out as a high priority a comprehensive study of the employment and social consequences of advances in the new micro-electronic technology and similar advances in UK technology, together with the wider ramifications of its applications by our competitors. (4)

   An interim report was produced as the basis for discussion at a special conference held in May 1979 attended by delegates from 61 TUC affiliated unions. (5) This led to the revised report 'Employment and Technology' which, following endorsement by the 1979 Congress, was published in September 1979. In addition, individual unions had established working parties and published a range of discussion documents and policy statements relating to technological change. (6)
3. The TUC report 'Employment and Technology' is a comprehensive and influential guide in the formulation of trade union policy over technological change. For the TUC the introduction of technology is considered inevitable, as Len Murray, the former TUC General Secretary, remarks:

   It is not just a question of accepting the new technology or of fighting it. The issue is how we can maximise its benefits and minimise its costs. \(7\)

   In order to maximise the opportunities the report calls for government intervention to create a suitable economic environment and the strengthening of arrangements for negotiations and collective bargaining advocating the pursuit of new technology agreements.

4. The economic environment considered necessary by the TUC report is "clearly consonant with, and a continuation of, the prevailing corporatist or Keynesian ethos of the official trade union movement"\(8\) consisting of several traditional interventionist demands. These include: a commitment to the industrial strategy of tri-partite planning and monitoring at sectoral level; increasing demand and employment through an expansion of the public services; an internationally co-ordinated reflation of world trade; expansion and increased investment in research and development in electronics and machinery manufacture; and a priority being given to the training and re-training of the labour force in new skills.\(9\) To facilitate the development of collective bargaining it proposed that new technology agreements be pursued providing a ten point checklist for negotiators to follow.\(10\)

5. The policy encapsulated in the 'Employment and Technology' report was broadly accepted by UK trade unions as the basis for individual union policy statements. However, variation between individual union positions over technological change have been summarised as follows:
We conclude that although no union says it is opposed to new technology per se, the degree of willingness to agree to change varies considerably. At one end of the scale are unions like the POEU and EETPU who see advantages for their members and are willing to embrace micro-electronics provided that certain minimum safeguards are met.

In a central position are unions such as APEX and NUBE (sic) who realise that new technology will lead to fewer jobs, but that resistance to productivity improvements would not help their members. So, whether the benefits outweigh the disadvantages will depend on the extent to which they can control the implementation and price of change.

At the far end of the scale are unions like the NGA and ACTT who feel threatened by new technology and are only prepared to accept change subject to rigorous conditions; they have the necessary collective organisation in key areas to insist that these conditions are satisfied.

Criticisms of the Trade Union Policy

6. The TUC report 'Employment and Technology' has been described as "the most philosophically coherent and weighty statement as regards new technology for the labour movement". As Robins and Webster observe:

   for the first time in history organised labour has been in a position to produce well researched, considered and widely debated industrial, social and sometimes political approaches to major technological changes still in the early stages of being introduced.

   However, whilst the trade union movement was able to analyse and provide a degree of consideration to the problems raised by the introduction of technology the application of its strategies are criticised for being adaptive and retrospective and "its ability to initiate remains limited". Its passive response has been viewed as characteristic of the unions' role within the development of 'British capitalism'. Robert Taylor's remarks about trade unions in the mid 1970s appear equally applicable in the mid 1980s:

   In many vital respects, the unions are what they always have been - defensive, voluntary pressure groups, under sporadic threat from the class bias of the British legal system and the blandishments of government, at the mercy of the ebb and flow of impersonal economic forces.
The sectarian and defensive tendency of the trade unions, what Len Murray referred to as being "good at stopping what we do not like, but not at starting anything" arises from the weakness of union intervention traditionally restricted to narrow economic concerns concentrated on retention of employment levels, wages and maintaining existing working conditions and practices. Beyond this, issues such as the content of work, job design, corporate strategy, investment policy, etc., are traditionally delineated as the prerogative of management remaining under their hegemonic control.

7. The limitations of union influence have given rise to criticism over the unions' perception of technological change. As Webster and Robbins point out:

the fundamental questions of the social role of technology has been displaced by a sense of technological inevitabilism. (16)

This has given rise to unions being criticised for holding "deterministic conceptions of a unilinear path of technological change". (17)

For instance, Manwaring is critical of the TUC's view that:

whether technology will prove to be a friend or foe will depend not on the technology itself, but on its application and the policies adopted by governments, trade unions and employees. (18)

because he believes it appears to accept that the technology is in itself "neutral in relation to the interests of union members". (19) Whereas in fact "the technology is not socially neutral, but embodies, and is developed within antagonistic relations of production". (20) On the other hand Williams argues that the same TUC quote conversely demonstrates that unions are aware that technological change is not inevitable but dependent on "the form of social control adopted". (21) Manwaring and Williams
both recognise the non-deterministic nature of technological change along with the existence of technological choice – a choice influenced by social and political forces surrounding the development and introduction of technology resulting in the opportunity for differing social and political outcomes. However, in Manwaring's zealous attempt to demonstrate how unions need to adopt a more politicised attitude he argues that only technology which "will increase product competitiveness will be introduced and that this is inevitable given the competitive framework within which firms operate". Implicit in his argument is a notion of capitalist technology with an alternative form of socialist technology existing elsewhere, embodying a set of different social values. Manwaring's overstatement and over simplistic account of the importance of economic conditions surrounding technological change result in the exchange of economic determinism for technological determinism and ignore the limitations imposed by the technology itself, thus playing down "the role played by technology as a discrete independent variable in shaping work. It is one thing to say that technology is not the primary determinant – it is quite another to say it has no influence at all". These arguments illustrate that the process of technological change is a good deal more complicated than a simple deterministic model would suggest.

8. Further criticism has been made of the TUC policy over its adherence to traditional 'interventionist' and 'corporatist' Keynesian economic policy. According to this view the new technology policy differs little from earlier union policy over technological change arising from automation in the mid-1950s. Inherent to this policy is the contradiction created by the unions demand for the UK to have a competitive edge over other nationalities and the unions call to form international links in order to combat the operation of multi-national companies.
addition, any policy which strengthens the bargaining position of a union itself has the contradiction that "shopfloor power may be the basis of securing a share of the benefits but it may also prevent productivity increases in the first place". (26) In the 1980s adherence to Keynesian economic policy appears out of touch with "the reality of the current (economic) depression, the long term decline of the British economy, and a government strategy of retrenchment". (27) Furthermore, a commitment to economic growth for reducing unemployment cannot be guaranteed as expansion would probably occur through investment in technology rather than labour and the reliance of expanding the public services appears misfounded when the public services are themselves utilising technology to shed labour and have undergone considerable contraction.

Application of the Trade Union Policy: Tri-Partite Planning

9. A central component of the TUC new technology policy to ensure economic growth in a socially responsible way was for tri-partite planning involving government, industry and unions within every industrial sector of the UK economy. To this end the TUC sought a national agreement with the CBI over the adoption of new technology. However, what could have been the first agreement between the TUC and CBI since 1972 collapsed due to opposition from those employers who "were having little difficulty in introducing new technology". (28)

10. The CBI's rejection of a national agreement can be seen as a significant pointer to the changing social, economic and political environment of the early 1980s. The impact of the 1979 Conservative Government was to replace the previous post-war consensus form of neo-Keynesian based welfare social policy with its own brand of monetarist economic policy and 'radical right' social policies, pursuing its ideological preferences
for the operation of free markets and individual self reliance vis-a-vis central planning and state intervention. Taking this cue, and with unions weakened through falling memberships and failing organisations in the economic recession, meaningful tri-partite planning for orderly technological change was traded for short-term managerial advantage. This resulted in technological change being accepted on terms largely dictated by and favourable to the employer.\(^{29}\) Moreover, the CBI's failure to come to a national agreement with the TUC showed "that responsibility for the centralised, adversarial approach in the British industrial relations system is shared by both sides of industry (unions and management)".\(^{30}\)

11. The rejection of the TUC/CBI statement marked the failure of the TUC to achieve any significant form of state intervention to facilitate the introduction of new technology. Instead, the TUC's role became one of supporting individual trade unions through the provision of educational documents, organising courses and publication of campaigning material. The TUC's changed position is indicated by its lack of policy development, so that the 1979 'Employment and Technology' report still remains the most authoritative union policy statement for new technology to date. Union policy for new technology subsequently relied on the effectiveness and organisation of individual unions with responsibility for technology bargaining devolved to the multitude of negotiating units existing throughout the UK.

**New Technology Agreements**

12. The TUC's call for new technology agreements (NTAs) has been pursued by a number of unions at various negotiating levels. It has been estimated that by 1984 the total number of NTAs amounted to around 400.
However, this number remains insignificant compared to the number of negotiating and bargaining units in the country as a whole.\(^{(31)}\) Nevertheless, the NTA remains a significant feature of the unions' response to technology formally extending union intervention beyond traditional areas of negotiation. The ambition of the NTA policy was to enable union involvement in the earliest decision-making stages of the computer system's design and development process and to negotiate a share of the productivity and efficiency benefits accruing from the application of technology. Moreover, they sought demarcation boundaries to safeguard employment levels, grades and levels of skill as well as improving job satisfaction and standards of health and safety.

13. A number of studies have been made into the content and distribution of NTAs. These demonstrate that the content of the NTAs has been limited compared to the original TUC objectives\(^{(32)}\) and that the unions have "been largely unsuccessful in securing a share of the benefits from new technology".\(^{(33)}\) This is reflective of the unions' weakened position in the prevailing industrial relations climate. Also the unions' original objectives were usually presented in the strongest terms as an initial bargaining position in the expectation that they would be mediated through negotiations. Furthermore, the majority of NTAs have been signed by unions predominantly representing white collar workers,\(^{(34)}\) the same unions that "have set the pace in response to micro-electronics".\(^{(35)}\) This section of labour has traditionally been badly organised, without the channels of collective bargaining commonly found representing blue collar and skilled labour. Moreover, the emerging technologies predominantly affect information handling; consequently it is not unexpected that white-collar unions have adopted NTAs in an attempt to strengthen their representation.
14. From the evidence of these studies it is clear that the adoption of NTAs per se is insufficient to overcome the problems new technology poses for unions, although it does mark "the beginning of a long term project to grapple with the realities of a new wave of technological change". (36) Whilst the NTA policy went beyond traditional union practice of "acceptance and resistance" proposing a more pro-active stance, it did expose a number of weaknesses "regarding bargaining structures, consultation rights and issues of concern". (37) But despite the uneven achievements the NTA policy may provide a basis for developing future union policy over technological change. The signing of procedural agreements has strengthened consultation rights in areas previously lacking adequate bargaining machinery; consultation under NTAs was often more extensive than under conventional collective bargaining procedures; the existence of legal rights to health and safety information and the traditional and perceived legitimacy of union involvement in this area has promoted greater coverage of these issues in NTAs. Rush and Williams go so far as to argue that legal rights for union involvement in issues such as corporate planning, job design, etc., would enhance the unions' effectiveness in controlling technology. (38)

**Case Study Investigations**

15. It has been found that unions and management typically discuss technological change but such discussion tends to concentrate on more traditional issues with "consultation over corporate plans for technological change not being widespread". (39) Moreover, "the position of bargaining over new technology would largely reflect the pattern of bargaining found more generally" (40) with negotiations tending "to be confined to traditional industrial relations issues". (41) The manner in which union policy is applied within these broad parameters has been the
subject of two important case study investigations. One by the Trade Union Research Unit of Ruskin College, the other by the Technology Policy Unit of Aston University. These provide the focus on the process of negotiating technological change.

16. The Ruskin case studies emerge with two major themes. Firstly, a recognition that new technology did not emerge as a novel, separate, self-contained and standardised issue for unions,⁴² but rather it was "enmeshed with other bargaining preoccupations and with wider managerial strategies."⁴³ While secondly, that more than any other issue technology exposed the existing weaknesses of union structure, organisation, and services. As Moore and Levie point out:

At its harshest and most challenging, new technology can slice right through the hitherto seemingly rational logic of the structure and organisation of trade union representation, and consequently convert a strength into a liability.⁴⁴

17. The Ruskin study concluded that "the patterns of collective bargaining are not very well geared to negotiating technical change",⁴⁵ identifying four structural problems: firstly, agendas overloaded with the traditional economistic concerns of annual wage rounds tended to occupy all the available time allocated to negotiations and the support services of the union; secondly, the mismatch between union and management organisations and the levels of collective bargaining; thirdly, shortcomings in existing negotiating procedures whereby it was usual that management came to the union with a proposal for the union's response, placing the union in a defensive and reactive role (this conventional form of collective bargaining often does not touch upon the managerial decision-making procedures which lead to technological change); and fourthly, a lack of information. Consequently, the union's reply was often based on supposition leading to unrealisable demands. Detailed
financial, economic and manpower data was normally not disclosed to
unions and "the provision of information about investment alternatives,
with an indication of their respective consequences for work organisation
and employment, was even more out of the question". (46)

18. Technology, although commonly perceived and treated as a separate
issue, invariably arises following or combined with other events. The
Ruskin study described the situation from their case studies:

- In the General Electrical Company it came with changes in
the orders of the Post Office for telephone equipment.
- In Alfred Herbert it came with a takeover, a total scaling
down of the company and product range and a complete change
in industrial relations.
- In Midland Bank it was part and parcel of a reorganisation
of all bank branches consequent upon a determined shift of
corporate marketing strategy.
- In British Leyland it came together with major changes in
industrial relations, the phasing out of old models. (47)

The outcome of negotiating a multitude of related issues is dif-

cult to predict and union representatives lacking information on manage-
ment proposals are at a disadvantage. The following examples demonstrate
this. Firstly, negotiations over changes to payment systems or gradings
may be undertaken without awareness of their implications for management
plans on future technical changes; secondly, acceptance of a technology
in one workplace may result in changes to the work organisation else-
where; thirdly, a company or workplace reorganisation programme and the
introduction of technology rarely develops according to a "scheme care-
fully planned in detail by management" (48) and during widespread
reorganisation there are just too many variables to control, as Moore and
Levie rather romantically point out:

whilst management at least have a map and a torch the union
representatives have to manoeuvre by the light of the moon and
their sense of orientation

(49)
and lastly, the multiplicity of issues raised by wholesale change, including the introduction of technology, requires that union representatives allocate their time and energy to a range of short and longer term interests and, with limited resources available, only the more immediate issues are tackled.

19. A feature of British industrial relations is the sectional representation of work groups. In many large organisations it is not uncommon to find more than seven unions representing a single workforce. The division of labour along skilled and unskilled or blue and white collar demarcations has promoted sectarianism among a workforce which may become acute during periods of change and uncertainty. When it comes to technological change different groups will have different interests. Moore & Levy cite the example in which "the arrival of manually instructed numerically controlled machine tools may lead to a running battle between the programmers and the machinist", and where in one case study "machinists (organised in the AUEW Engineering Section) gained a victory over the programmers (AUEW/TASS)"(50) However, as they point out, such a 'victory' is "based on the old craft traditions, which is divisive in the short run and may turn out to be temporary and relative".(51)

20. The introduction of technology exposes a number of weaknesses in any union organisation. This often occurs because it is the first time unions have attempted to move beyond economic and health and safety related issues and sought to influence something as strategic as the organisation and content of work. The introduction of technology can also expose existing weaknesses in union structure in terms of the inadequacy of a union's communication with its members, other unions, and more strategically with other organisations affected by change. The formation
of alliances with consumer groups, pressure groups and even sections of management, is an often neglected area with potential for unions to increase their influence. In addition, the deployment of technology may highlight the lack of involvement in any form of union activity by the membership, often due to the apathy of the membership to issues being pursued by the union, but also a problem neglected by the unions themselves. Furthermore it calls into question the support, or more usually the lack of it, for local union representatives from the more senior areas of the union organisation. However, in mitigation the Ruskin study found that the pressures of technology bargaining upon union organisation was not always negative. The exposure of weaknesses permitted unions to address the problems and take the necessary action by "strengthening their presence at the workplace" and "providing an enhanced role for the workplace representation". However, this was "conditional upon unions giving priority to servicing their representatives and strengthening their internal democracy".

21. The Technology Policy Unit (TPU) conducted case studies where special bargaining machinery, including NTAs, had been established for negotiating the introduction of technology. However, despite the high profile given to union consultation over technological change, union influence was found to be limited operating "over a very narrow range of issues and impinged only on the margins of corporate strategy". This reflected not only the lack of confidence and bargaining strength due to the adverse industrial relations climate, but also confirmed the inadequacy of union policy and organisation, to cope with industrial restructuring and the introduction of technology. Whilst concurring with the results of the Ruskin studies, the TPU studies found that even with the unions' lack of confidence and bargaining power the "winning of workforce
compliance and consent to the proposed technological change remained a central managerial objective.\textsuperscript{[55]} This need for consent was not uniform, but depended upon a number of factors such as: the skill requirements for production or implementation of change created certain key groups of workers to this process; the uncertainty of the process of change, particularly where management had a lack of control over the planning and implementation of technology; and the strength of union organisation.

22. It was found that the profile of union organisation and the centrality of a key group of workers (such as journalists in newspaper production) influenced management decision-making and choice of technology, resulting in the building of systems around those groups in order to ensure their consent and compliance. This is an important observation demonstrating that a range of managerial strategies can be adopted to introduce technology, including compliance and consent to change, as well as more orthodox managerial practices of coercion. Underlying this need for worker consent to change is a recognition of the contradictory nature of the relationship between employer and employee with both having interests that may simultaneously conflict and yet contain a mutual dependence. This complex relationship constrains the employer in introducing technology as well as permitting potential opportunities for effective union influence. These are issues which are discussed further in Part 2, paragraphs 32-33 of this chapter.

23. The fact that the need for employee consent has not influenced the development of union policy over technological change led to additional conclusions being drawn from the observations of the TPU case studies. It was found that what the unions required "but largely lacked was an
alternative vision of how technology might be introduced and the information and resources needed to sustain and apply that vision". (56) This lack of an alternative vision arose, partly, because there were no alternative exemplary practices for introducing technology, thus bolstering the perception that technology would necessarily follow a linear deterministic development in the interests of, and prescribed by, the employer. In addition, it is apparent that unions are not organised to undertake the kind of forward planning necessary to translate a policy for technology into a visible and workable plan of action applicable to the workplace and aimed at not only prescribing the conditions for accepting technology, but also at strategies for shaping the technology itself.
PART 2. TYPOLOGY OF TRADE UNION POLICY FOR TECHNOLOGICAL CHANGE

1. A distinctive characteristic of the industrial relations system in Britain is its complexity. There is a long historical tradition of voluntarism and decentralisation with little state involvement, and a predominance of occupational union organisations as opposed to industrial union organisations. Restrictive and oppressive union legislation, single union representation and 'no-strike' agreements are contemporary trends in UK industrial relations. The ease of adoption of such agreements illustrates the deep-rooted laissez-faire nature of industrial relations in the UK. The widespread variety of collective bargaining arrangements at all levels of employee representation has developed in response to particular situations and at particular historic moments. As the arbitration service ACAS recommends, "management and trade union representatives in all enterprises should, periodically, conduct an audit of bargaining arrangements in recognition of the variety of changing composition of bargaining units". The review of case study investigations into technological change showed that the introduction of new technology often exposed the existing deficiencies in collective bargaining - a point recognised by the TUC policy which sought to strengthen collective bargaining through the satisfactory conclusion of new technology agreements.

2. Union policies and the strategies for translating the policies into a coherent set of actions to cope with the introduction of new technology, following the 'laissez-faire' tradition of UK industrial relations, vary. Selection of a particular policy or pursuit of a particular strategy is dependent upon a number of factors, including the nature and extent of the technology being introduced and the managerial strategy to
implement change. However, the choice of an option also depends upon assumptions about the nature of technological change. To focus discussion on some of these assumptions, a typology of three ideal type union policies or strategic approaches can be defined, each with different implications for potential union intervention and influence over the process of technological change. They are classified as: an 'adversarial approach'; a 'co-operative approach'; and the 'independent participative approach'.

The Adversarial Approach

3. The adversarial approach is typified by a traditional reactive union response with incumbent defensive, negative and conservative attitudes to change. The approach is rooted in the conflict tradition of industrial relations with collective bargaining mediating the management-union relationship permitting a direct maintenance of the distinct responsibilities and loyalties of the two groups. As Davies observes "this is believed to be of the utmost importance because of the basic conflict of interests, and the difference in preferred outcomes between the management and union groups".(59) Examples of this approach include the policies of print unions in the national newspaper industry. In the recent case of News International this involved re-location of the entire production process and employment of a new labour force, organised by the EETPU instead of the NGA and SOGAT, in order to undermine the collective strength of the unions who until 1986 were able to restrict the introduction of new technology which, in this particular industrial sector, potentially threatened jobs and undermined traditional printing-craft skills.
4. In technology bargaining the adversarial approach is described by Ehn and Sandberg as the "mobilisation of membership around prescribed union demands."(60) It is a strategy around which existing union organisation is constructed and suited to, because coping with "new technology can result in a rapid concentration of tasks and know-how on already burdened union representatives. The union can emphasise the development of fundamental union principles, for example the right of existing workers to operate the new machinery regardless of the nature of the new technology solutions."(61) Basic principles are negotiated and agreed with the employer. Subsequent introduction of new technology has either to comply with these principles or invoke a conflict, the outcome of which is dependent upon the confidence, organisation and bargaining strength of the employer and unions. To be an effective strategy for unions this approach requires two pre-conditions. Firstly, a union policy capable of producing the fundamental principles upon which technology would be acceptable and ensuring membership support for, if necessary, industrial action; and secondly, the ability and willingness of the employer to undertake investigations and research arising from union demands. However, confronted by a strong union organisation and demands which are considered not feasible or uneconomic the employer may choose to delay introducing technology or, as in the case of News International, re-locate elsewhere with a new workforce.

5. The adversarial approach is a strategy commonly adopted when new technology poses a direct challenge to workers' interests with little potential advantage for the workers. Employer strategies described by Edwards as "technical control"(62) or Friedman as "direct control"(63) where managerial control of the labour process is maintained through an authoritarian hierarchy often embedded in the technology itself and the
design of work, is commonly associated with engendering a union response based on an adversarial strategy.

6. This approach is also associated with a highly political 'leftist' perspective of technological change. The most commonly cited commentator from this perspective is Braverman(64) whose analysis of the labour process observed employers as introducing technology unilaterally in order to: increase productivity through intensification of labour; limit worker autonomy by the reduction of discretion required in a job; and controlling the pace of labour through increasing the division of labour and separating the conception from the operation of work. Braverman's thesis that technology under conditions of monopoly capitalism leads to the de-skilling and degradation of labour is widely criticised for its adherence to a single management control strategy based on Tayloristic scientific management, and its neglect of worker resistance including the importance of workers' compliance and consent in the labour process.(65)

7. The underlying deterministic perception of technology upon which the adversarial approach is based is not only misleading, but also denies opportunities for shaping technology to workers' interests. The 'arms-length' principle to participation which the strategy advocates places union representatives outside the important decision-making stages of the technology's design and development process. In addition, as Ehn and Sandberg point out, a danger for such representatives is that by "placing major emphasis and effort into working out fundamental principles (rather than developing a detailed knowledge of the relevant technology) ... they may lose the initiative to management and 'miss' ongoing and important changes in the company".(66) Moreover, the unions would be further
disadvantaged because they lack the "technological expertise and knowledge which would enable them to determine whether or not the company management proposals for technology were in agreement with the unions basic principles". (67)

The Co-operative Approach

8. In contrast to the adversarial approach is the co-operative approach. Whilst the former is rooted in the tradition of collective bargaining, the co-operative approach emphasises participation and involvement of union representatives and members. This is not to deny that collective bargaining is a form of participation, but whilst it is based on conflict the co-operative approach is based on consensus. Perhaps the clearest example of a co-operative approach is the EETPU technology policy. Eric Hammond, the General Secretary of the EETPU, comments in the introduction of a brochure selling the EETPU's technical training facilities, itself an important component of their technology policy:

We are unequivocal. Technological progress is vital to industrial survival. Our concern is to ensure that it is successfully harnessed, not fearfully rejected by the industrial backwoodsmen in some short-sighted emotional spasm.... We co-operate readily with fair employers. They and our members alike gain immensely from the enlightened self-interest involved in doing so and from the presence of our genuinely representative, independent and trustworthy organisation at their work place. (68)

However, adherence to this policy with the EETPU's well publicised sympathy towards 'no-strike' agreements has attracted considerable criticism within the TUC and may have limited success even on greenfield sites. (69)

9. In the introduction of technology this approach is characterised by union representatives or members sitting on 'project groups'. Whilst
this permits involvement at an early stage of a system's development and keeps the unions well informed of progress, the degree of influence they can exercise is limited. The unions have "no real means of exerting power coupled to its project group participation". In addition, "the models (of participation) advanced largely accept management prerogative to initiate and implement change, and participation is viewed only as an appropriate managerial strategy for overcoming resistance", or to engender union acceptance of technological changes, with the consequence that "there is the risk that the union will become integrated in the general unaltered employers' decision-making process".

Forms of Participation

10. Underlying the co-operative approach is a complex array of conceptions of participation. They are generally based on post-Tayloristic humanitarian theories characterised by their non-political and non-conflictual perspectives. As Davies remarks, summarising arguments propounded by Poole:

Whenever the predominant ethos of society has been authoritarian, and whenever the main assumptions of leaders have been based on their belief in man's essential evil rather than good, the prospects of enhancing human freedom by ways of participation has been limited and circumscribed. . . . participation has been a mainspring for many broadly humanitarian philosophies, whether socialist, democratic, libertarian or religious. Davies goes on to construct a classification of worker participation based upon three ideological assumptions defined as political, humanistic and efficiency.

11. In its political context participation is considered "a means of optimising individual freedom and self-determination within a collective context" driven by a "need to equalise the internal distribution of power and involvement . . . redressing what is seen as the existing inequality
in the possibility for individuals to be involved and make decisions in their own jobs". \((75)\) Humanistic assumptions are largely concerned with increasing the quality of working life (QWL). "It is agreed that giving workers more autonomy, their sense of powerlessness and dehumanised regimentation will be reduced and their work given more meaning". \((76)\) This view derives from industrial psychologists in the human relations tradition, notably Mayo, Maslow and Hertzberg. \((77)\) The third, efficiency, is related to the management perspective of organisations where the worker is viewed as a "factor of production which must be taken into account if it is to be used with maximum effectiveness". \((78)\)

12. Differing views exist as to how the various forms of participation affect the introduction of new technology in the workplace. For example, in a study of the adoption of computer numerically controlled machine tools, Kelly identifies two approaches which may be considered the polarized extremes of a continuum of possible managerial approaches to participation. One is 'technocentric-participation' which "can be a vehicle for directing worker suggestions for modifying the technology without necessitating a change in hierarchical relations in the workplace". \((79)\) It is associated with 'employee involvement' initiatives such as special production meetings between workers and management to consider and discuss methods of improving production. However, as Kelly observes:

The resulting organisation of work may look no different than it does in an establishment in which management has adopted a Scientific-Management approach to the design of jobs. The difference between it and a strictly scientific management approach lies not in the formal division of labour but by the evident willingness of management to tap workers' knowledge to resolve production problems. \((80)\)

At the other extreme is 'worker-centred participation' which is defined as the "deliberate design of new technology and re-definition of work
roles in order to achieve an increase in workers' control over technology. Such an approach advocates task expansion or 'job enlargement' broadening the 'repertoire' of skills and/or creation of 'autonomous work groups' with flexible and multiple skills. This follows in the traditions of the Tavistock Institute and the socio-technical approach of systems design of whom Enid Mumford is possibly the most widely cited proponent.

13. In a critical analysis of office automation adopting participative or 'user involvement' strategies, Beirne & Ramsay identify two broad frames of reference, which they define as 'systems rationalisation' and 'computer re-design', each having 'three broad categories' or strategies. 'Systems rationalisation' strategies are based on scientific management principles. They range from: 'technocentric design', similar to Kelly's 'technocentric participation' (see above paragraph) being a somewhat broader and more sophisticated adoption of 'Taylorism'; through to 'passive user involvement', the provision of "certain concessions for labour to counteract problems of data-capture and resistance to implementation" being advanced by "less belligerent systems thinkers to combat systems 'noise'", although through the "values, vocabulary and orientations of systematic rationalism, the principles and precepts of scientific management are sustained"; and on to 'ergonomic systems design', based on "abstracted aspects of advanced research in hardware construction and software mechanics for use in placating user hostility at the so-called 'man-machine interface'" specifically "non-oriented high level programming languages, conversational procedures and query languages. While these techniques in themselves are of great significance for the co-operative design of computer systems, their narrow use
in human factors engineering is designed only to elicit user acceptance and expedite the productive use of pre-specified systems". (85)

14. The 'computer redesign' strategies are based on human relations principles and may be broadly equated to Kelly's 'worker centred participation' advocating a strong moral justification for workers to use and develop their creative abilities. Within this frame of reference three strategies are identified. These are 'socio-technical design', 'organisational design', and 'organisational politics'. The 'socio-technical design' approach of incorporating social as well as technical objectives in the application of technology, arising from well established critiques of purely technical approaches to mechanisation, have created a range of what purport to be techniques and "tool kits for engaging meaningful user-involvement and effective design". (86) For example: Mumford and Weir's 'Effective Technical and Human Implementation of Computer Systems' (ETHICS); Pava's 'Socio-technical Design Methodology' for non-routine office environments; or Mumford's classification of three different levels of user involvement relating to consultation, representation and consensus design. (87)

15. Whilst socio-technical design deals with "human-technical interactions, usually under specific environmental circumstances", (88) 'organisational design' adopts a somewhat more sophisticated approach introducing uncertainty and turbulence as factors present around the systems' design process. The strategy of organisational politics extends this somewhat further by drawing upon "wider debates and broader analyses of the political implications of computing technologies" with technology as a factor of the "aggrandisement of power in environments characterised by continuous battles for power, influence and prestige between groups with
conflicting interests"(89) (organisational politics has features relevant to the union strategy of 'independent participation' - see para.16 below. However, the distinction between organisation politics and 'socio-technical design' is important. As Tipton states "changes in job content other than of the most trivial kind, necessarily requires the restructuring of traditional hierarchies of occupational prestige and control"(90) and hence have a strong political context. Whilst organisational politics goes some way to recognising this the socio-technical approach does not. Davies identifies three criticisms of socio-technical theory. Firstly, it largely ignores the motivations of members and groups within organisations and the problem of matching individual objectives to organisational goals. Secondly, the structural power of the union-management relationship is largely ignored, i.e. participation is given ascendancy over collective bargaining. Thirdly, conflict is viewed as interpersonal and not structured. Consequently, this approach "negates a legitimate role for the trade unions, and as such has aroused the hostility and suspicion of many trade union leaders".(91)

The Independent Participative Approach

16. In contrast to both the adversarial and co-operative approaches, a new union strategy is discernible based on 'independent participation'. This approach challenges not only traditional forms of collective bargaining and the underlying union structures which support them, but also traditional forms of participation based on scientific management and socio-technical design and re-defines 'technology bargaining' making it an activity identifiably separate from traditional collective bargaining. Independent participation combines elements of the two previous approaches, overcoming the obvious contradiction between participation and conflict by identifying the politically differentiated interests of
union and management groups as the focus upon which the relationship between the two groups and forms of participation can be established. It thus identifies conflict as a legitimate, natural and inevitable phenomenon and therefore respects a union's independence of perspective and activity. In addition, the legitimate involvement of unions is extended beyond traditional economistic concerns into areas traditionally the hegemony of management, i.e. work procedures, job design and the computer systems design and development process itself.

17. The 'independent participative approach' has similarities with 'integrative bargaining' which has been defined as a "co-operative type bargaining relationship in the context of conflict based industrial relations system". Integrative bargaining is described as a "creative process by which bargainers discover new options" although it requires unions to have a well established bargaining procedure and to be effective, strong and powerful, and a commitment from both sides for forms of power sharing and to a wider infrastructure to support redeployment, training, etc. The operation of 'integrative bargaining' complements 'distributive bargaining' which is described as "the process of resolving pure conflicts of interests between the parties". However, the limited application of integrative bargaining as a novel or supplementary form of collective bargaining does not address itself to the wider problems of union organisation and structure and the management-union relationship. In addition, the apparent contradiction created by the necessity of an open and trusting environment for its operation in a conflict based situation tends to negate its relevance to the independent participative approach which is based on achieving a democratisation of the systems design process where unions, through technology bargaining, play an important and significant role.
18. It may be suggested that the independent participative approach encourages implementation of office automation away from traditional behavioural models of change, which have been criticised because they "miss the plurality of offices (activity) and assume a rationality on the part of organisational actors which is unlikely to exist". (95) Adherence to such behavioural models has been cited as the cause of the general failure of computerised data processing systems to fulfil prescribed objectives. (96) For example "systems are conceived of in technical terms, designed in technical terms, and implemented in technical terms, with little attention paid to social aspects". (97) To overcome this, Hirschheim argues that a 'social theoretic perspective' be adopted in the design, development and implementation of office information systems. (98)

19. This perspective differs from the prevailing dominant mechanistic ethos applied to the systems design and development process. The relationship between various perspectives and the independent participative strategy may be considered against Burrell and Morgan's framework for locating organisational theory. (99) The framework, illustrated in Diagram 1, maps four quadrants around two dimensions or assumptions about the nature of society and social science. These dimensions are polarized from order to conflict and subjective to objective respectively. The resulting paradigms, each located in one of the four quadrants, are: 'functionalist' lying in the objective/order quadrant; 'interpretivist' in the subjective/order quadrant; 'radical humanist' in the conflict/subjective quadrant; and 'radical structuralist' in the conflict/objective quadrant. Existing approaches to introducing technology are clearly located within the functionalist paradigm based on "social integration, consensus, needs, satisfaction and rational choice". The independent participative approach along with the 'social theoretic'
perspective promote projects developed and designed in the 'radical humanistic' paradigm based on transcending the limits placed on "existing social and organisational arrangements" and/or the 'radical structuralist' paradigm based on radical change, emancipation and stressing "the roles different social and organisational forces play" in the system's design and development process. (100)
Aston University

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Scandinavian Experiences of Independent Participation

20. The concept of independent participation has been defined and well developed across a range of projects and initiatives involving attempts by Scandinavian unions to engender greater control over the systems design process. Their "advanced forms of social welfare, deeply rooted traditions of social democracy and high (sic) comprehensive and co-operative forms of industrial relations"(101) are characteristic features of Scandinavian countries. These factors along with legislative rights have encouraged democratic principles in the systems design processes, promoted further by the establishment of the 'Arbetslivscentrum' (The Swedish Centre for Working Life) in 1977 under government legislation as an independent institute under the joint leadership of the government, unions and employer organisations, with research programmes "concentrated on issues of direct interest to the trade union movement".(102)

The Iron and Metal Project

21. It was in 1970 that the Norwegian union of Iron and Metal Workers began an influential research project on the use of computers and modern methods of planning and control. This was stimulated by an awareness of the potential of technology and an increasing demand and awareness at that time for increased industrial democracy. At first the research was designed in a traditional way with professional researchers undertaking tasks on behalf of the unions. However, as Kyng and Mathiasson point out "as the project progressed it turned out that it was impossible for the researchers to make the union representatives see any direct connection between the project and their daily work as union members, shop-stewards or as representatives at the national level".(103) The project was re-designed into workplace groups with workers defining and examining the issues they considered the most important affecting their workplace in
relation to planning, control and computerisation. The researchers position became one of undertaking a more supportive and facilitating role towards the workplace groups.

22. The 'Iron and Metal Project' demonstrated three important lessons. Firstly, that there was a need to build up knowledge about technology based on the 'trade union view of the world', i.e. from the union perspective and not the values and concepts of engineers, sales people and management. Secondly, that it was not sufficient for unions to employ a researcher to acquire insight on behalf of the unions or other interest groups - an understanding of the technology "must be built up locally, on the floor of the workplace". (104) Thirdly, because an increasing number of key decisions taken locally will relate to technology, there was a need to understand how technology affects the workplace as a result of decisions taken at all levels of the organisation. These lessons reaffirm the importance of a non-deterministic (either technologically or economically) model of technological change with the implications of specific technology being dependent upon a range of social, economic and political factors including highly localised environmental conditions.

The DUE and DEMOS Projects

23. Inspired by the 'Iron and Metal Project' two further projects were established in Denmark and Sweden in the mid-70s. The Danish Trade Union Research Council initiated the DUE (Democracy, Development and Electronic Data Processing) project, whilst the Swedish Trade Union Council initiated the DEMOS (Democratic Planning and Control in Working Life) project. The primary objective of the DUE project was to assist unions gain influence over information technology in accordance with their interests. A secondary objective was to contribute towards research and graduate
professional education in the systems design process. In meeting its primary objective the main tasks of the DUE project were the building up of resources within unions, specifically knowledge about the problems arising from the use of information technology, together with the use of this resource in negotiations with employers and also education within the unions. Their objective was achieved using research methods suited to the unions and oriented around a democratic ideal dependent on the unions' active participation and influence. The results from this project were a critical method of analysing traditional management oriented systems design methodologies and examples of the demands unions needed to make in order to secure influence over this process. For example, systems descriptions need to be conveyed in a variety of forms to be easily communicated to the diverse range of people involved in the system and/or techniques for designing systems 'with users' as opposed to the tradition of designing systems 'for users'. The critical analyses of systems design methodologies may, it has been suggested, provide the "insight which is a necessary prerequisite for developing new and more appropriate methodologies for local union involvement". (105)

24. The Swedish DEMOS project was similar to the DUE project in that it was a co-operative venture involving unions and "concerning possibilities for unions to influence the planning and use of new technology at the local level in the company". (106) The outcome was a form of union involvement based on an independent union investigative group operating in parallel with the company's project group as an independent union effort "to build up knowledge and information or for mobilisation (of members) around union demands". (107) A model for the development of union resources and negotiations is illustrated in Diagram 2. This model
demonstrates the conflict-based relationship between the parties, recognition of which is considered an important pre-condition for the democratisation of co-operation and decision-making in the work organisation. (108)

25. Ehn and Sandberg recognise a number of potential problems with the independent union investigation strategy. These are similar to those discussed in relation to project group participation within the co-operative approach (see para. 9 above). Union representatives may become hostage to the dominant management perception of the project thus finding it difficult to cope with a complicated problem area whilst maintaining an appreciation of, and being sensitive to, the interests and wishes of the members. To help overcome these problems and "in order for participation and negotiations to have a good chance for success" it is important that the union is able to integrate long range union aspirations with a strong 'union line'. They go on to question whether the 'union line' can be established at a time when a union "is involved with large and current changes". (109) The union investigation strategy developed and tested in the DEMOS project is essentially one of three simplified union strategies. The other two, "mobilisation around union demands" and "project participation," have parallels with the adversarial and co-operative approaches described above. Ehn and Sandberg note that "in practice these strategies are often combined in different ways depending upon the individual situation". (110)
Diagram 2

MODEL OF UNION INVOLVEMENT BASED ON AN INDEPENDENT UNION INVESTIGATIVE GROUP

Aston University

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The Utopia Project

26. The DUE and DEMOS projects were complementary initiatives following on from the Norwegian 'Iron and Metal Project'. The experience gained in these initiatives led to a further project being established in 1981 by researchers and graphic workers in Scandinavia (along with the support of the Nordic Graphic Workers Union) entitled 'Utopia'. In the Scandinavian languages UTOPIA is an acronym for Training, Technology and Products from the Quality of Work Perspective. The project's aim was "to develop trade union oriented alternatives for computer-based text and language processing in printing industry". (111) It was an attempt to develop a specific piece of 'alternative technology' in order to overcome limitations created by existing production technology which were identified to constitute an insurmountable barrier preventing the realisation of trade union demands for the quality of work and a meaningful job. The development of alternatives has precedents in the UK such as the corporate plan drawn up by Lucas Aerospace Workers to produce socially useful products, the establishment and ethos of the Centre for Alternative Industrial and Technological Systems (CAITS), and Harold Rosenbrock's work at the University of Manchester's Institute of Science and Technology on developing human centred machine tools. (112)

27. The Utopia project was a brave attempt at an offensive, rather than a defensive, union strategy. At the beginning it was considered that the project must result in a technical success. However, slow progress and lack of visible results, coupled with an underestimation of costs and lack of financial support, served to undermine the project. This led to the eventual abandonment of the original ideas for "active participation in an organisational experiment where graphic workers and journalists together seek new ways of working". (113) Instead, the project became
linked to a state owned printing concern co-operating on a page make-up and image processing system for newspapers. The Utopia team were very much the minor partner, permitted to pursue its own line of research, but unable to force the company into accepting their results. The project was not a technical success, but it did provide further valuable experience of co-operation between skilled workers and researchers and in doing so contributed to the research begun in the mid-1970s with the 'Iron and Metal Project'. However, this achievement was marginal compared to the original ambitions. One finding of the project was that "the newest technology may be designed and put into use to improve, not decrease, the skills of the graphic workers"(114) although there was doubt whether such a capability would be applied in an altruistic way, instead of being cynically applied to exploit workers in a management strategy of ensuring worker consent and compliance.

28. Growing scepticism of the possibilities for a 'New Scandinavian Model' for technological development based on democratisation and union involvement of the systems development process is reflected in some of the more recent Scandinavian literature. For example, Ehn and Kyng, two influential researchers in the DUE, DEMOS and Utopia projects, outline the general requirements of a New Scandinavian Model in a paper despairingly entitled 'Stardust Memories' while another paper 'Systems Development and Use: A Science of the Truth or a Theory of the Life' appears to question the motivations behind the development of computer systems and in doing so the role any researcher or systems specialists plays in mediating this process including those specifically oriented towards union and worker interests.(115)
New Participative Strategies for Trade Unions

29. The rich and varied experience provided by the development of this New Scandinavian Model serves as a useful source of information and inspiration in developing an independent participative approach within the context of UK industrial relations. Several authors, inspired by the research in Scandinavian countries, have contrasted traditional union strategies with suggestions for new participative strategies. For example, Schneider and Ciborra contrast 'after the fact' with 'before the fact' strategies. (116) 'After the fact' is the traditional strategy where unions "accept the company's decision to introduce new technology, allow management to develop new technological systems, but intervene heavily in bargaining over the impact of technological changes after the system has been developed and implemented". (117) The 'before the fact' strategy has been described thus:

from the very moment a system is suggested, the union makes its own proposals about the general goals of the system, its main functions, its applications in the labour process, the amount and kind of training necessary for workers to understand and use it - all before the system is designed. The union also participates in developing and introducing the new system, as well as regulating and evaluating its implementation and use. (118)

The advantage of this strategy lies in the greater opportunities it offers for influencing the outcome of the system. However, it requires unions to articulate short and long term demands for technological change, to have the capacity to forecast implications of particular technical configurations and to be able to suggest and devise alternatives and to evaluate final systems in relation to "initial blueprints and identify [as is usually the case] what went wrong and why". (119)
30. Levie and Williams propose a similar dichotomy based on what they
define as 'external union involvement' and 'internal union involve-
ment'.(120) External involvement corresponds to the traditional union
strategy and is considered most effective "where demands can be codified
(for example, workplace ergonomics, effects of manning levels, wages and
formal aspects of work organisation) and tend to be defensive
demands".(121) Internal involvement corresponds to 'before the fact',
(see above) "with its focus on ways the process of design and implementa-
tion shapes the characteristics of the system eventually intro-
duced".(122) The independent participative approach may be considered as
a development on the 'before the fact' and 'internal involvement' forms
of union strategy.

Towards a Theoretical Basis for the Independent Participative Approach

31. The theoretical basis for the independent participative approach may
be located within the contemporary labour process debate following criti-
cisms of Braverman's historic treatise. These criticisms, particularly
the neglect of worker resistance and subjectivity, have given rise to so
called 'second wave' theories of the labour process.(123) These are
associated with explanations for a variety of managerial strategies
adopted to accomplish control over the labour process depending upon the
more localised circumstances, such as the relationship of workers to
production process, the level of contact of union organisation, etc.
Friedman's 'direct control' and 'responsible autonomy' represent two such
strategies. The former describes an orthodox adherence to scientific
management whilst the latter is defined as "the maintenance of managerial
authority by getting workers to identify with the competitive aims of the
enterprise so that they will act 'responsibly' with a minimum of supervi-
sion".(124) Edwards classifies three forms of management control -
'simple', 'technical' and 'bureaucratic'. Simple control is an interpretation of Taylorism, technical control corresponds "broadly to the assembly line and other types of mechanisation", while bureaucratic control "routinises the functions and procedures of management, stratifies work and job titles, and governs appointments and promotion by impersonal rules". These two authors are the most widely cited and associated with 'second wave' labour process theories.

32. Manwaring and Wood identify a 'third wave' of theories which "broadens out the definition of worker subjectivity to include co-operation, consent and the application of employee knowledge in the production process". A number of interpretations and positions are adopted within this third wave, although an overlapping perspective can be identified, with the capitalist labour process creating contradictory relations within the firm for both conflict and co-operation. Conflict arises from the need of capital to reduce labour cost in order to secure its survival in a competitive environment. Consequently, technology is deployed as a means for controlling labour, making it more reliable, and increasing the intensity of labour. Co-operation occurs because capital is still dependent on labour, and in practice must utilise the tacit skills of the workforce. Capital must "engage workers active participation in the production process within controlled limits and reach accommodations with the realities of shop-floor power". It has been suggested that Gramsci's concept of hegemony may point to a useful framework in which to locate managerial control strategies based on consent.

33. Gramsci stressed that "the control of a ruling class is based on the permeation of a whole system of beliefs, morals and values through the
cultural and ideological apparatus of society and state". However, Thompson argues that "the concern with the organisation of consent is located almost wholly on the wider political terrain, and not on work". It would appear that Thompson fails to locate work in its wider social context. It must be recognised that in order for labour to develop a counter hegemony in the field of technology - which Williams and Steward argue has provided the basis for the union policy of new technology agreements - it will be necessary for unions to form alliances among disparate sections of capital and labour thereby locating the analysis of work within its wider social context.

34. Underlying the independent participative approach is a counter-hegemonic union model of technology and how it should be applied which recognises the political process of conflict and accommodation. It is the identification of this counter hegemonic position which differentiates independent participation from more sophisticated co-operative forms of participation based on "conflict, compromise and consensus". The sustenance of the counter-hegemonic view of technology through the development of union policy, formation of alliances among other interest groups, and dissemination of information challenging deterministic notions of technological change, are political expressions of the underlying conflict characteristic of the capitalist process of production.

35. From the discussion of the independent participative approach a number of themes emerge suggesting that it is a union strategy which, potentially at least, could be fruitfully explored to shape technological change in the interests of union members. It is a strategy which seeks to move beyond traditional economistic concerns of union bargaining into areas such as job design, work procedures, job content, etc., which
formed a central component of the policy encapsulated in the TUC 'Employment & Technology' report. The extension of union influence may be associated with a concomitant extension of industrial democracy. Its specific application to technology bargaining in the politicised form of sustaining a counter-hegemonic position over technological change is more a call for the democratisation of the system's design and development process. This has ramifications beyond the workplace in the wider society and suggests the need for more sophisticated social and economic union policies.

36. The independent participative approach is also a closer fit with our understanding of how control and power is exercised in the workplace, permitting neither the underlying conflict of interest between employer and employee, nor the co-operative pursuit of unitary interests between the two antagonistic groups, to blinker, limit or determine union policy and action. It therefore confronts the process of industrial relations with its blend of conflict, compromise and consensus by permitting participation whilst maintaining the necessary independence of organised labour, whose interests are fundamentally and diametrically opposed, and whose frame of reference, metaphors and language reside in a different paradigm to their employer. Moreover, it has been suggested that such a strategy addresses itself more fully to sophisticated methods for introducing technology which may lead to less system failures. These are all themes which are discussed and emerge further in this study.
CHAPTER TWO

THE CIVIL SERVICE: INDUSTRIAL RELATIONS AND TECHNOLOGICAL CHANGE
PART 1. THE CIVIL SERVICE

1. The organisational characteristics of the Civil Service today are descended from 19th century reforms. Specifically from a report 'Organisations of the Permanent Civil Service' by Sir Charles Trevelyan and Sir Stafford Northcote published in 1853.¹ The report was highly critical of the Civil Service for its barriers of entry, lack of talented people, and fragmented organisation leading to a disparity of service standards between departments. A number of reforms resulted from the report, including: recruitment by means of competitive examination; a division between superior positions and lower class positions; and a unified structure with uniform grading and salary encouraging inter-departmental transfer. In addition, it was advocated that civil servants should be 'generalists' rather than 'specialists' on the basis that 'intellectuals' having demonstrated a high academic achievement in any subject would have the right sort of ability for carrying out the variety of public service functions demanded from the Civil Service.²

2. Further reform followed the 'Report of the Civil Service Re-Organisation Committee' published in 1920 creating three divisions of civil servants classified as administrative, executive and clerical. The administrative class has responsibility for the formulation of policy and advising ministers, the administration and control of departments and the co-ordination and improvement of the government machine. The executive class has responsibility for undertaking tasks "within the scope of approved regulations or approved decisions, initial investigations into matters of higher importance, and the immediate direction of small blocks of business", whilst the clerical class has responsibility to follow
"well defined regulations and instructions, prepare material for processing, undertaking simple drafting and collection of materials on which judgements could be formed". (3)

3. The development of the Civil Service has been described as "a continuous process of creation, fission, fusion and transfer rapid at some time, slower at others". (4) The multiplicity of factors involving changes to the operation and formation of departments include:

- expansion of the functions of government, the development of new areas of policy (e.g. social security and economic planning) as well as the disappearance of old ones (e.g. India), fluctuations in the degree of emphasis accorded from time to time to different fields of administration. (5)

However, common characteristics are discernable. The form of organisations equates closely to the classical model of bureaucracy developed by Max Weber with a hierarchy of officials whose functions are circumscribed by a written and codified definition of their power enabling a clear separation between 'personal' and 'business' affairs. This is considered important for maintaining the apolitical role of the Civil Service. There are also the class divisions of the internal labour market operating vertically between higher and lower grades and horizontally between 'generalist' and 'specialist' grades. Union representation of civil servants clearly identifies these divisions. The First Division Association (FDA), Society of Civil & Public Servants (SCPS) and Civil & Public Servants Association represent the 'generalist' or 'administrative' grades at the higher, middle and lower levels, respectively, whilst the Institute of Professional Civil Servants (IPCS) represents the 'specialist' grades.
4. A unifying factor of the Civil Service is the pervasive culture operating throughout the diverse maze of departments, commissions, directorates, quangos, etc. The term culture is used as the explicit or implicit collection of norms, standards of behaviour, ways of doing things etc., which are unique to any particular organisation. The 'Civil Service culture' is an elusive, undefined concept relating to the bureaucracy and its compulsive dependence upon secrecy, the written word and codified instructions. The culture is maintained and reproduced through the well established routines and practices of the Civil Service. For example, decision-making based on achieving consensus among those interest groups represented on, or with access to, committees (outside these forums decision-making remains largely secretive). In addition, public accountability is a key metaphor of the Civil Service. Public accountability is achieved by the careful documentation of all actions and through ministerial responsibility, i.e. ministers alone are responsible to parliament, and thereby the public, for all the actions taken by their officials (in theory all actions taken by civil servants are the exercise of the will of the minister). Public accountability also means an equitable and non-discriminatory service provided throughout the country irrespective of geographic location or the departmental function. Other expressions of the civil service culture are the internal class divisions between occupational groups, the all-encompassing secrecy encapsulated in the Official Secrets Act, and political neutrality and diverrcement from the parliamentary process.

5. For lower grade workers, generally those represented by the CPSA, the manifestations of the culture are expectations of austere working environments and jobs with secure employment conditions that follow well-established procedures requiring little individual discretion. In
the higher grades, particularly at the administrative level, the culture is synonymous with the perceived independence of the Civil Service. An independence based euphemistically on consensus or the 'common ground' "on which, or to which, the majority of people can be persuaded to move". (6) At this level the culture is based on the intellectual ability of civil servants to prepare well argued briefs with all the available options and consequences of a particular policy proposal laid out. Sir Anthony Part, former permanent secretary at the Department of Industry, justifies civil servants influencing ministers to the common ground on the basis "that in recent times neither of the main political parties has been elected by a majority of the electorate". (7) The importance of this culture as an ideological form of control and a hegemonic force across the Civil Service is discussed further in paragraph 14 in relation to more recent reforms which have attempted to politicise the Civil Service towards the ideology of the post-1979 Conservative Government.

The Treasury

6. A further important characteristic of the Civil Service is its centralised control and decision making through the Treasury Department. The Treasury is not only the 'Department of Departments', co-ordinating the Civil Service, but also has a central position in the activity of the UK economy. The central role of the Treasury evolved from two important acts of parliament. The first in 1787 with the creation of the central consolidated fund "into which shall flow every stream of revenue and whence shall issue the supply for every public service" (8) and administered by the Treasury. The second in 1861 when the Treasury was given "the right to vet and approve the annual estimates of all Government departments before presentation to Parliament". (9) With the unification of civil servants grading, salary and conditions, the Treasury not only
held the purse strings but became the arbiter of public spending as well as controlling the quantity and quality of labour employed.

7. It was the concentration of power and authority in the Treasury that aroused considerable criticism in the 1950s. The Treasury was accused of being "partly attributable to Britain's economic stagnation" due to its conspicuous lack of imagination and initiative. These criticisms led to contemporary measures that were adopted to reform the Civil Service, such as the Plowden's Committee's re-organisation of the Treasury in the early 1960s and the Fulton Report in the later 1960s. The Plowden Committee, in a move to promote a form of positive economic planning, created the National Economic Development Council and the Department of Economic Affairs (DEA). The DEA took over all the Treasury's responsibilities for planning and co-ordination of the economy, a role which lasted until 1969 when the DEA was disbanded and its responsibilities returned to the Treasury.

The Fulton Report

8. In 1965 the House of Commons Estimate Committee under the chairmanship of Jeremy Bray MP called for a "full scale Government enquiry into the structure, recruitment and management of the Civil Service". This became the 'Committee on the Civil Service' under the chairmanship of Lord Fulton established in 1966 and led to the publication of the Fulton Report in 1968 which has been acknowledged as "the most thorough-going inquiry into the Civil Service since Northcote & Trevelyan". The Fulton Report made a number of criticisms centering on the Civil Service's adherence to what Peter Kellner and Lord Crowther-Hunt termed "the cult of the generalist". They point out that this adherence is "so all pervasive and all powerful was this ideology that no single recommend-
ation could hope to eradicate it.\(^{(13)}\) In all, 158 recommendations were made and measures taken by the committee to ensure immediate acceptance by the Prime Minister and Cabinet of the more important recommendations in order to circumvent expected opposition from civil servants.\(^{(14)}\)

9. A white paper published in 1978 reported that following the Fulton Report "a number of radical changes in the organisation and management of the Civil Service had occurred.\(^{(15)}\) A further report 'Response to the Fulton Report', prepared by the Civil Service, detailed these changes against the original 158 recommendations. However, it has been pointed out, "the pattern that emerges is that the old administrative class largely chose for itself which recommendations to carry out and which to ignore.\(^{(16)}\) The process of selection and obstruction which effectively undermined the Fulton recommendations was achieved by circumvention, subtle changes of emphasis and in certain cases outright obstruction.\(^{(17)}\)

10. The Fulton Report set the agenda for the contemporary public discussion on Civil Service reform. This issue was adopted with renewed vigour by the Conservative Government elected in 1979. There have been three strands to this reform. Firstly, a commitment to reducing the size and influence of the Civil Service consistent with its monetarist economic policy which perceives the role of the state, and all public services, as harmfully influencing the operation of 'free markets'. The policies of privatisation and de-regulation have formed the major initiatives in reducing the influence of the public sector, both central and local, whilst specific 'manpower targets' and cash limits have been arbitrarily imposed upon the Civil Service to reduce its size.\(^{(18)}\) This has led to a reduction of civil servants from some 735,656 staff in post as at 1st April 1978 to 595,764 staff in post as at 1st October 1985.\(^{(19)}\)
11. Secondly, the establishment of the Efficiency Unit following precedents established by the Rayner Reviews. These were a series of scrutinies undertaken by departments with the help of Sir Derek (later Lord) Rayner seeking out inefficiency and reporting directly to ministers.\(^{(20)}\) Thirdly, the creation of a more market oriented management philosophy within the Civil Service, with associated improvements to management information systems, such as the 'MINIS' system established in the Department of Employment, setting out the objectives, priorities, costs and results of each internal departmental activity. In addition, payment for common services, which had hitherto been received free of charge, was introduced and changes to the training and promotional requirements in order that "those likely to occupy the highest ranks in the service have direct experience of managing both people and money".\(^{(21)}\)

12. The epitome of changes in the management philosophy has been the introduction of the Financial Management Initiative (FMI). FMI is aimed at promoting in each department an organisation and system "in which managers at all levels have:

(a) a clear view of their objectives and means to assess and, wherever possible, measure outputs or performance in relation to these objectives.

(b) well-defined responsibility for making the best use of their resources, including a critical scrutiny of output and value for money; and

(c) the information (particularly about costs), the training and the access to expert advice that they need to exercise their responsibilities effectively.\(^{(22)}\)

FMI has been promoted as a means of delegating authority giving managers "more say in the composition of their budgets and greater freedom to manage within them".\(^{(23)}\) FMI de-centralises and devolves decision-making. However, it also provides an improved means to centralise control by providing performance indicators of the devolved budget
centres with the allocation of budgets being under central control. Centralised control also occurred with the disbandment of the Civil Service Department and the division of its responsibilities between the Treasury and Cabinet Office. (24)

13. These reforms have been observed by some as the final acceptance of recommendations made by the Fulton Report. (25) However, this neglects the important ideological components of the current reforms which seek to replace the existing consensus culture with one allied to the world view of the present Conservative Government. (26) For example, 'public accountability' has traditionally been an important tenet shaping the consensus culture of the Civil Service. The concept of 'public accountability' has both quantitative and qualitative aspects. It is a complex mixture which was recognised by the Fulton Report when recommending for a more accountable and efficient management by creating both 'budget centres' where financial costs and benefits could be measured and 'responsibility centres' where costs and benefits could not be easily measured. (27) In principal FMI adopts this Fulton recommendation. However, the emphasis of FMI has been towards the economic quantification of the service for the purposes of reducing services. But, as David Thomas has pointedly remarked "a party wanting to expand public services has more to gain from the efficient use of resources" (28) rather than one seeking to cut services. In FMI the qualitative aspects are submerged by the quantitative, and consequently the concept of public accountability, with its stress on efficiency and service, is displaced by the concept of 'economic accountability' with a stress on getting the most at the lowest cost. This may be described as a process of commodification across the public services.

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14. Commodification occurs as services are reduced to a bare economic equation adopting a commodity status to be purchased at a rate dictated by market forces. This not only ignores the complexity of the form and nature of services provided by public bodies, but also, by reducing the provision of services which most serve the deprived in society, it generates greater inequality and accentuates social divisions within society. In addition, public accountability of civil servants was brought into public attention by the trial of Clive Ponting, a Civil Servant prosecuted for disclosing information to an opposition MP.\(^{(29)}\) In this case the duty and loyalty of civil servants was under examination, questioning whether they are responsible "to the Crown, or the State, or to the Crown in Parliament - than to ministers alone and above all".\(^{(30)}\) The Conservative Government were unequivocal in their belief that civil servants' responsibility was to them alone. The Ponting case illustrates an attempt by the present Conservative Government to politicise the Civil Service. Moreover, this process of politicisation attacks the civil service culture. It has been suggested that the extent of the current reforms and degree of politicisation will be apparent and determined by what happens following the election of a different government.

15. Three possible scenarios may be considered. First, with the traditional civil service culture disrupted and effectively broken there is an opportunity for an incoming government to re-shape public services in sympathy with its own ideology. For example, an incoming Labour Government may seek to re-define the role of central government along practices applied in pursuit of 'municipal socialism' by Labour controlled local authorities. This would require a clear expression and understanding of the alliance of forces required to sustain control through engendering a new culture within the Civil Service and formation of counter-hegenomic
positions over the public services. Second, with the traditional culture transformed towards the ideology of the present government any new government may find itself constrained by an infrastructure hostile to any radical or alternative policy options. Consequently, an incoming government may find it necessary to continue existing policies to ensure its own survival. Third, the Civil Service may prove resilient to all these recent reforms and demonstrate that it continues the practices and habits so despised by the would-be reformers. Given the deep-rooted tradition and pervasive nature of the Civil Service culture this latter option would appear most likely.
PART 2. INDUSTRIAL RELATIONS IN THE CIVIL SERVICE

1. Industrial relations in the non-industrial Civil Service operate on a formal collective bargaining system based on the operation of Whitley Councils. This operates in conjunction with a highly developed informal system of contacts and networks between union officials and management representatives. However, the Whitley system with its characteristic formal and bureaucratic procedures largely dictates the form of collective bargaining and management/union relationships in the Civil Service.

2. Whitley Councils derive their name from J. H. Whitley, a Deputy Speaker in the House of Commons, who chaired a committee to consider ways of improving relations between employers and employees. The resulting report, published in 1917, recommended "the establishment of joint councils in every industry to consider regularly the progress and well-being of the trade and to give opportunities for satisfying the growing demands made by trade unions for a share in industrial control". Whitley Councils were envisaged to operate within each industrial sector and despite a proposition from Beatrice Webb for using the Civil Service as an experiment in the operation of Whitleyism the government sought not to apply Whitley councils within the Civil Service. However, following a vociferous campaign by all Civil Service unions, Whitley Councils have operated in the Civil Service since 1919.

3. Whitleyism in the Civil Service operates at three levels: local, departmental and national, each level having a written constitution. There is some variation to this structure dependent on the departmental circumstances. For example, the very large and geographically widespread DHSS operates a system of regional Whitleys in addition to the local and
departmental bodies. The guiding principle of establishing councils has been "that at whatever level of management decisions are made which affect [union] members, they are entitled to negotiate and influence these decisions". (33)

4. Whitley Councils consist of two sides. The 'official side' of management representatives, usually personnel officers and the senior management of the applicable level, and the 'union side' of representatives from the constituent unions representing members at the applicable level. For example, at the national level all nine Civil Service unions are represented; these are: the Civil and Public Services Association (CPSA) representing lower grade clerical workers; the Society of Civil and Public Servants (SCPS) representing middle-level management; the First Division Association (FDA) representing senior administrative grades; the Civil Service Union (CSU) representing a diverse range of grades not in any of the other unions; the Institute of Professional Civil Servants (IPCS) representing scientists, engineers and other specialist grades; the Inland Revenue Staff Federation (IRSF) representing all grades in the Inland Revenue departments; the Prison Officers Association (POA) representing prison warders; the Association of Government Supervisors and Radio Officers (AGSRO) representing several specialist grades; and the Association of Tax Inspectors (AIT) representing higher grades in the Inland Revenue (this union is closely associated with the FDA).

5. At the national level the trade union side have their own independent secretariat - the Council of Civil Service Unions (CCSU). This was formed in 1980 following an internal review by the union side of the National Whitley Council. The CCSU plays an important co-ordinating role
and undertakes necessary representation on behalf of unions, conducting collective negotiations as and when required. The impact of the CCSU tends to be only on national policy providing a resource for discussing joint policy formation with little, if any, intervention in departmental affairs. Co-ordination of departmental issues is organised by the appropriate Section Executive Committees of constituent unions through the Whitley system.

6. Whitleyism has provided the basis for collective bargaining in the Civil Service for over sixty years. It has enabled individual civil service unions to collectively discuss issues affecting more than one union before making representation to, and undertaking negotiation with management. To this extent it has helped overcome divisions between unions. However, a notable weakness of the Whitley constitutions is the lack of a 'status quo' clause relating to the breakdown of negotiations. Where negotiations do break down a formal disagreement is registered and referred up to the next level, and whilst the issue is being negotiated management are permitted to take 'administrative or executive action'. If an agreement cannot be achieved at the national level then management retain their right of prerogative to take unilateral and non-agreed action. Thus, the fundamental basis of Whitleyism relies on consensus and goodwill rather than agreement and compromise.

7. Since its introduction, attitudes towards Whitleyism have changed reflecting wider changes in the development of industrial relations in the public services. For example, in the thirties the official side generally demonstrated resistance to consulting the staff side or recognising that they could make a useful contribution on issues that concerned civil servants. However, favourable experience in the Inland
Revenue Department and the co-operative spirit for industrial relations engendered during the Second World War resulted in the official side becoming "fully convinced of the value of Whitleyism when confronted with a practical problem, such as implementing [or evading] the recommendations of the Fulton Report".\(^{(34)}\) Since the Second World War and until the late 1960s and early 1970s Whitleyism became more prominent. The success of Whitleyism in the Civil Service, as compared to its virtual disregard in the private sector, has been attributed to a number of factors, including what Henry Parris observes as "an absence of fundamental differences of interest between the two sides".\(^{(35)}\) This, he argues, is due to whatever antagonism between "the staff and an abstraction which may variously be labelled the state, the public, the taxpayer, or society at large ... (is not based on) ... the bitterness all too common a feature of collective bargaining in the private sector".\(^{(36)}\)

8. This view is reflective of the historical moment in 1969 at which it was written, on the fiftieth anniversary of Whitleyism in the Civil Service, and did not appreciate the changing industrial relations climate within public services or the backlash effect of Civil Service reform and the rising phenomena of 'white-collar militancy'. Whilst Parris identified a growing militancy within the Civil Service and recognised that the antagonism between staff and the employer "was less clear in departments with large numbers of low paid staff where conditions of work approximate to those of the private sector"\(^{(37)}\), he failed to appreciate the influence this would have at a time when it was felt that co-operation through Whitleyism had exceeded itself. Some union leaders and management representatives considered that "the clear didactic of enlightened management and co-operative union leaders"\(^{(38)}\) had gone too far. In addition, the Fulton Report considered "that management, constrained by the existing
structure of the service, has allowed the Whitley system to operate in ways that hamper effective management". (39)

9. For union officials the operation of Whitleyism created difficulties with their own members. As a general secretary of the IRSF remarked:

Conference agendas today criticise Executive Committee; no voice seems to be raised against the official side. Looking at my agenda my members seem to think I am the Permanent Secretary. (40)

The gulf between individual civil servants and those negotiating on their behalf is exacerbated by the centralised nature of industrial relations in the Civil Service. Issues such as pay, allowances and grading are subject to national bargaining. Moreover the bureaucracy of the service, in particular the central role of the Treasury Department, dictates that the formation of employment policy is decided centrally. This centralisation of negotiations is reflected in the structure of union organisations. For example, all CPSA full-time officials are located at the HQ in London. However, the changing social composition of civil servants, with the recruitment of people brought up in the post-war period whose values, assumptions and attitudes had been shaped by the security provided by the welfare state and who have adopted a more questioning outlook, has led to the cosy relationship between management and union leaders - epitomised by the Whitley system - to become subject to closer scrutiny by representatives and members. An expression of this growing militancy was the adoption and use of a strike policy in the early 1970s.

10. The adoption of the strike policy by Civil Service unions marks a departure from the post-war consensus of the Whitley system and was as much an attack on the union leaders as against the official side. The
unions argued that the reality of the system is that at the end of negotiations and bargaining the employer can refuse to accept arguments or interpretations other than their own. Therefore, a strike policy is necessary because collective action is an essential part of the collective bargaining process.

11. In recent years the operation of Whitleyism has come under increasing pressure and strain. The militancy of civil servants and the pressure to cut back the public services are not conducive to good industrial relations and have tended to sharpen conflict between civil servants and their employers. These are developments which have undermined Whitleyism. This can be illustrated by consideration of the three basic principles for the successful operation of Whitleyism. These are: firstly, a separation of the "state in relation to its employees, from the state in its capacity as state"\(^{(41)}\); secondly, a fair comparison as a means of determining pay; and thirdly, a workable incomes policy, not only for the government's own employees but also the rest of the economy. Since the early 1970s, conflict has arisen from each of these principles. For example, the distinction of the state as employer and as the 'state' has become increasingly blurred with pressure from the post-1979 Conservative Government towards the politicisation of the operation of the state, (see above in Part 1, paragraphs 13-14 of this chapter). Also, the principle of pay determination has been unilaterally defined by government and a system of fair comparability, which had been operating since 1956, was scrapped in 1981. In addition, there is no national incomes policy which has resulted in an increasing disparity between civil servants' pay, whose levels are suppressed by government intervention, and that in comparable outside industry. The undermining of its basic principles combined with the instigation of a "financial culture"\(^{(42)}\) within the
Civil Service have contributed to the transformation of the Whitley system away from a consensus seeking institution towards a procedural system for conducting negotiations. The contemporary Whitley system differs little from collective bargaining arrangements operating in other industrial and commercial sectors.
PART 3. THE CIVIL AND PUBLIC SERVICES ASSOCIATION (CPSA)

1. The Civil and Public Services Association (CPSA) is the accredited trade union for lower grade clerical workers in the Civil Service and a number of quasi-central government bodies, such as the Atomic Energy Authority, British Airports Authority, Metropolitan Police, etc. It represents approximately 140,000 people, three-quarters of whom are women.

2. The majority of CPSA members are in the clerical, secretarial, typing and data processing grades. There are also smaller groups, such as Teleprinter Operators, and departmental grades, such as DHSS Local Officer grades. The Civil Service employs nearly 280,000 workers in these grades, making the penetration of CPSA membership at just over 50% in 1984. A feature of the lower grades of Civil Service workers, which creates problems for union organisation, is the rate of staff turnover. For example, in 1984 there were 51,300 Clerical Assistant (CA) grade workers and 118,300 Clerical Officer (CO) grade workers. Of these, 12.6% CAs were promoted to CO and 3.4% COs were promoted to Executive Officer (EO); whilst 14.6% CAs and 11.24% COs left the service. Recruitment rates for 1984 were 23.4% CAs and 7.8% COs. Therefore the turnover rate of COs and CAs averages around 15-20% per year. Consequently, it may be expected that in a 5-7 year period almost all CAs and COs will either have been promoted or have left the Civil Service altogether. This high turnover creates problems for the stability of the union, not only because of the unknown and constantly changing voting habits of the new membership, but also in retaining committed and experienced local union activists. It has been estimated that the CPSA annually loses some 30% of its branch officials.
3. The organisation of the CPSA follows the levels of Whitley councils corresponding to levels of management decision making. These are national, section and local. The national structure is based at the CPSA's HQ in London and consists of the finance office and supporting services, such as education, research and organisation departments, as well as the offices for all the full-time union officials both elected and appointed. There are 15 sections organising the CPSA representation in individual departments, such as the Department of Health and Social Security (DHSS), Ministry of Defence (MOD), Department of Employment (DE), etc. In addition are two assemblies, northern and southern, organising branches which do not fit into any of the other sections. All the section and assembly offices are based at the union's HQ. At the local level there are over 800 branches spread throughout the UK and in some overseas establishments. The larger sections, such as MOD, DHSS, and DE, also have sub-branches and area or regional organisations. The national senior officers of the union, i.e. the General Secretary, Deputy General Secretary and General Treasurer are elected by a membership workplace ballot every five years. The assistant secretaries, who administer the sections, are appointed officials with no recourse to elections, unlike all other section honorary officials, i.e. chair, secretary, treasurer, etc., who are elected annually by the section membership in a workplace ballot.

4. The major decision-making body of the CPSA is the annual conference attended by delegates from every branch. Motions for conference are accepted from branch meetings. Between annual conferences decision making is vested in the National Executive Committee (NEC) which, along with its senior offices of President and two Vice-Presidents, are elected by a membership work-place ballot every year. The individual CPSA member is
likely to be involved, through workplace ballots and branch meetings, in the CPSA decision-making procedure several times every year. The CPSA is affiliated to the TUC and has a seat on the General Council. In the past, the CPSA and its forerunners have been affiliated to the Labour Party, although at present it has no such affiliation.

5. The CPSA has developed a reputation of instability from the erratic voting of its membership leading to inconsistency and dramatic swings in the composition of its leadership. A leadership which is bitterly fought over by competing internal factions. In 1984 there were three main factions. First, 'Broad Left' reputedly dominated by supporters of the Trotskyist group 'Militant Tendency'. Second, 'Broad Left '84' an alliance of Communist and Labour party supporters who broke away from the 'Broad Left', dissatisfied by its increasing domination by Trotskyist groups such as the Militant Tendency. Third, 'Moderate Group' an assortment of people who shared a hostility to communist and Marxist influence within the union and who interpreted union activity in a narrow and limited way separated from wider political activity. During the 1960s the Moderate Group dominated the national union with its supporters holding all key positions and offices. During the 1970s the Broad Left grew in opposition to the Moderate Group securing a majority on the NEC for the first time in 1974(47). Since then control of the national union has swung between supporters of the Moderate and Broad Left factions often in a haphazard and inconsistent fashion. For example, in 1986 the NEC was elected with a majority of Moderate supporters whilst in an election for a General Secretary, also held that year, a Broad Left supporter was elected. However, the General Secretary's election became the subject of a court action and was overturned and in a new election a Moderate Group supported candidate won.
6. The instability of the CPSA and influential prominence of so many factions representing the entire political spectrum from the ultra-left 'Socialist Workers Party' and 'Militant Tendency' to the 'Conservative Trade Union Association' within the CPSA are indicative of a youthful membership drawn from a variety of social backgrounds and a fast turnover of both membership and local activists. This encourages capable yet inexperienced union activists to gain positions of influence and importance soon after joining the union. These people are often susceptible in their political education to well-organised factions. Outside the union HQ these lay officials hold considerable sway and influence over the local CPSA members, often fulfilling a dual role of full-time officer and shop steward.\(^{48}\) However, the centralised nature of all important negotiations over the Civil Service has created an elite and somewhat remote national organisation with considerable power in the hands of national officials. Their strategic location and access to information and decision-making, along with the stability they bring in a situation of constantly changing leadership, all add to the considerable influence and power of these national officials.
PART 4. TECHNOLOGY BARGAINING AND THE CPSA

1. Interest and involvement over the introduction of technology into the Civil Service has always been an issue for the CPSA and its various forerunners. The first forms of technology in the Civil Service were typewriters introduced in 1878 - and not without a degree of discontent by the civil servants of that time.\(^{(49)}\) This was some 25 years before the formation of the Assistant Clerks Association, the direct antecedent of the CPSA.

2. The first forms of computer technology in the Civil Service came in the 1950s with the use of 'electronic data processing machines' which the official side saw "as a natural sequel to earlier stages of mechanisation"\(^{(50)}\) such as calculating machines, punched card machines, etc. Despite the prevailing 'automation debate' which had similar parallels with the current new technology debate in its fears for employment, the union side appeared remarkably complacent requesting only that they (the union) should be consulted early and that there was "no desire to oppose this type of mechanisation, but [the union side] might wish to ask for safeguards".\(^{(51)}\) Moreover, at a National Whitley Council held in 1956 to discuss computerisation, one union side representative "expressed concern lest the government might be failing to make the most of its opportunities. Were they, for example, seeing whether the machines which the scientists were using which were much more advanced machines than punched card computers could be applied to office work?"\(^{(52)}\)

3. Throughout the 1960s and into the early 1970s the introduction of computers was satisfactorily achieved through the existing form of collective bargaining. However, the 1970s witnessed the introduction of new
management practices, such as 'management by objectives'. In recognition
of the changing managerial practices the CPSA decided to expand an exist-
ing 'Welfare Sub-Committee' of the Civil Service NEC 'to be re-named
'Welfare and Management Services Committee.'(53) However, with the
growing number of computer centres this committee was split to form
a 'Welfare Committee' and a separate 'Management Services/Computer Com-
mittee.' The major issue discussed by this committee was a regrading
exercise replacing a 'Machine Operator's' grade with the new 'Data Pro-
cessor' grade in 1976. The exercise was a recognition of the changes in
work being performed in the computing areas. In response to the growing
membership of this area, a motion was passed at the 1975 Annual Confer-
ence calling for the creation of a 'National Computer Advisory Committee'
with representation from every section of the CPSA.(54)

4. The implications of the new micro-electronic based technology first
emerged in the late 1970s. In particular, there was growing concern over
word processors being used in a trial at the Department of Education and
Science, Darlington, in 1977. In addition, at the annual conferences
motions concerning new technology issues became more apparent. For
example, in 1976 one motion recognised "the ever increasing number of
VDU operators in the CPSA grades" and went on to urge the NEC to review
the grading implications suggesting a "VDU specialist grade".(55) At the
1978 conference several motions demonstrated concern at the possible
health risks associated with the use of VDUs, in particular calling for
regular eye-sight tests. The publicity given to the 'new technology
debate', particularly following the Horizon documentary in the Spring of
1978 (see paragraph 1, chapter 1), engendered greater awareness and put
the issue firmly on the agenda within the CPSA.
5. Deliberations within the NEC during 1978 resulted in a report 'Future Policy Towards Technological Change and Departmental Restructuring Claims' being published for consideration at the 1979 conference.\(^{(56)}\) This called for the creation of new National Technology Sub-Committee reporting to the NEC and "monitoring major technological developments in the Civil Service and make recommendations to the (NEC) as to how the Association should respond to them."\(^{(57)}\) It also called for "linking co-operation in changing technology with improvements in pay and other conditions of service".\(^{(58)}\) However, at the 1979 conference, the impact of the report was overshadowed by a motion which called for a sub-committee to establish a "National Code of Practice on the introduction of new technology"\(^{(59)}\) containing the principles of no job loss and the introduction of a shorter working week. It also called upon a "policy of non co-operation until the principles were achieved". Given the prevailing climate this was an unrealistic policy and reflected the domination of the national conference by the 'Broad Left'. In contrast the document reflected the more realistic and conciliatory attitude of the national officials.

6. Following the acceptance of this policy, and taking the advice of the TUC 'Employment and Technology' report negotiations between the CCSU and the Central Computing and Telecommunications Agency (CCTA) of the Treasury began on obtaining a national new technology agreement. At the 1980 conference the policy as agreed at the 1979 conference, was reaffirmed and, in addition, an educational campaign informing members of the potential dangers of new technology was agreed. The 1981 conference again reaffirmed its policy for "a no job loss and a shorter working week emanating from any new technology agreement".\(^{(60)}\) This was passed in preference to a motion with the milder clause of 'no compulsory redundancy', a clause which had been agreed as part of a national agreement on
'The Introduction and Use of Stand Alone Word Processors for Typing' in May 1981.

7. Negotiations on the national new technology agreement had been ongoing during this period. After two years an interim agreement was signed in early 1982 by the CCSU with the agreement of the constituent unions' NECs. This agreement was circulated to all CPSA members on the 16th March 1982. The negotiations did not secure a 'no job loss' clause or any commitment to a shorter working week and in place of these demands provided "a guarantee of no redundancy, gave protection of earnings for those whose jobs were affected by new systems of work based on new technology equipment and detailed consultation procedures on the introduction of new systems". (61)

8. The negotiators of the agreement, supported by the NEC, argued that these guarantees were better than no agreement at all. At the 1982 conference two motions - 659 and 675 - were related to the agreement. The former urged conference to endorse the interim two year agreement and called upon "CPSA participation in a Council of Civil Service Unions Awareness Programme to prepare members for the difficult negotiations in two years time to achieve an improved agreement which will guarantee improved conditions of service such as the shorter working week". (62) This was supported by the moderate dominated NEC, the majority of national union officials, including the national union leadership, and the Moderate Group conference delegates. The latter motion called for the censure of the NEC in failing to observe the terms of motion 550 passed at the 1981 conference and "called upon them to re-open negotiations based on the 'no job loss and shorter working week' principle". In addition, the motion made a demand for "detailed plans for industrial
action should negotiations fail".\(^{63}\) This was supported by the Broad Left group of national conference. The Broad Left motion was carried and the moderate supported motion lost resulting in the CPSA seeking an orderly withdrawal from the agreement. At the 1982 SCPS conference, the agreement was similarly rejected. Therefore, with both the major CCSU unions rejecting the agreement, the CCSU decided to withdraw completely at the July 1982 meeting of its full council.

9. The termination and withdrawal from the agreement was achieved by an exchange of letters between the two sides. However, with no prospect in the prevailing industrial relations climate of an agreement being concluded which would be acceptable to both sides, national negotiations were never resumed. Consequently, negotiations over technology were left to departmental and local levels of collective bargaining. In place of an agreement the CCSU issued a policy statement. This declared that technology should be used to improve the quality and quantity of services to the public and not simply to cut staff numbers and reduce costs, and called for a share in benefits arising from technology. In addition, the CCSU detailed procedures of how to negotiate over technology and sought the co-ordination of departmental union side policies to make constituent unions aware of possible repercussions of a particular union's action over technology.\(^{64}\)

10. The 1982 conference also witnessed the election of a Broad left dominated NEC. The new NEC followed up the policy of rejecting the agreement with an immediate ban on membership co-operation and 'withdrawal of goodwill' with the introduction of technology. They also authorised strike action where membership support to oppose a project could be demonstrated, promising to pay 80% of net pay to all strikers.
In addition, a longer term strategy was devised involving the identification of projects where selective action could be sustained and the planning of a national campaign which supported the no job loss and shorter working week principles. The longer term strategy recognised that industrial action could not be possible in all establishments "because of the nature of the project or because of the attitude of members". In addition, and in a move to centrally co-ordinate the policy, the NEC ensured that sections or branches did not have the authority to conclude agreements without prior agreement of the General Purposes Committee (GPC) of the NEC.

11. Over time the CPSA technology policy fell into increasing disarray. The ban on membership co-operation was consistently ignored and did not take cognisance that the vast majority of CPSA members welcomed technology, either as a novel work feature breaking up what is in most cases a dull and uninspiring work routine, or because they were daily experiencing the overwhelming advantages of using technology to ease an already overworked and understaffed establishment. To date, no strike pay has been paid by any section of the membership in connection with a dispute over a technological project. The national vetting of departments and section NTAs has never been consistently adhered to and the authority for vetting NTAs was passed from the GPC of the NEC to the technology sub-committee. With the Broad Left NEC replaced by a Moderate NEC in 1983, and the general lack of enthusiasm for pursuing what proved to be an 'impossibilist policy', the CPSA's national technology policy was never effective.

12. The official side's response to the rejection of the agreement was to issue a series of guidelines on the industrial relations aspect of new
technology. This sought to reaffirm that all departmental agreements should go no further than the rejected national agreement and also sought to detract from two of the guarantees, i.e. the loss of separate consultation outside the normal Whitley system questioning whether an agreement was really necessary, and a withdrawal of any exceptional redeployment measures. In addition, the Treasury issued instructions that no agreement could contain a 'no job loss' clause. The only employment guarantees could be 'no compulsory redundancies' or, in exceptional circumstances, reference could be made on the effect of a project within a finite period on the complement of a department, although for this prior approval had to be sought from the Treasury.

13. Since 1983 requests at conference have called for an awareness and educational campaign,\(^{(67)}\) which resulted in the publication of a CCSU booklet and guidance for branch secretaries entitled 'Technology Whose Future'.\(^{(68)}\) In addition, greater public awareness of the possible health risks associated with the use of VDUs, particularly the concern over their effects on women of child-bearing age, resulted in demands for the "right of transfer for staff pregnant or wishing to become pregnant".\(^{(69)}\) A number of sections and branches have concluded departmental and project agreements with a varying degree of success and most sections are in the process of negotiating or considering negotiations of some kind of agreement. The official side have continued to issue and update their guidance to departments.

14. More recently, the major national involvement with technology bargaining in the CPSA has been the assimilation of the data processing (DP) grades with the clerical grades to form a new grade of Administrative Officer (AO) and Administrative Assistant (AA) as from the 1st January
1987. This was a unilateral initiative of the CPSA in response to the increasing use of technology by clerical staff and resulted in a shortening of the clerical pay scale with an overall increase in pay for all grades. However, the cost of this increase was the scrapping of the DP specialist grade. Those identified as working in traditional DP jobs now get an ADP supplement, although the criteria for this supplement remains a controversial issue.
PART 5. WHITE-COLLAR WORKERS OF THE STATE

1. Civil servants, as white-collar workers of the state, hold a unique socio-political position straddling traditional class demarcations in terms of both their labour process and relationship to the state. The generic term of 'white-collar worker' has been attributable to a widespread group of workers whose unifying characteristic is their ambiguous class location to either capital or labour. These two debates have been the focus of considerable attention in recent years. Further investigation of these debates provides a more informed understanding of the positions adopted by union representatives over industrial relations in the Civil Service and the operation of the Whitley system.

2. Three positions are identified as corresponding to the typology of union strategies adopted over technological change outlined in Chapter 1, Part II. The 'capitalist state' and 'proletarianisation of white-collar workers' are discussed as politicised or ideological expressions of the adversarial position. The co-operative position is discussed in relation to three theories of the state classified as pluralist, elitist, and corporatist, whilst the social location of white-collar workers is related to theories of the new middle classes. These two positions provide a background for considering more recent contributions to these debates. In particular, Gramsci's concept of hegemony as applied to an understanding of the state and the contradictory class location of white-collar workers. These are developed as a basis to discuss the independent participative position.
The Capitalist State

3. From what may be identified as a 'leftist' perspective the state is considered as developing in conjunction with the social division of labour and "is the form in which the ruling class asserts its common interests". The state is identified as the 'capitalist state' with its interests unambiguously operating to ensure the continuation and survival of capital's accumulation. In this sense, "the executive of the modern state is but a committee for managing the common affairs of the whole bourgeoisie". The similarity of class location between the state and bourgeoisie elite, i.e. those holding senior and influential positions, leads to self-selection from a similar social background. This influence, exerted through personal contact, is given as an argument for the state as an instrument of bourgeois domination in capitalist society. This 'instrumentalist' approach observes the objective power of capital to constrain the state to ensure the continuation of the process of capital accumulation, a view most closely associated with Ralph Miliband in 'The State in Capitalist Society' his thesis being that the state is an instrument that serves the long term interests of the whole bourgeoisie.

4. Within this perspective a number of competing arguments have evolved. The so-called Poulantzas-Miliband debate has focused these arguments around the 'instrumentalists' as described above and the 'structuralists' of which Poulantzas, following the work of Althusser has been the main advocate. Poulantzas initially criticised Miliband's emphasis on the social class background of state officials rejecting this as unimportant whilst maintaining that the "structural constraints placed on the state by the objective power of capital was the conclusive factor". Miliband's reply was to accuse Poulantzas of "determinism with
the state's agents as bearers of objective forces which they are unable to effect"(75) which is contrary to situations where the state may carry out reforms in the interests of the proletariat or not wholly in the interests of the bourgeoisie. This latter argument illustrates the difficulty of accounting for the relationship between economic power and political power. To explain this both Miliband and Poulantzas use the concept of 'relative autonomy', the apparent "disjunction between economic and political power".(76) The use of this concept has been seen as the major weakness of this perspective, particularly in its use for the analysis of public policy, because it provides no satisfactory explanation of state activities thereby failing to "identify the limits of dependence by the state on the bourgeoisie and the conditions under which state agencies are able to operate autonomously".(77)

The Proletarianisation of White Collar Workers

5. Within the 'leftist' perspective, the increase in white collar work, along with the importance of white collar unionism, is identified as the formation of a 'new working class' (or as a process of proletarianism of the 'middle layers' of workers) by those seeking to locate the class location of 'white collar workers' within the "dichotomous model of production relations".(78) In brief, it is argued that with the advance of the capitalist mode of production, more activities are required to ensure the realisation of surplus value rather than just those involved in the production of surplus value itself. Furthermore, these activities are simplified and sub-divided, leading to a process of proletarianisation over both administrative office tasks and technical-managerial functions.
6. The term 'new working class' was coined by Mallet in 1963 who argued that "technically qualified labour - whose work often straddles the conventional 'manual'/'white-collar' division - represents a 'new working class' with a radical potential to fulfil the historic role assigned by Marx to the factory proletariat." (79) Central to Mallet's argument for the new working class is a criteria based on relations of production. This has been criticised for the difficulties in differentiating between productive and unproductive labour and identification of the group that performs directive functions rather than productive functions.

7. Other notable authors proposing the proletarianisation theory are Klingender and Braverman. (80) Arising from the introduction of the office machine Braverman comments:

the traditional distinction between 'manual' and 'white-collar' labour, which are so thoughtlessly and widely used in the literature on this subject, represent echoes of the past situation which has virtually ceased to have meaning in the modern world of work. (81)

His central theme is that labour, whether in the factory, in the office, or even in the design of new machines, is being de-skilled through routinisation, regulation and simplification, leading to the proletarianisation of the labourer.

The Adversarial Position

8. The 'capitalist state' and proletarianisation of white-collar work are ideological assumptions which may motivate union representatives to adopt an adversarial position. The adoption of this position is politically associated with a 'leftist' perspective. This is not to deny the adoption of this strategy by unions confronted by a direct threat to their immediate interests. In this latter respect, pragmatic necessity
may serve to unite internal union interests and overcome factional conflict based on differing political ideology. The adoption of an adversarial strategy for pragmatic purposes is somewhat different from its adoption as an expression of political ideology, the former being a short-term expediency whilst the latter serves to construct a long-term strategy of revolution.

9. From the adversarial position the preservation of a union's independence and the union-management conflict based relationship is observed to be most favourably conducted through traditional forms of collective bargaining. Adherents of this point of view in the Civil Service have no difficulty in their empathy with workers from more traditional industries. The internal class division of the Civil Service permits a stronger identification of this position with the lower grades and is, therefore, more apparent in unions such as the CPSA and CSU. In the middle-management union SCPS, and specialist grade union IPCS, the position is more ambiguous. Although it may be argued that proletarianisation occurs through bureaucratic constraints on their position making them mere instruments of the capitalist state at whatever level. Identification of the politicised role of the state makes no differentiation between the state as employer and the state in itself. The state is viewed as operating in much the same way as the individual or collectivistic capitalist in both supporting capital accumulation and extraction of surplus values from its workers although exactly how this surplus can be quantified remains problematic. The state's political purpose justifies political activity and opposition from its own employees.

10. From this position the operation of Whitley Councils is criticised for the restrictions it imposes on trade union activity and in particular
free collective bargaining. The Whitley system is viewed as committing unions too deeply to the interests and aspirations of the 'official side' and losing an awareness of the unions' real identity, purpose and role in defending the members' class interests. Moreover, the lack of any status quo clause in the constitution of Whitley Councils results in unions having little control and no real share in decision-making. In addition, it creates an environment favourable to the interests of the employer, as issues for discussion must stand a reasonable chance of securing managerial acceptance. Therefore radical alternatives, in the interests of union members' will largely be excluded from discussion. With an agenda restricted to 'safe' issues, the attention of unions is diverted away from the pursuance of real class interests and the class struggle encouraging a false sense of complacency among members and their representatives.

11. Whitleyism is also criticised for its tendency to promote undemocratic procedures within unions due to the secretive and centralised nature of discussion undertaken, permitting union representatives on councils to have an advantageous position over other union representatives and members in terms of information and access to decision-makers. It is argued that these negative features create a system which is unresponsive to the needs and demands of the membership and a mechanism for obtaining employee acceptance of terms and conditions favourable to the employer.

The State From The Co-operative Position

12. In contrast to the adversarial position based on conflict is the co-operative position based on consensus, harmony and solutions with a mutual interest and benefit to both employees and employers. Underlying
this position is a considerable range of literature pertaining to an understanding of the state, much of which has a common identity in the repudiation of Marx; this can be divided into three perspectives of pluralist, elitist and corporatist.

The Pluralist State
13. The pluralist perspective is most closely associated with Robert A. Dahl who argues that power in Western society is widely distributed among different groups with no one single group occupying a key determinate role. (82) There is a plurality of power sharing and influence throughout society. Within the pluralist perspective, the state is observed as either a neutral force mediating between the ambitions of different interest groups, or as Dahl argues, the state is but one set of pressure groups existing among many others. In this latter view, the state is seen not as a unified and coherent whole, but a combination of various pressure groups who are often competing among themselves. Whilst this view aptly accounts for the departmental system of the Civil Service each with its own function and administration, it does not appear to take account of the centralised decision-making power of the Treasury or the conformity to centralised control within the bureaucracy of each department. It would appear 'elite theory' is more suited to take account of such phenomena.

The Elite State
14. The classical elite theoriticians are Pareto and Mosca, and more contemporary authors such as C. Wright-Mills. (83) Their central argument is that the concentration of organisational control and power in society rests in the hands of a minority - the elite. Concepts of oligarchy have a sympathy with elite theory, although it may be argued that competing
oligarchies provide a link between pluralists and elitists, i.e. society composed of a plurality of groups which are themselves controlled by an elite of top executives, administrators, etc. Democracy is ensured through a system of competing 'elites' (democratic elitism). Contemporary elite theory has been developed into a number of various forms. For example, Bachrach and Baratz(84), in what has been described as their 'neo-elitist critique', directly attack Dahl by pointing out the importance of non-decision making as an important form of power and control.(85)

15. Classical elite theory adopts Weber's description of the state as a bureaucracy whose top officials are accountable neither to the public nor politicians, and who have an overlapping interest with leaders in other influential institutions, i.e. business, employers' associations, unions, military, etc., who together form a coherent power elite. In contrast, contemporary elite theories have suggested the existence of democracy in the modern state through competition between different elites, i.e. state institutions, pressure groups, etc., that ensures no one single group or elite dominates.(86) Marxist authors, such as Miliband, have identified elites as the 'ruling class' by another name.

The Corporatist State

16. The third perspective is corporatism. It is argued that, as a result of the slowing down of the process of capital accumulation, the state has adopted a more directive and interventionist stance. "The state is not controlled by any particular economic class or group, but plays an independent and dominant role in its relationship with labour and capital".(87) Corporatism is termed economically as the "private ownership of the means of production combined with public control".(88)
17. Within this perspective a number of different views are expressed as to what constitutes corporatism. For example, Winkler defines it mainly as an economic system, whilst authors such as Middlemas, Milward and Francisco, and Schmitter define it as a political system.\(^{(89)}\) The latter identifies two forms - state and societal - the state being authoritarian, such as German Nazism and Italian Fascism, whilst societal is associated with European and North American political systems. Middlemas points out that the state exercises a process of corporatism with unions and employers groups becoming governing institutions because of their close association with the government system. This is considered not as subordination, but an inclusion of the interests of these groups creating harmony and avoiding conflict through power sharing.

18. Marxists such as Westergaard criticise this interpretation of the state for its lack of any clear identification other than its quasi-directive function incorporating a diverse and largely unspecified variety of interest groups.\(^{(90)}\) However, this very vagueness and lack of specificity goes some way to replace an all encompassing concept of the state by a notion of the state as a disembodied and unequal plurality of interest groups whose collection of relationships contribute to a pervasive range of economic, social and political functions. This goes some way to describe the Civil Service, although neglects the importance of the 'civil service culture' which binds the characteristics of the Civil Service together.

19. The pluralistic, elitist and corporatist perspectives tend to view the state as having a non-political role and a stabilising influence which mediates the plurality of interest groups and maintains the status quo through the creation of elites or through a democratic system, by
ensuring no one single interest can predominate all others (apart from the state itself). A dominant common theme is the refutation of Marxist theories of the state - a theme echoed in respect of the social location of white-collar workers.

20. White-collar workers, it might be argued, fit in neither of the polarized class divisions, but form a 'new middle class' whose interests and aspirations may either be different from the traditional proletariat and bourgeoisie or ambiguously located between the two. These arguments are derived from Weber who, in criticising Marx, defines class as the probability of an individual's ability to procure goods, gain a position in life and find inner satisfactions with their lifestyle. Whilst acknowledging the difference created by an individual being propertyed or propertyless, Weber argues the difference in market conditions creates a highly differentiated structure with class based on 'status groups'. The divergency between Weber and Marx has been summarised by Crompton and Gubbay as:

Weberian theory focuses on the way in which societal rewards are acquired, and the manner in which patterns of acquisition are determined by the market. Marx's theory focuses on the manner in which new values are created and the social relationships arising out of sustaining this process.  

21. Some, such as Dahrendorf, have sought to expand on Weber's model by incorporating a dichotomous scheme of class formation based on possession of and subjection to authority. Others, in zealous attempts to dispute the proletarianisation thesis, have sought to identify the 'new middle class' as a group who exhibit cohesive and unambiguous attitudes towards their employers, trade unions and political affairs. For example, in his analysis of civil servants Kelly went to the extraordinary length of constructing a Marxist class definition of white-collar
state employees and then demolished this in order to prove the inadequacy of the proletarianisation thesis. However, his original construction was dubious and subjective and he appears to do little more than undertake a rather introspective dialectical argument with himself. Authors such as Lockwood and Mills\(^{(94)}\) have sought to synthesize Marx and Weber in order to produce an identifiable 'new middle class'.

**The Co-Operative Position**

22. In contrast to the adversarial position, the co-operative position moves away from deterministic notions of the class location and political role of white-collar employees of the state. Whilst the former adopts an explicit understanding of the wider political influences and how these determine its characteristic reactive response, the latter implicitly adopts a non-political perspective comprehending conflict as the aberration to what is otherwise a smooth, efficient and consensus based system. From this perspective, civil servants occupy a unique niche in society as administrators of the benevolent state machine which exists to ensure stability, fair play and continuance of democratic practice. They are part of, although identifiably different from, the great amorphous group of white-collar workers whose interests straddle both capital and labour and are a group who form an identifiable new 'middle class'.

23. The consensus of the co-operative position is well suited to the Whitley system based on non-antagonistic forms of industrial relations. Whilst acknowledging that the existing system could always be usefully reviewed, this would serve only to amend the system and not fundamentally change it, as its basic principles reflect the special social and political culture of the Civil Service. It may be argued that Whitley councils provide a well established forum suited to the circumstances of Civil
Service negotiations and would only be replaced by a similar body. In addition, the Whitley system provides a means of co-ordinating the different interests of different unions and, therefore, an orderly way of doing business.

24. A key difference emerges between the adversarial and co-operative positions over the extent to which the Whitley system is seen as providing a legitimate channel to exercise the democratic rights of unions to be consulted and involved in the Civil Service decision machinery. For example, Parris, reflecting the co-operative position, argues that the practice of democracy through staff participation is one of the major successes of the Whitley system. He states:

   Since the staff side were made aware of what was projected, they were able to demonstrate that they had been consulted. In other words, they participated, and they were able, therefore, to give the staff some confidence that what was being done was not being done in an authoritarian way. It was being done after consultation with people who represented their interests. (95)

   However, he goes on to confirm that Whitley is no more than a mechanism for obtaining worker compliance and acceptance for managerial decisions when he points out that consultation was occurring "even in cases where they (the unions) disagreed with what was being done". (96) Thus confirming the fear expressed from the adversarial position, that the unions were consulted and could disagree, but what was projected would still go ahead anyway!

The Hegemonic State

25. Contemporary debates over the role of the state have suffered from the generality of the concept of 'the state'. The apparatus of the state and the functions it performs in contemporary society are prevalent in almost every sphere of social, economic and political activity. There-
fore, its size and wide ranging influence militate against a general theory of the state. Instead, it has been suggested "that different agencies of the capitalist state are subject to different political influences" (97). This emphasises that the state may not be a unified set of institutions, as illustrated by the differences between the central and local state institutions as well as differences between civil service departments. However, the weakness of this argument is that it fails to account for the unification of the Civil Service through the legislative economic control of the Treasury or the civil service culture.

26. In seeking to avoid forms of simple determinism based on one or another kind of reductionism, Jessop, a Marxist who argues against a general theory of the state, proposes that "the state is located on the terrain of the social formation and this comprises more than economic relations and their conditions of existence" (98). He takes a major departure from more orthodox Marxists by pointing out that any analysis of the state will need to consider non-class based struggles. Although not providing any general theory of the state he details the conditions for such a Marxist analyst to be considered adequate.

27. The value of the Marxist analysis of the state is in "reminding us that the state in western industrialised societies functions in a capitalist economy in which the goal of capital accumulation is fundamental" (99). In addition, by "focusing attention on the economic context of political activity" it "avoids the logic of analysing political behaviour in isolation from factors which have a significant influence on that behaviour" (100). However, the state is not entirely an instrument of 'class domination' and appears to serve 'non-bourgeois' interests. For explanatory purposes, theories from the non-Marxist perspective also have
a value. For example, corporatism provides an explanation of the role of the state and the form of interest intermediation in relation to the economy and issues of production, whilst the operation of policy making by elites from a variety of interest groups and institutions suggests a form of pluralism. Locating these explanations within the circumstances of contemporary capitalist economy, where the goal of capital accumulation is fundamental, provides a means of accounting for the state's activities, not all of which directly serve the interests of capital, whilst also accounting for the unification of the state and the Civil Service. It is the factors surrounding the unified characteristics of the state and the Civil Service to which Gramsci's concept of hegemony appears to have relevance.

28. Roger Simon argues that "the starting point for Gramsci's concept of hegemony is that a class and its representatives exercise power over subordinate classes by means of a combination of coercion and persuasion. Hegemony is a relation not of domination by means of force, but of consent by means of political and ideological leadership" (101) For Gramsci the concept of hegemony "is a tool for understanding society in order to change it", (102) as compared to Lenin who used hegemony as a strategy for revolution. In the Gramscian sense "a hegemonic class, or part of a class, is one which gains the consent of other classes and social forces through creating and maintaining a system of alliances by means of political and ideological struggle". (103) Gramsci's concept of hegemony is constructed along with numerous other concepts, such as: economic corporate struggles; national-popular or non-class struggles; passive revolution; intellectual and moral reform; and so on. (104) The state, in his peculiar terminology is used in a number of senses referring to both the state as government (sometimes referred to as 'political society') and in
the sense of power. The confusing definition arises from the loose way
the concept of the state is used to account for an entirety of relation-
ships such that the state is "the entire complex of practical and theo-
retical activities with which the ruling class not only maintains its
dominance, but manages to win the consent of those over whom it
rules". (105) This is summarised in Gramscian terminology as "political
society plus civil society, in other words, hegemony protected by the
armour of coercion". (106)

29. Gramsci has relevance both to an understanding of the state where
his lack of specificity bears well with arguments against any general
theory of the state and in respect of the hegemony of the Civil Service
culture. Hegemony provides a useful concept for linking the diverse range
of activities and institutions operating as the state with a common
unifying factor. It also locates the central importance of non-class
based struggles in shaping the ideological or common-sense understanding
of the state. In terms of the civil service culture, hegemony provides a
concept for the generalised understanding and political purpose of the
culture. The post-1979 Government reforms of the Civil Service may be
described or understood as part of an overall strategy to replace the
hegemony of the welfare state with a hegemony of the free-market or
'popular capitalism'. The introduction of a 'financial culture' philos-
ophy in the Civil Service can be identified as a component of this ini-
tiative. A central feature of 'popular capitalism', which illustrates
the importance of non-class based struggles, has been the engendering of
popular support for change from groups whose interests have traditionally
been associated with the labour movement. This includes: wider home
ownership; wider share ownership; and perceived efficiency of public
services. However, an appreciation of the importance of hegemony in
policy formation and in particular the proposal of alternative or counter-hegemonic scenarios is, as stated above in paragraph 27, a tool for understanding society in order to change it. It is in this respect that the concept of hegemony is relevant to this study.

The Contradictory Class Location of White-Collar Workers

30. Debates over the social location of white-collar workers have been limited in their attempts to pigeonhole a large amorphous occupational group into over simplistic categories. The concept of white-collar work extends across a range of discrete occupations and incorporates a wide range of workers differentiated by a variety of factors, including their relationships to the production process, gender, pay and status. Clearly, the reductionism of crude Marxism provides no satisfactory means of identifying the location of these occupational groups. However, such categorisation into either of the 'two hostile camps' is a misrepresentation of Marx himself. For Marx, "the model of capitalist production, as a pure socio-economic form, is an abstraction from the far greater complexity of empirical reality; accordingly, there will inevitably exist subsidiary groups or classes, not unambiguously related to either of the two hostile camps". (107) Thus, the term middle layers is only applicable in the loosest of senses, although it is recognised that the role of this group or groupings "may exert a critical influence upon events" (108) at particular periods of social or political upheaval.

31. Marxists such as Braverman have pointed out that it is not possible or necessary to offer a precise or fixed definition of the class position of the middle layers, although he observes a process of proletarianisation going on in clerical employment. The inference of this analysis is that the 'middle layers' have ambivalent class interests in both capital
and labour and a varying adherence to one or other, dependent on a host of other dynamic political, economic and social factors. The ambivalent interests of this group, it is argued, creates a distinctive class partially performing functions of both capital and labour.\(^{(109)}\)

32. The Ehrenreichs, in their study of 'The Professional Managerial Class',\(^{(110)}\) recognise that capital accumulation must permeate through "the reproduction of capitalist culture and capitalist class relations within everyday life",\(^{(111)}\) a theme with some familiarity to Gramsci's concept of hegemonic control exercised through the state. In doing so, they pose that groups within the middle layers are 'objectively antagonistic' to the working class, although not part of the ruling class. The professional managerial class as a distinctive middle layer grouping has been criticised by Hyman for its imprecision in defining boundaries within the ruling or working classes.\(^{(112)}\) However, the Ehrenreichs' definition of class in terms "of a common relationship to the process of social production, and of a common experience in private life"\(^{(113)}\) with their emphasis towards 'antagonistic class relationships', places non-class based struggles and formation of alliances among disparate social groups within a clear political perspective without attempting to create a synthesis between Marxist and Weberian theories.

33. Poulantzas and Carchedi also propose a similar distinctive 'third' class. Poulantzas, in particular, proposes a definition of class which has been described as "circumscribed and idiosyncratic"\(^{(115)}\) with employees of the state being directly connected with maintaining capitalist domination, although groups having 'objective affinities' with the working class may include subordinate office workers in state or private bureaucracies. The fact that such groups are predominantly female has
been cited as evidence of such subordination. (116) Carchedi contributes an interesting discussion on the contradictory role of supervisors to both oversee the labour process and its function for co-ordinating and unifying work - a function necessary even under non-exploitive production systems. The strength of Poulantzas's arguments is that they seek to stress the political and ideological domination in sustaining class relations, whilst Carchedi tends to reduce capitalist domination to control over the labour process. However, Poulantzas is criticised for the "perverse and confusing" way in which he determines class relations and for "conceptual ambiguity, if not downright mushiness". (117)

34. Erik Olin Wright suggests that "any theory of class must incorporate the existence of objectively contradictory locations" (118) between the bourgeoisie, petty-bourgeois and working class. However, in constructing these locations, Wright appears to do no more than provide a more elaborate, if not original, scheme in which to place occupational groups and is at a loss to locate certain groups such as middle managers and technical specialists. To overcome the difficulty of constructing a scheme of 'contradictory locations' and then establishing exceptions that do not fit, Crompton and Gubby (119) propose the term 'structural ambiguity' to emphasise the possibility of such differentiation arising from subjective consciousness and action. This leads to inconsistent and vacillating perceptions and strategies which account for "the absence of coherent interests among the 'middle layers'." (120) However, the boundary between groups is again not clear cut and leads to the pedantic discussions over where control on behalf of capital ends and subordination to capital begins.
35. The concept of 'structural ambiguity' clearly identifies the contradictory and indeterminate occupational role and social location of white-collar workers. As Hyman points out, this transfers any objective categorisation to one of "selective emphasis among the various contradictory aspects of their own situation and of their relations with other groups. Relatively peripheral factors may decisively influence perceptions of interests and the individual or collective strategies through which these are pursued". (121) A connection may be established between this vague and indeterminate notion of white-collar workers and the loose Gramscian concept of the state. The importance of hegemony in shaping individuals assessment of their social location and role of the state would appear to have some pertinence. In addition, the fragile 'peripheral factors' which influence these perceptions would appear to suggest the importance of non-class based struggles in achieving alliances among groups who, in other respects, may have a divergence of interests.

The Independent Participative Position

36. Civil servants hold a unique social location with interests that remain ambiguous across two levels, i.e. as white-collar workers and as employees of the central state apparatus. The relevance of Gramsci's concept of hegemony is useful in: providing a unifying theme across the diverse organisations that form the state; accounting for the unification purpose of the civil service culture; and in shaping the perception of individual's social location as a white-collar worker. This all suggests that hegemony is a useful and powerful concept in the explanation of explaining social activity, as well as prescribing policy for social change. For example, the widespread ideological divisions within the CPSA and unpredictable voting habits of the CPSA membership suggest a group of people with differing perceptions of their social location
despite the similarity of their occupation. (This example provides evidence for the usefulness of the concept of 'structural ambiguity.) However, these perceived differences could be organised around the construction of common interests and purposes. A union policy which sought to do this by instigating a counter-hegemonic approach around technological change among the CPSA membership may achieve this. This is an important component in the formation of union policy adopting an independent participative position. It is constructive to consider this position in relation to possible reform of the Whitley system to enable the democratisation of the systems design and development process.

37. The Whitley system provides a legitimate forum for collective bargaining. This has been maintained in the development of Whitleyism away from the consensus of post-war industrial relations to the more conflictual industrial relations of more recent times. The importance of this legitimate forum can be illustrated with respect to the emergence of new technology agreements (NTAs) in the 1980s. As identified in Chapter 1, Part 1, paragraphs 12-14 the majority of these have been concluded in traditional white-collar areas due, in part, to the lack of existing procedural means for employees to raise issues with their employer. Whitley has provided a means of raising issues around technology in the Civil Service and this has been a major advantage of the Whitley system. The disadvantages of the Whitley system have had more to do with wider social and political changes and the breakdown in normative procedures, such as the scrapping of fair pay comparison, along with the greater confidence of local management to unilaterally act with scant regard to local unions. As noted in Part 2, paragraph 11, above, conflict over the basic principles governing the operation of Whitleyism will undermine its
operational credibility, increasing antagonism between employer and employee.

38. Reform of the Whitley system to permit greater democratisation of the system's design and development process therefore requires changes beyond the procedural arrangements of industrial relations in the Civil Service with a re-assessment of the relationship between the state and its employees. This is potentially different from the antagonistic relationship between labour and capital. However, the existing internal organisation of the Civil Service has largely recreated a capitalist mode of production through its well developed bureaucratic hierarchy. This can be observed in the labour process of civil servants, particularly the lower grades, whose jobs are characterised as routine, with the conception of work divorced from execution of work and, in the larger information processing establishments, are based on Tayloristic Scientific Management principles with a high division of labour and highly fragmented tasks. In addition, recent reforms based on the instigation of a 'financial culture' have served to reinforce the existing dominant capitalist forms of relationships within the Civil Service.

39. The reproduction of capitalist forms of relationships within the Civil Service serves the interest of the departmental management by increasing their control and monopoly over the internal decision-making process. However, the bureaucracy demands that decision-making is undertaken by committee to ensure that actions are not taken out of self-interest and a resemblance of public accountability and democracy is maintained. The departmental management are in an advantageous position over this process with their access to information and knowledge of the relevant people, allowing them the opportunity to circumvent these ideals
and pursue their own group interests. For example, the democratic ideal can be circumvented by the exclusion of particular interests from committees thus limiting the agenda of discussion around 'safe issues' which do not challenge the existing status quo. However, the well established decision-making by committees could be opened-up to allow wider participation. This could include trade unionists and pressure groups, with representation on committees and the dissemination of information to a wider audience. To open up the decision-making of the Civil Service requires a greater freedom of information and the repeal of the ubiquitous 1924 Official Secrets Act. This would also challenge the monopoly of internal decision-making enjoyed by departmental management, making a more open system and could permit an extension of industrial democracy. In addition, this would require the civil service unions to adopt a more politicised position in support of specific social policies espoused by political parties, and use their experience and expertise in administering the state to contribute to debates over the formation of social policy and operation of the state. A more politicised position would also involve forming alliances with pressure groups and other representatives of customer or client groups to ensure a wider perspective and understanding was adopted in the formation of union policy.

40. The political purpose of the Civil Service owes much to its internal accounting system which perceives all functions as a cost and consequently efficiency as a matter of cost-cutting. For example, technology introduced to achieve greater efficiency or cost-cutting can only be demonstrated, under these limited definitions, as being successful by the degree of staff savings achieved. This form of quantified accounting dominates the language and metaphors which inform public opinion of the Civil Service as being a burden on the economy. A counter-hegemonic
understanding needs to be instilled based on concepts such as 'social investment' where technology is openly and clearly observed as successful by the degree to which it improves and extends services to the public and widens the public perception of efficiency to more than simple cost-cutting. (121)

41. The discussion above provides a flavour of the kind of wider social changes suitable for creating an environment in which technology bargaining in the Civil Service could be transformed to decisively shape the development of new technology. However, to achieve this requires reforms of both the constitution of Whitley and the internal organisation of unions. For example, the lack of any 'status quo' clause in the constitution tends to make Whitley councils consultative bodies with little real or direct influence over decision-making; it also permits the employer to operate in an authoritative way engendering a reactive and defensive strategy from unions. Within unions Whitley promotes centralised negotiations with adverse consequences on the internal union democracy. This could be improved with better support to local officials and the extension of their involvement in national decision-making. This would not only utilise their direct experience and knowledge of the workplace, but also improve the internal communications of the union. Furthermore, for unions to become involved in extending industrial democracy, there is a need to build and extend their own research and education facilities to provide the basis upon which their independent policy formation and perspective can be developed. Also, co-ordination across different unions is important. At present the CCSU provides a limited fulfilment of this role, but only at a senior national level. Whilst this co-ordination could be extended and improved, it may be better
achieved through amalgamation of the various civil service unions towards a single unified union representing all civil servants.

42. Further reforms of the bargaining structure and organisation of the CPSA can be considered in respect of the experience gained from the case study investigations.
CHAPTER THREE

METHODOLOGY
Introduction

1. The empirical research of this study is based on developing three case studies concerned with the introduction of new technology into civil service departments and/or establishments and the response of the CPSA in the process of technology bargaining over its introduction. The case studies are similar insofar as they detail the characteristics of their locations in terms of the departmental function, organisation and prevailing industrial relations. These include a brief assessment of the clerical labour process. However, two of the case studies incorporate an action research approach with the Author's direct involvement in the strategy and policy of the CPSA. In both of these studies, the Driver and Vehicle Licensing Centre at Swansea and Land Registry Department, negotiations over crucial periods of technology bargaining are comprehensively described.

2. In order to appreciate the importance of the Author's involvement, not only in the case studies but also in the relationship with the CPSA, it is instructive to reflect upon the circumstances in establishing the project from which the study arose. The relationship of the author to the CPSA was a crucial factor in the selection of methodology, choice of case studies and how they were developed.

The Project

3. The project began in late 1982, established between the Technology Policy Unit (TPU) of Aston University and the Civil and Public Services Association (CPSA) under the aegis of the Science and Engineering Research Council's (SERC) Co-operative Awards in Science and Engineering (CASE) scheme. The scheme had been originally intended to foster links between industry and universities, but developed into extending links
between universities and other bodies. The direct link between the TPU and national trade unions through this scheme represented an unusual, if not unique, utilisation of a university's resources.

4. The CPSA's motivation to call upon the resources of a university and establish a close link follows advice from the TUC Report 'Employment and Technology' which states:

   (union) negotiators may wish to allow technical information to be evaluated by union nominees from outside the enterprise. In some cases this could lead to unions appointing, at national levels, experts for this specific task. \[1\]

The CPSA had sought to use the CASE scheme in conjunction with the TPU to appoint a researcher as a consultant to provide technical expertise and information on the developments in new technology.

5. The Author was appointed to fulfil an undefined consultancy role based on technological and sociological expertise gained from completion of an apprenticeship in British Telecom (formerly Post Office Telecommunications) and the 'Society and Technology' degree at Middlesex Polytechnic. Liaison with the CPSA was at the national level supervised by the union's national full-time officer responsible for new technology issues (an Assistant Secretary) and the General Secretary of the CPSA. This included: membership of the 'National Technology Sub-Committee' of the National Executive Committee (NEC) that was responsible for formulating national policy with executive decision-making capabilities and composed of selected NEC members; membership of the 'National Computer Advisory Committee', an advisory body with no executive decision-making responsibility, composed of individuals from each section within the CPSA who had responsibility within their sections for new technology; membership of the 'Data Processing Grades Committee', an advisory body representing
specialist data processing grades' interests; attending official side presentations of strategies, projects, etc., related to new technology and reporting back to the relevant CPSA representative or committee; and assessment of emerging new technologies reporting to the relevant CPSA representative or committee. In addition, there was involvement in negotiations over the national grading issue which formed the dominant national issue in technology bargaining of the CPSA since the demise of the national new technology agreement in 1982. These commitments occurred concurrently with research for the case studies, which was undertaken at the section and branch levels of the CPSA.

Rational for the Case Study Approach

6. The close, and in many ways novel, relationship between the Author and the CPSA had an important influence on the methodology and approach to the project. There was good access to documentation originated from the CPSA and to that coming into the union's possession. Identification as a national official enabled close working relationships to be established with CPSA officials and representatives at all levels. In addition, contact with civil service management and access to establishments was arranged through CPSA officials. Access to a wide and diverse source of primary documentation and the relevant decision and policy makers favoured a case study approach to the research, because this enabled a comprehensive view of technological change to be developed.

7. Similar studies into the trade union response to technological change also influenced and favoured a case study approach (see Chapter 1, Part 1, paragraphs 15-23). It has been argued that technological change is not determinant upon a pre-disposed technological trajectory based on a neutral or natural and inevitable development. Neither does it follow
a determinant economic criteria harnessed by capitalists to ensure greater subordination of labour to the interests of capital and ensuring the unfettered reproduction of capitalist relations of production. Instead, it has been postulated that technological change is the outcome of a complex decision-making process which has consideration to a range of political, economic, social and, not least, technological factors. As Wilkinson points out:

In sum, previous research has generally failed to map out the politics of change - the process of bargaining, negotiation, accommodation and so on, which we can expect to occur when new technology is chosen and implemented. (2)

The indeterminacy of change resulting from new technology has a potential, due in part to the versatility and pervasiveness of the technology itself, to result in the restructure of organisations and a propensity to transform existing hierarchical and work relationships. In order to appreciate both this potential and the actual arising changes, a broad field of inquiry based on a case study approach was considered the most suitable form of analysis.

8. A further stimulus to a case study approach arose from the Author's obligation to the CPSA in the role of technology consultant. Whilst this role was well defined at the national level, at the section and branch level it was neither well defined nor understood by union officials. Moreover, it was at the section and branch levels where individual computer systems and projects were discussed and negotiations for their introduction carried out. It was also at this level that the benefit of greater union resources had been identified as both desirable and lacking. Fulfilling the consultancy role at this level was, therefore, a means of addressing this deficiency.
9. The provision of expertise at the section and branch levels was restricted by the forms and extent of union involvement undertaken in the system's design and development process. There was also a degree of suspicion among union officials towards outsiders intruding upon their area of responsibility, particularly someone with close ties to an academic institution. It was evident throughout the project that an anti-intellectual bias among union officials still predominates in UK industrial relations. This suspicion, particularly in the CPSA, was all the more acute due to the highly competitive internal political factions seeking to extend their control and influence within the union. To overcome this suspicion required the diplomatic construction of relationships between the Author and key representatives within the sections and branches of the CPSA; an aspect of the project which was time consuming and created expectations among union representatives that the Author's involvement should be more than a passive observer. After confidence in the Author's ability and his motivations had been established, it was expected that the Author should contribute advice and assistance directly to union representatives where and when appropriate. These influences not only favoured a case study analysis, but also largely dictated the selection of individual case studies and the action-oriented approach undertaken.

Selection of Case Studies

10. The selection of the case studies followed an initial induction period with the CPSA, which consisted of visiting establishments where CPSA members were being confronted with the introduction of new technology. This involved travelling the length and breadth of the UK, from Plymouth to Perth, and Southend to Swansea, visiting establishments with a diverse range of information processing functions and an array of
technology at various stages of development and deployment. It also provided a valuable over-view of the working conditions, terms of employment and union awareness among the CPSA's membership, as well as establishing personal contact with a number of CPSA officials and management representatives from different hierarchical levels.

II. Experience from the visits established that a limited number of case studies would be the most suitable approach to the research, enabling a detailed picture of the decision-making and technology bargaining surrounding a computer systems development to be constructed and permit the active involvement of the Author in that process. However, there were two important considerations for the selection of suitable case studies - a time constraint and access to the project. The duration of the research was generally too short to comprehensively cover a complete system's lifetime other than for very small projects. Hence specific periods of the design process and specific aspects of the technology bargaining were concentrated upon, supported by historical detail to provide a longitudinal study placing the technology into a clear organisational and industrial relations context. Secondly, certain projects provided more potential access to information and opportunity for the Author's involvement than others. Central to this was the establishment of a working relationship between the Author and key union representatives. In addition, it was decided to select only civil service establishments rather than projects in quasi-government bodies, such as British Telecom or Amersham International, in order to provide a degree of coherence and consistency between the case studies. It was also decided to select projects from different civil service departments: this was in order to appreciate the divergence in practice and procedure over introducing technology and industrial relations between departments.
12. Based on this criteria and the knowledge gained from previous visits to establishments five projects were selected as suitable case studies. These were: a pilot project for computerising records of prison inmates at Bedford Prison, part of the Home Office; a mainframe computer replacement project at the Driver and Vehicle Licensing Centre (DVLC) at Swansea, part of the Department of Transport; a project to produce computerised Land Registers in the Land Registry Department; the Operational Strategy of the Department of Health and Social Security (DHSS), a corporate strategy for computerisation of the UK social security system; and a project in the Manpower Services Commission (MSC) concerned with computerisation of job vacancies information. However, with further investigation, the projects in the MSC and DHSS were dropped in favour of completion of the other three. The remaining three form the empirical study, with the DVLC and Land Registry involving the Author's active participation in the CPSA's response.

Methodology for the Case Studies

13. Before developing the three case-studies, a further set of case studies were made into the use and introduction of word processors into three civil service establishments. Part of this study was reproduced in the UK section of a study, published by the European Foundation, into 'The Role of the Parties Concerned in the Introduction of New Technology'. The word processor case studies provided a pilot study for developing a suitable methodology and approach to the main case studies. A variety of research methods were adopted. This included: structured and unstructured interviews with relevant individuals such as union representatives, management representatives, computer suppliers' representatives, consultants and other academic researchers; observation of working practices and procedures; open-ended discussions, both individual
and group, with CPSA members at or near their place of work; examination of documented information such as minutes of meetings, internal memos, letters, feasibility reports, technical specifications and user requirements, evaluation reports, etc.; and attendance at Whitley meetings, presentations and union policy planning groups. In addition, an important component of the research was the close working relationship established with CPSA officials and some management representatives, resulting in numerous informal conversations and discussions from which a considerable quantity of information was gathered. This 'tacit information' about the CPSA, the Civil Service and perceptions and feelings about technology, provided a rich understanding of the issues and how they were perceived. Unspecified reference is made to these conversations throughout each case study.

14. A further feature of the close working association with the CPSA was the necessity to inform officials of the research approach and progress of the study. Before undertaking each case study a detailed research framework was drawn up detailing; the objectives of the study; information gathering techniques and sources; proposed feedback on the progress of the study; and a comprehensive checklist, providing an indication of the detail and information sought from each study. These were presented to the appropriate CPSA officials clarifying what the Author proposed to do and providing an understanding of the Author's role in the project. Throughout the period of research for each case study various reports were presented to CPSA representatives and in some instances management representatives. Feedback from these reports contributed an important element to the understanding and development of each case study.
15. An open approach was adopted for each case study with no one single method of information gathering dominant over others. The duration of involvement in the case studies ran from early 1984 until the middle of 1985, with a certain overlapping of the studies at various times. During this period different opportunities for the Author's direct involvement and access to information in the projects arose. These opportunities become apparent in the descriptions of each case study.

16. The collaborative nature of the project created an ambiguity in the Author's role. He was both an academic research student seeking an objective detached position to analyse and interpret historical and current events as they unfolded whilst also fulfilling a legitimate role in working for the union providing advice and assistance that served their interests. The ambiguity of this role was reflected in the labels attached to the Author. During the research he was variously labelled as a 'Post Graduate Student', 'Technology Specialist', 'Consultant', 'National Union Official', 'Union Researcher', etc. An awareness of this ambiguity was maintained by the Author throughout the project and care taken not to confuse the two roles. On occasions this ambiguity assisted in the relationship established with interviewees when they felt most comfortable and at ease with a view of the Author as an 'independent professional' rather than solely as a national union official. Whilst the research was approached from a 'trade union perspective' as objective an approach as possible is adopted in the analyses of the case studies with discussion of the Author's explicit role included as part of the DVLC and Land Registry case studies.
CHAPTER FOUR

THE BEDFORD PRISON CASE STUDY
PART 1. THE BEDFORD PRISON CASE STUDY: BACKGROUND

Introduction

1. The Bedford Prison case study describes a computerisation project undertaken by the Prison Department of the Home Office. All prisons in England and Wales contain personal and intelligence details of all prisoners held which is used for administrative purposes throughout the different areas of a prison. The philosophy behind the Bedford Project was to maintain these records in a micro-computer linked to terminals throughout the prison. The system was motivated by a desire to improve the efficiency of the existing clerical functions and to increase the quantity of information held on prison inmates. Originally due for completion in July 1983, and extended to all other prisons in England and Wales by 1988, the project became a catalogue of delays and setbacks resulting in its eventual abandonment in 1986. These setbacks demonstrate problems of attempting to automate a complex manual information processing system. In particular when inadequate provision is made for specifying user needs as a result of poor communications and a general lack of empathy between systems designers and the end users of the systems.

2. The CPSA's response to the project was a traditional reactive strategy with technology bargaining concentrated on securing a departmental new technology agreement. The response of the CPSA had been shaped by the level at which the project was discussed, i.e. the national level, which in turn was a reflection of the CPSA's organisational difficulties in representing a membership widely dispersed throughout the UK. The major characteristic of industrial relations in the Prison Department is the divisions between uniform workers represented by the Prison Officers'
Association (POA) and non-uniform workers represented by the CPSA and other unions. In contrast to the CPSA, the POA's response to the project was initially more co-operative, although it resulted in industrial action being taken over a dispute concerning the level and extent of training provided to Prison Officers for the computer system.

3. The case study describes the Prison Department of the Home Office, the nature of its duties and responsibilities and details the division of labour within penal establishments. The Bedford Prison Computer Project is described, as are the consultation arrangements and the response of the trade unions representing workers affected by the project. Problems encountered with developing a computer system to automate what is essentially a complex clerical labour process is discussed, as well as the limitations of the trade union response given the sectional nature of trade unionism in the Prison Department and the strategy of a traditional reactive response.

The Prison Department of the Home Office

4. The Prison Department forms one of the five major departments which together form the Home Office.\(^1\) The organisation of the Home Office and Prison Department are illustrated in diagrams 3 and 4 respectively. The Prison Department is split into four geographical regions - North, Midlands, South-East and South-West.\(^2\) Within the Home Office, the Prison Department is renowned for its autonomy arising from the highly specialised nature of its function and the organisation of the prison system. This permits an unusually high degree of control over its internal administrative affairs, uncommon within many civil service departments. In addition, the Prison Department plays a highly influential role in policy formation over penal affairs. The Prison Department
employs over 25,500 people\(^{(3)}\) with total expenditure in 1984/85 amounting to some £586m. Over 65% of this was accounted for by staff salaries.\(^{(4)}\)

5. The prison system is essentially a centralised bureaucracy with numerous isolated and geographically dispersed establishments (prisons). The nature and extent of information and knowledge about the system is controlled by the centralised bureaucracy as are all outside enquiries.\(^{(5)}\) The prisons themselves operate as closed societies with little, if any, contact with the outside local community. Life inside a prison has been described as a "society within a society" emphasising its closed environment.\(^{(6)}\) Sims and Fitzgerald note that "relationships in the prison system are rigidly hierarchical. Policies made at the centre are handed down to those in individual establishments for implementation".\(^{(7)}\) However, the Prison Department is criticised for its "impersonality, long delays, over-centralisation, lack of public accountability of decisions and inscrutability of procedures".\(^{(8)}\) Cohen and Taylor make the following observation:

The special nature of the secrecy taboo, the obsession with security and the political sensitivity of the prison issue combine to make the working of the Prison Department potentially more oppressive than other state bureaucracies. \(^{(9)}\)

The influence that introducing technology has on the oppressive nature of the Prison Department, although an important issue, is beyond the scope of this study.

6. The role of the Prison Department lies within the context of the criminal justice system. In this respect the Prison Department provides three major services to the courts. Firstly; it holds people accused of criminal offences who have been refused bail and remanded in custody to await trial. Secondly; it holds and makes reports upon people who have
been tried and convicted. Thirdly; it has a number of responsibilities for the management of people being tried, such as escorting remand prisoners from the prison to the court, staffing cells underneath the courts and acting as 'dock officers' guarding prisoners during trial.

7. Perhaps the most visible aspect of the prison service is the organisation and administration of prisons as places for the secure containment of prisoners. Prisons are officially categorised into two types - local prisons and training prisons. Each prison is formally controlled by a governor who is responsible for the day to day running of the establishment and the maintenance of "security, good order and discipline for the effective co-ordination of the work of all members of staff, for the regime of the establishment and the treatment and training of persons in its custody and for the proper use of public money, materials and premises".

8. The function of a local prison is to service the courts, holding people remanded in custody to await trial or sentence and transporting prisoners to and from court appearances. In addition, it has been the tradition that short term prisoners, defined as those serving sentences of less than 6 months, serve their time in local prisons. However, in recent years the increasing prison population has created overcrowding and a strain on the existing system with local prisons housing medium and even long term prisoners. The Governor of Lincoln Prison remarked on a BBC radio programme, "I suppose the best way to describe a local prison, possibly unkindly, is as a transit camp".
Diagram 4

THE PRISON DEPARTMENT

DIRECTOR GENERAL of the PRISON SERVICE
(Deputy Under Secretary of State)

DIRECTORATE OF REGIMES & SERVICES
(Ass.U/S)

DIRECTORATE OF OPERATIONAL POLICY
(Ass.U/S)

DIRECTORATE OF PERSONNEL & FINANCE
(Ass.U/S)

DIRECTORATE OF INDUSTRIES & FARMS
(Director)

DIRECTORATE OF PRISON MEDICAL SERVICES
(Director)

p1
(A/S)

p2 p3 p4 p5

p6 p7 p8 p9

PHYSICAL EDUC. BRANCH
(CH)

PRISON SERVICE CHAP.
(AR/D)

CHIEF ARCHITECTS BRANCH & DIRECTORATE OF WORKS
(Director)

SUPPLY & TRANSPORT BRANCH
(Director)

INSPECTORATE OF PRISONS for ENGLAND AND WALES
(HM Chief Inspector of Prisons)

CHIEF EDUC. OFFICERS BRANCH
(Ch.Ed.Off.)

PRISON PSYCH. BRANCH
(Dir.)
9. The prison under examination in this case study, Bedford Prison, is a small local prison within the Midlands Region. It has a maximum prison population of 385 inmates, averaging around 360 per night. Bedford handles 30-40 daily receptions, 6-10 of which will be first time to Bedford Prison. Along with most other prisons in the UK, Bedford is overcrowded and contains many prisoners serving sentences longer than six months, the official maximum for a local prison.\(^{(13)}\)

**Division of Labour Within a Prison**

10. The division of labour in a prison is characterised by both its vertical and horizontal aspects. The horizontal divisions are explicitly between uniform and non-uniform grades. Vertical divisions operate through the bureaucratic hierarchy of supervision. Uniform grade work is carried out by prison officers. It consists of tasks that ensure the security of a prison, the secure containment of prisoners and the supervision of prisoners' daily activities following centrally defined procedures. However, the isolated and closed environment of a prison has given rise to numerous informal practices, known as 'Spanish practices', which are adopted to suit local conditions and preferences of local prison officers.\(^{(14)}\) Uniform work involves a number of activities\(^{(15)}\) although the major task is the patrolling of prison areas (referred to as 'pounding the gangways') which is notoriously dull and boring.\(^{(16)}\) Particular features of the conditions of employment are shift-working and abundant overtime giving rise to unsocial hours and a remuneration often double the average working wage.\(^{(17)}\)

11. Non-uniform work consists of all tasks associated with running a prison not involving security, i.e. essentially basic administration although including more specialised tasks, such as prisoner welfare and
workshop supervision. The work of CPSA grades is almost entirely clerical support to administrative work. This covers a wide variety of tasks involving a range of clerical skills and abilities, including many non-routine tasks involving clerical workers in the use of their discretion. In the isolated prison environment clerical and administrative workers provide the infrastructure and organisation that enable the closed society to function. The size of the administrative staff varies considerably between, and in proportion to, the size of prison. Each prison has its own administrative section, and at Bedford Prison this consisted of 14 workers, 9 of whom were CPSA grades. The conditions of employment for administrative workers contrasts dramatically with Prison Officers, the former working fixed office hours with limited and seasonal overtime, and receiving a considerably lower remuneration.

CPSA Representation in the Prison Department

12. CPSA members in the Prison Department are organised in the Home Office Section which represents all members working in the Home Office Department. It is one of the smaller CPSA sections, having approximately 3,500 members, 1,500 of whom work in the Prison Department. The section is divided into twelve branches, four of which are organised corresponding to the regional division of the Prison Department. The Prison Department branches are dispersed over a large geographic area. For example, the Midlands branch has members in over twenty-five establishments, including Bedford Prison. The branch has an elected Branch Executive Committee and five honorary officers. Representation at individual prisons is carried out through a system of local representatives. However, the relatively small and dispersed membership poses problems for effective union organisation. The limited facility time provided to branch activists and limited availability of central funding
make it unlikely that the Branch Secretary would visit all establishments
in any one year. In addition, the isolated and inexperienced local
representatives perform little more than a paper distribution role.(20)

Industrial Relations in the Prison Department

13. Industrial relations in the Prison Department have two distinctive
characteristics: the divisions between uniformed and non-uniformed work-
ers and the overall dominant position of the POA. Uniformed workers—the
prison officers who constitute more than 70% of Prison Department person-
nel— are represented by the independent trade union the POA. Non-
uniformed workers including administrative grades are represented by CPSA
and SCPS (depending on grade); Governors and Assistant Governors are
represented by a special section of the SCPS; Scientists and Engineers
are represented by the IPCS; and psychologists, social workers, etc. are
represented by a variety of other trade unions. CPSA grades constitute
approximately 8% of the workforce with just over half of these being
paid-up CPSA members. In contrast, the POA recruit almost all uniformed
grades. The POA has several distinctive union characteristics: it demon-
strates the status and political attitudes of a professional association,
such as the Police Federation, yet it is a TUC affiliated union; and
also, with its small but highly organised membership, enjoys an influen-
tial position within the prison system.(21) The strength of the POA's
bargaining capability resides in an effective union organisation and
presence in every prison in England and Wales.

14. Consultation and negotiations in the Prison Department are formally
institutionalised through the Whitley system. There are two systems
reflecting the division between uniform and non-uniform grades. The
uniform grades system (the POA) operates at two levels: nationally with
the Prison Department management and locally at individual prisons. At the national level various sub-committees operate, including a Technology Sub-Committee. The non-uniform grades system combines all other unions to form the Home Office Trade Union Side (HOTUS)\(^{(22)}\) with two levels of negotiation - at the national and branch level. Whilst the POA negotiate nationally with Prison Department officials. HOTUS do so with Home Office officials. HOTUS discusses issues related to the prison system at a 'Prison Service Sub-Committee', whilst a 'Technology Sub-Committee' deals with all Home Office computing projects.

15. The division between the POA and HOTUS is most acute at the national level, where little formal contact exists.\(^{(23)}\) At the local level contact between unions tends to be greater due to the close proximity of workers in a prison environment. The POA and other local union representatives, where they exist, usually form the Trade Union Side of the Local Whitley Council. This can be particularly advantageous for the minority unions, such as the CPSA, in securing local conditions over and above those to be gained if they had negotiated separately. However, such gains are usually only achieved on issues with a relevance to the POA. Sectionalist union interest tends to over-ride any form of union solidarity.\(^{(24)}\)

16. The lack of consistent formal contact and the POA's introspective attitude have fuelled rumours among CPSA representatives over the POA poaching CPSA grades work and even CPSA members. The POA formally deny any ambitions for their members to carry out administrative duties, although they do declare a wish to recruit governor grades and bring this grade into the uniform structure, thereby extending the career progression of prison officers. In addition, to overcome the routine nature of
many prison officer jobs, the POA express a desire to undertake more welfare duties in prison. (25)

17. The tension created by the divisional nature of Prison Department industrial relations has an adverse effect on union business. Time and energy are devoted by all union representatives to ensure they do not lose any sectional advantage and it permits the Home Office management to employ 'divide and rule' tactics. The CPSA 1983 Home Office Section Annual Report notes:

no progress has been made on the creation of a formal joint committee during the past year ... whilst our occasional contacts with representatives of the POA have continued, that body has continually declined to become involved in formal Whitley Council machinery within the Prison Department. (26)

And in recognition of the potential widespread organisational changes arising from the introduction of technology, the report goes on to add:

The Home Office Trade Union Side remain convinced that there are many areas, for example, particularly in the technology fields where the interests of both administrative staff and POA members will have common ground in the years to come. (27)

18. Further divisions between HOTUS unions and the POA are created by the difference in organisation. The POA has strong local branches and a weak national structure. In contrast, HOTUS unions tend to have weak dispersed branches but a strong national structure. POA branches are successfully protective of their independence from national officials whilst CPSA branches relinquish a lot of responsibility to national officials. The relatively small membership of the POA does not sustain a well-resourced national structure whilst the HOTUS unions are supported by much larger union structures. Thus, power and influence are decentralised and concentrated locally in the POA whilst in HOTUS this tends to be centralised at the national level.
Automatic Data Processing in the Home Office and Prison Department

19. The Prison Department has no ADP expertise of its own, relying upon that provided by the Home Office. This reflected the limited use of computers in the Prison Department which, until the Bedford Project, consisted of a localised pay system - the Mechanised Automatic Payment System - and statistical work on prison records carried out by the Home Office centrally on behalf of the Prison Department. However, the Home Office has been using computers for its various activities since the early 1960s when an ADP unit was formed jointly with the Metropolitan Police. In a departmental reorganisation in 1980, the ADP unit of the Home Office split from the Metropolitan Police moving to a new computing centre at Bootle on Merseyside. Organisationally, the ADP unit is located in Establishment 5 Division of the Home Office (see diagram 3).

20. The increasing penetration of computers in the Home Office along with growing demands upon the use of ADP expertise have facilitated a number of organisational changes to Establishment 5 Division and the decision-making procedure for ADP expenditure. Authority for proceeding with specific projects was taken by an Information Technology Committee. This included representatives from all Home Office Departments, down to an assistant under secretary grade (see diagram 4) and had replaced a formerly higher level committee. The development of decision-making to include assistant secretary grades reflects the diffusion of technology and the growing awareness towards the need for non-ADP specialists and lower line management to be involved in the design and development of computer systems, and thus demonstrates a move towards 'user involvement'.(29)

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21. Since 1980, and with an increased awareness for the potential use of technology, the Prison Department has demonstrated a greater interest in computing. As part of a Prison Departmental re-organisation in the early 1980s, a new committee - the Management, Science and Technology Committee (MSTC) - was established to co-ordinate and assess the total ADP requirement of the Prison Department and to identify problems in the Prison Department related to computing or which could be overcome using ADP resources. The MSTC consisted of Prison Department personnel reporting directly to Establishment 5 division for authorisation of Prison Department computer projects. (30)

22. It was the MSTC that originally established the Bedford Prison Project. Along with the creation of the MSTC, Establishment 5 division were undertaking a separate 'Strategic Study Review' in conjunction with an external consultancy, to fulfil the need for a corporate study of the Prison Department. The study developed a modular concept for development of future Information Technology (IT) projects which was to eventually include the Bedford Project, but not before the Bedford Project had been established and development work undertaken. The modular development of projects was to be implemented consecutively to build towards a total IT network. In October 1983 responsibility for the review's work, which by then included the Bedford Project, came under the jurisdiction of a steering group called the Computer Information Technology Group.
Establishment of the Project

1. One of the first actions taken by the MSTC were proposals for an exploratory study of information flows in the prison system. This resulted in a report 'ADP Report No.3' published in November 1981, which concluded:

   A pilot scheme should be designed and developed in a selected prison. This pilot scheme itself should be developed and implemented in stages and should be capable of replication in other Establishments. (31)

   The MSTC selected Bedford Prison as a suitable location because of the composition of its prison population and proximity to London. In addition, the Governor of Bedford Prison served on the MSTC demonstrating a management commitment to the introduction of new technology.

2. To control and co-ordinate the work of the pilot scheme a 'Project Committee' was established with terms of reference beyond the Bedford Project and concerned with the ongoing development of the project throughout the Prison Department. (32) The Project Committee first met on 23rd April 1982. The design and development of the project was undertaken by a 'Project Team' of ADP specialists from Establishment 5 Division of the Home Office (See diagrams 3 and 4) led by a 'Project Manager', an HEO grade from Establishment 5 division.

3. The Project Team drew up a project specification based on the following terms of reference:
1. to design and implement a computer based system at Bedford Prison for the creation, update and retrieval of inmates' records following, as far as desirable and feasible, the recommendations set down in ADP Report No.3, Chapter 7;

2. in designing the scope and operation of the system, to take account of the wider objectives of:
   (a) relaying data to regional and central management and servicing the needs of the Prison Index System;
   (b) replicating the system in other Establishments. (33)

To hasten implementation, the systems development stages of equipment evaluation and procurement ran in parallel with those of design and specification. This novel approach, which had been considered desirable in the initial study of the prison system, resulted in the hardware and software (34) being delivered and prepared for the next stage of development when the design specification was published and approved by the Project Committee in January 1983.

4. The project specification had a number of limitations imposed upon it. For example, it was required that "existing prison procedures should not be significantly altered so as to allow the easy integration of the computer into the present clerical system with minimum disruption." (35) In addition because the phased introduction of the interactive computer system would result in partially updated records, imposing an intolerable burden on staff, it was decided to implement the system in all areas of the prison simultaneously. It was proposed to achieve this through a three stage implementation programme consisting of 'system testing', 'file conversion', and 'parallel running'. Following completion of the programming stage 'systems testing' was to simulate one or two days
running with the involvement of prison workers. With a satisfactory test, 'file conversion' was to commence by freezing the main files held in the prison and transferring them onto the computer. The final stage, 'parallel running' of both computer and manual systems, was to begin when all records had been converted.\(^{(36)}\) The new computer system was not to be fully adopted until everybody involved with the new system was satisfied with its capability and operation.\(^{(37)}\)

5. The objective of the Bedford Project was to computerise all record keeping in a prison. A prison maintains various records of its custodians but this information is frequently duplicated throughout the various areas of a prison. The philosophy for the project was to store all the information in a central computer and access it via VDU terminals and linked printers distributed throughout the prison. There were five prison areas to have access to the computer: 'Reception' - the area for entry and discharge from prison where main details of a prisoner and his property are recorded; 'Centre' - the area in the middle of the cell block where cells are allocated; 'Observation, Classification and Allocation' - the area for deciding the most appropriate penal institution for the prisoner's term of sentence; 'Discipline Office' - the clerical area of a prison for all administrative work and dealing with such things as discharge data, transfers, lodge warrants, court appearances, parole appearances, etc.; 'Security' - the area for dealing with special category prisoners, such as high security, child molesters, etc., and gathering intelligence information on prisoners. The proposed computer system is illustrated in diagram 5.
Diagram 5. Bedford Prison: Areas for Computerisation

**Reception**
System will replace
- written reception list
System will provide
- intake discharge info.
- property box location
Functions available
- insert/update record
- insert/update property update discharge diary
- reception & discharge enquires

**Central Office**
System will eliminate
- all wall boards (except location & report)
System will replace
- centre location books
- cell charge book
- ten sheet

**Observation, Classification & Allocation**
System will replace
- allocation queue cardex
- written categorisation
- young persons classification
System will provide
- search facility
- printouts of all classifications
- printouts of all lists, etc.

**Central Processing Unit**

**Security Office**
System will replace
- security card index
System will provide
- fast access to info.

**Discipline Office**
System will eliminate
- statistics cards
- discharge diary
System will provide
- documentation for prison dept.
- increased local office information
Functions available
- create new records
- update records
- enquiry information
- discipline record list
- full record printout

Data-flow
Computer Link
Union Policy and Involvement in the Project

6. In 1981 HOTUS had received ADP Report No.3 and were made aware of the MSTC's proposals for the Prison Department's computerisation proposals. At the departmental level, details of the Bedford Project were first discussed at a Whitley Technology Sub-Committee on the 14th December 1982. Following union requests for more information, the Bedford Project system specification, with an accompanying letter outlining the management's strategy for the project, was sent to the unions in January 1983. (38)

7. At the local level, staff at Bedford were originally given a presentation in April 1982 on the procedure for information gathering in drawing-up the system's specification. Prior to this, members of the local Whitley Council (a body dominated by the POA) had been briefed by the Project Leader. A presentation of the system was given on 16th November 1982 to staff representatives from prison areas affected by the proposed computer system. This presentation was part of the information gathering exercise eliciting comments from staff representatives and resulted in partial amendment to the original design work.

8. The response and attitude to the Bedford Project by HOTUS (including the CPSA) and the POA differed substantially. In dealing with technology in many areas of the Home Office, HOTUS had established a Departmental Technology Sub-Committee. Consequently the Bedford Project, with its ramifications for computerisation throughout the Prison Department, became a departmental rather than a local issue and another item on the Technology Sub-committee's agenda. Meanwhile the POA, with little experience in negotiations over technology, had no specialised forum for discussing the subject. In response, the POA established a national
Technology Sub-Committee, although the Bedford Project was dealt with at the local level.

9. The POA policy towards the project and the subsequent introduction of technology in the Prison Department was defined by the local Bedford branch who had been informed and involved at the outset in the early stages of the project's design and development process. The POA policy was to welcome technology on condition that it could provide tangible benefits to its members. The POA perceived the use of technology as having several distinct advantages: improved information would be available to prison officers; labour saving methods would be welcomed by an already overworked and overburdened workforce; and savings in administrative duties would permit the expansion of the welfare duties performed by prison officers, creating a more varied and interesting job. Job loss was not of paramount concern to the POA due to planned expansion of the Prison Department.

10. In contrast, the HOTUS unions, and in particular the CPSA, retained a more cautious attitude over the Bedford project fearing its implications for job losses to administrative staff in prison establishments. The HOTUS response was oriented around a policy of seeking a Home Office departmental new technology agreement. During the period of the Bedford Project's development the major technology issue for the HOTUS unions was negotiations over the departmental agreement, relegating discussion and attention over individual projects, such as Bedford, to a marginal status. Therefore, although fearful for the potential job loss, the HOTUS unions were quite prepared to let the Bedford project proceed as a trial on a 'without prejudice' basis for any future agreement and sought assurance that the staffing complement would increase in the Prison Department.
for the duration of the trial. In addition they made it clear that if the trial was to be extended an agreement with a no job loss assurance would have to be forthcoming.

11. The strategy of HOTUS was to use the Bedford Project as a bargaining lever for negotiations over a departmental agreement, deferring any union intervention in the project to a later date. The local branches of the HOTUS unions, whose branch officials were located elsewhere in the Midlands region, had no direct association with the Bedford Project, receiving only the information supplied by their respective union HQs and leaving the local CPSA representative at Bedford isolated and reliant on contact with POA branch representatives for information and local union intervention in the project.

12. From the outset of the project the management had been keen to engender good industrial relations. This is demonstrated by the discussions held with local union officials, i.e. POA branch officers, and in a letter sent to HOTUS which recognised the need for involving staff when drawing up plans for automation and obtaining commitment to implementation. The letter states:

Clearly the progress the Department is able to make with its plans for computerisation network can only be totally successful with the co-operation of the staff.

(44)

going on to say:

We are anxious to ensure that staff, through their local trade union representatives and departmental trade union bodies, are kept wholly in the picture with developments and that there exists a high degree of consultation, exchange of views and joint examination of difficulties arising from the implementation programme and, indeed, any other applications involving information technology introduced into the prison department.

(45)
However, CPSA officials in the Home Office Section were less than satisfied with the degree or timing of consultations, which they considered insufficient, too late and after the event. For example, the first time HOTUS and national POA officials had any direct contact with the project was a presentation by the project team on the 8th May 1983 at Bedford Prison. The presentation did not alter the respective union's policies, although it did serve to clarify what was happening at Bedford. The presentation did demonstrate the gulf between HOTUS and the POA. Officials from both unions attended the same presentation, but held separate discussions immediately afterwards.

Development of the Bedford Project

13. The development of the Bedford Project followed a series of unforeseen problems and difficulties resulting in a setback to the implementation schedule. The initial timetable had the full system go live in July 1983 with a full evaluation in the Autumn of 1983. However, the system never operated in all the designated areas of the prison and fell far short of its original specification, being formally abandoned in 1986.

14. Initial delays to the project occurred during the programming stage when 'severe difficulties' were encountered with both the software and hardware. The software, although providing fast programme development, was found to impose undesirable constraints on the system. For example, although the screen layout and commands were 'user friendly', many files occupied three screens resulting in the user being unable to layout all information on a file at one go and instead having to switch
from screen to screen. This was found to be irritating and time consuming by the user, making it difficult to read a complete file. However, greater constraint was imposed by the hardware.

15. The central processing unit (CPU) of the computer proved too small for the job it was proposed to fulfil. However, the computer specialists implementing the system pointed out that the selection of hardware was restricted by an overall lack of funding for the project and in having to select equipment from an approved list of government suppliers. The size of the CPU placed considerable restrictions on the project, particularly when users requested alterations following hands-on experience with the system.

16. In order to help overcome these and other initial problems, it was decided that the computer would be moved to the Home Office ADP unit at Bootle in June 1983 for further development, returning it in September 1983. At that time this deferred the live running date until December 1983.

17. In September 1983, the computer was returned to Bedford for the 'systems testing' stage to begin. However, instead of taking the initially proposed two weeks, further unforeseen complications delayed this stage for over three months. A casualty of this delay was the effectiveness of keyboard training. This was originally introduced in September 1983, but by the time full systems training could begin, after the systems test in January 1984, the lessons of the earlier training were felt by the users and computer specialists to have been lost. Full systems training took a further 7 weeks resulting in the 'file conversion' stage beginning in March 1984. Again, further hardware and software problems
were encountered centring once more around the inadequate size of the CPU.\(^{(50)}\) In addition, the software manuals were found to be out of date and did not contain all programming amendments, resulting in system crashes caused by spurious and often undetectable programme breakdowns.

18. These difficulties were largely technical problems, most of which were beyond the control of the Project Team. However, they were compounded by social and organisational problems which should have been under the control of the Project Team. A common feature of contemporary office automation has been its spectacular failure rate. It has been found that only "20% are successful, 40% marginal successes and 40% failures"\(^{(51)}\) and that the cause of this failure rate has been the neglect given to the social and organisational aspects of introducing technology by computing specialists and practitioners.\(^{(52)}\) In the Bedford Project this was demonstrated by the provision made for communications between the users of the system (who defined their requirements) and the specialists who designed and developed the system (who translated requirements into a feasible specification). Therefore, despite the efforts of the Project Team, a breakdown in communication between the two groups occurred.\(^{(53)}\)

19. The communication breakdown can be demonstrated by comments attributed to the Chief Prison Officer who "was concerned that the system had appeared to take a long time to get up and running and the project team, lacking understanding in the working of a prison environment, had caused delays which had become very frustrating".\(^{(54)}\) In contrast, the computer specialist, commenting on how the Observation, Classification & Allocation (OC & A) area users had revised their original requirements notes:
This is a typical case of the user at the outset being unfamiliar with what a computer system could provide, when actually able to view a system [they] found it easier to identify true requirements.  

(55) 

going on to add:

The Project Team found themselves in a difficult situation in trying to tailor a basically simple concept around a series of complicated manual processes. The need to involve the users and make them feel part of the development work led to an increased number of amendments, all of which were essential if the system was to work as the users now envisaged it.  

(56) 

20. In order to help alleviate this situation (which had been clearly recognised by all involved in the project) and attempt a smooth implementation, a 'User Liaison and Technical Working Group' was established in June 1984. 

(57) The members of this committee recognised that users' anxieties, frustrations and concerns were able to be openly voiced and discussed in a manner that had not been possible before.  

(58) However, the local POA branch, feeling dissatisfied with the support their members were receiving in using the computer system, requested an arrangement of 'liaison officers' to improve communications between the Systems Manager and prison officers using the computerised system. It was subsequently found - perhaps not surprisingly - that uniformed grades "related more easily to the liaison officers than to the systems manager".  

(59) 

21. Due to the unforeseen delays and problems with the project, a full parallel run was not attempted. Instead, a partial parallel run was started in April 1984 in the Reception and Centre areas, being extended to the OC & A and Security areas at the beginning of May 1984. During the parallel run workers maintained the manual system, whilst operating the computer system. A lack of confidence in the project was demonstrated when the Project Committee decided that instead of abandoning the manual system and moving to live running the system would undergo a full
evaluation between June to August 1984.\(^{60}\) This was also in recognition that for the project to continue a number of amendments would need to be carried out.\(^{61}\) However, publication of the evaluation report became embroiled in industrial action taken by the POA at the end of August 1984. This involved the local POA branch withdrawing all co-operation, resulting in the cessation of all development work in the project until the latter half of 1985 (the industrial action taken by the local POA is discussed further below in paragraph 27).

22. The evaluation report, carried out by an official from P6 division of the Prison Department (see diagram 4), concluded that the Bedford Project had been a partial success, recognising that whilst the computer system had yet to replace the manual system it had fulfilled the original aims as outlined in the ADP Report No.3.\(^{62}\) In terms of staff savings (the controversial means for accounting efficiency in the civil service) little evidence could be found to justify the project.\(^{63}\) However, it was intimated that had the project been extended to the discipline office, with its concentration of clerical workers, staff savings may have been forthcoming.\(^{64}\)

23. The evaluation report concluded by outlining three alternative courses of action: abandoning the project; scaling down the system; or completion of the specification. It recommended the last option, on the proviso that assurance could be given that a larger processor would enable the full specification to be completed, and it went on to state that the experience of the Bedford Project would prove useful in the development of the Prison Department's computing strategy.\(^{65}\) Furthermore, the project became subsumed as a component of the 'modular approach' of the Prison Department's computing strategy (see part 1,
paragraph 22). The modular development of Prison Department computing was proposed by the ADP specialists of Establishment 5 division and this took ascendency over the proposals originally put forward by the Prison Department dominated MSTC. This is suggestive of an internal management conflict in the Home Office. In place of the individual computer systems being installed within each prison, such that the Bedford Project would have been duplicated in every prison, a regional network linked to the central ADP unit was proposed, being developed in three stages over eight years at a cost of some £40m. In this strategy the Bedford Project was the first stage. This reflected a departure from the original strategy of automation in the quickest time, using Bedford as a model for the rest of the prison system. The strategy now used Bedford as a trial which could "provide valuable information for the development and introduction of the prison department's computing strategy from the technical, administrative and training aspects". (66)

24. The doubts about the Bedford Project, such as those expressed by the Prison Governor who was concerned about the length of time that the system had taken to get up and running, and the standard of training for senior managers questioning "whether or not the system should go into a line running situation", (67) were eventually vindicated by the abandonment of the project in 1986.

**Technology Bargaining Over the Project**

25. Throughout 1985 the major aim of HOTUS had been to secure a departmental new technology agreement. Negotiations resulted in a draft being agreed by both sides of the central Home Office Whitley Council, i.e. HOTUS and the official side, at the end of November 1983. However, ratification by the constituent unions and the Minister was not completed
until the end of 1984 with a three-year agreement coming into operation on the 1st January 1985(68) (the full agreement is reproduced in Appendix 1). The agreement was criticised by CPSA activists(69) because of its weak job loss clause which provided no guarantee for jobs. It stated:

The Department confidently expects that during the currency of this agreement, the introduction of new technology will not, of itself, lead to a reduction in posts greater than the increase which, on present plans, is scheduled to take place in the overall manpower of the department. (70)

However, in the prevailing industrial relations climate such a statement is not very reassuring.

26. The POA had not participated in negotiations for a Home Office new technology agreement and did not see it until HOTUS and the official side had concluded negotiations. A POA representative considered that had they been involved and party to the agreement they could have substantially improved its content(71) although such claims may be an exaggeration. However, at the POA annual national conference in 1985, the Bedford branch proposed a motion calling for a satisfactory agreement for new technology which the POA executive committee pursued during 1985. The Bedford motion arose specifically in response to the industrial action being taken over the Bedford project.

27. The POA withdrew co-operation with the Bedford Project primarily over their dissatisfaction with the training provided to prison officers. They argued that this was not sufficient for prison officers to take over the role of systems manager when the designated individual, an administrative non-uniform grade, was not on duty. Their demand was for the liaison officers to receive full training of the system permitting them to take over the role of 'systems manager' in their absence. This was
not simply an attempt by the POA to expand uniform grade work at the expense of non-uniform grades, although elements within the POA would undoubtedly not have been adverse to such a strategy. Instead it arose from the discontent and frustration felt by prison officers in not being able to access the computer system 24 hours a day.\(^{(72)}\) The POA's industrial action effectively stopped all development of the Bedford Project. However, before co-operation ceased in August 1984, a second presentation of the project to the unions was arranged in June 1984 - almost one year from the first presentation.

28. The second presentation arose from the unions' concern over the delays and setbacks the project had encountered. It was apparent from this presentation, again held at Bedford Prison, how limited the system was compared to the scheme outlined one year earlier. The stagnation of union policies was apparent in discussions between the management and union representatives following the presentation. These reiterated the same debates, with the CPSA concerned over job loss, SCPS concerned over grading and shift working, and management pledging their full co-operation with the unions.\(^{(73)}\) This second presentation demonstrated two other aspects of the technology bargaining over the Bedford Project: the centralised nature of the CPSA (and HOTUS) negotiations over the project and the deep division between the POA and HOTUS.

29. The second presentation was the first direct contact that a representative from the CPSA Prison Department, Midland Branch, had with the Bedford Project. The CPSA Home Office Section Executive Committee had decided the project was a national issue for section officials - a decision the Midland branch had readily accepted. The project was directly affecting only a small number of members and the delays in development
resulted in little encroachment over the work of CPSA grades. However, the ramifications of the project for the entire CPSA membership in the Prison Department were widespread and far-reaching. Therefore, in recognition of this the CPSA response was instigated at the section level. The drawback of this approach was that already overloaded section officials, who were pre-occupied with more immediate and pressing issues, had neither the time nor energy to sustain any new or novel response to the Bedford Project. Instead, they adopted a traditional reactive position and in doing so made no allowance for directly involving local representatives or members who could have shared responsibility with national officials to sustain a more interventionist approach. The advantages of pursuing a more politicised approach are discussed further in part 3.

30. Unlike the first presentation, the second involved POA and HOTUS representatives on different days. Although potentially affecting both uniform and non-uniform work and altering the division of labour between the two groups, the Bedford Project increased rather than reduced the divisions between the POA and HOTUS. With the POA being numerically and organisationally the stronger local union, the CPSA and other HOTUS unions feared uniform staff taking over clerical and administrative duties. However, the official POA policy did not consider technology as a means for prison officers to undertake administrative work, thus respecting the existing status quo over the division of labour between uniform and non-uniform workers in a prison. But the basis of this policy was not simply union solidarity. The substantial difference in pay rates made non-uniform grades a much cheaper, and hence more desirable, option for the Prison Department to employ. (74)
31. At the national level the only joint initiative was a formal meeting between the POA, HOTUS and Prison Department management held in March 1984 to discuss consultation arrangements for the Bedford Project. This amicable meeting agreed to the status quo on the division of labour with no poaching of other grades' work following automation. However, relationships were soured when the POA discovered that the new technology agreement had been agreed without their consultation. This tri-partite meeting remained the only real effort to bridge the division between the POA and HOTUS unions.
PART 3. DISCUSSION OF THE BEDFORD PRISON CASE STUDY

1. The Bedford Prison case study describes two related but separate issues. Firstly, the factors surrounding a systems failure of a computerisation project aimed at automating a series of manually performed clerical functions. Secondly, the strategy, policy and response of unions representing members at the site of automation.

2. The problems encountered in the automation process reflect a lack of ADP experience within the Prison Department of the Home Office. In addition, it has been suggested that over-ambitious computer specialists within the Home Office pushed a technologically interesting project into an unknown and, in more ways than one, hostile environment to impress and influence technologically ignorant Prison Department officials. It would appear that the much publicised potential of new technology in the early 1980s was utilised as a motivating factor in the interests of a particular section of management. Although there is little evidence from this case study to prove the existence of conflict between different groups of Home Office civil servants, it may be suggested that this could account for what appears as a complex and dynamic decision-making process surrounding the utilisation of new technology in the Home Office and Prison Department.

3. The problems that resulted in the failure of the project may be classified as technical problems as well as social and organisational problems. The inadequate size of the CPU and incorrect documentation of the software were the outstanding features causing technical difficulties. It was possible to overcome these with recourse to additional resources and/or suitable technical fixes. In contrast, the social and
organisational problems were not only more difficult to define, but also revealed structural limitations of the organisation and culture of the Prison Department, Home Office and Civil Service. For example, communications between computer specialists and the users of the system were a well documented problem resulting in what was considered to be an inadequate user specification. Addressing this problem, a 'user liaison committee' was formed in order to improve the representation of the 'end user'. However, composition of this committee was limited to line managers and other supervisory staff and not the operatives who actually used the system. The real end users were the lower grade uniform and clerical workers who were specifically excluded from these committees. Defining end users as the line management reflects the bureaucratic hierarchy of the organisation and the distinction made between those who make decisions and those who follow those decisions.

4. An awareness of facilitating greater user involvement and the importance of the need for user commitment in the development of the project was also reflected by changing managerial strategies. For example, the Bedford Project changed its emphasis from being akin to a maiden voyage of a system for replication throughout the Prison Department to a pilot for the first stage of a wider integrated network. In this latter strategy, greater consideration was placed upon the strategic or corporate planning for the use of information technology, as well as forms of user involvement. However, it is notable that unions were excluded from direct involvement in committees such as the user liaison committee at Bedford and the strategic planning activity of the Prison Department and Home Office. This illustrates the extent to which union involvement in technology is perceived as 'legitimate' demarcating the boundaries set by the employer (the Civil Service) to union intervention.
Union Involvement

5. In the Bedford Project union involvement was largely based on conditions defined by the management and mediated through the Whitley system. The management consistently reiterated and largely pursued what they themselves defined as good industrial relations. However, this definition placed the unions in a non-interventionist consultative role consisting of attendance at presentations, and being informed of developments, but without representation on any decision-making bodies or end user groups. The unions accepted this role although consistently complained about the extent, level and timing of information they received. Had they had direct involvement in one or other of the decision-making bodies then, at the very least, they would have had full information on the project and the strategic development proposals for the prison system.

6. The difference in response between the POA and HOTUS unions, particularly the CPSA, are in marked contrast; not only at the level which the project was dealt with (the POA negotiated the project at the local level, whilst HOTUS negotiated the project at the national level) but also in the strategy adopted. The POA Bedford branch, having first hand experience with the development of the project, were able to formulate demands based on a detailed and intimate knowledge of the system and its environment. Their demands for increased training of prison officers, which resulted in industrial action, may be construed as an attempt to intervene in the design of jobs in order to maintain control over the new system. In contrast the HOTUS unions, organised at the national level, had little understanding of the system and could not, therefore, formulate such detailed demands, let alone hope to obtain and maintain membership support for industrial action. In addition, the unions had
differing expectations over the potential loss of jobs in the Prison Department.

7. The POA felt confident and not threatened by the project. With their local bargaining strength they adopted a co-operative approach seeking to exploit the potential benefits for prison officers. HOTUS, and in particular the CPSA, threatened by potential loss of jobs and with a very weak local bargaining capability, adopted a traditional reactive strategy with threats of future industrial action should a satisfactory Home Office new technology agreement not be forthcoming. Even whilst the agreement was being negotiated, the weakness of the HOTUS strategy was demonstrated by the lack of any attempt to organise industrial action in this area.

8. Due to the unions' exclusion from decision-making bodies, lack of relevant information and difficulties in organising small dispersed pockets of members, a number of other structural problems prompted the CPSA to adopt a traditional reactive strategy. This included constraints upon national officials' available time for involvement in the project and also a lack of infrastructure within the CPSA to support activities other than those based on traditional reactive responses (there was no readily available alternative other than the policy of securing employment guarantees through an new technology agreement). It was also apparent that the research resources and educational facilities of the CPSA were centrally disposed to favour national officials and issues rather than local ones. This prompted the CPSA to adopt a centralised reactive approach with the result that the CPSA welcomed delays and setbacks to the project in order that the status quo and prevailing conditions could be conserved.
9. The value of the project was primarily as a learning experience in implementing a computer system in the Prison Department. The CPSA's lack of involvement and adherence to a strategy requiring minimal activity resulted in little or nothing being learned from the project. In contrast, the management and to a lesser degree, the POA, were able to gain a great deal from the project's failings which may result in more sophisticated and subtle strategies emerging for future technological based change.

10. The deficiencies of the CPSA strategy for the Bedford Project were repeatedly pointed out by the author in presentations and contacts with the CPSA Home Office Section officials. The advice to adopt an independent participative approach was not heeded until the Home Office Section was re-organised and an honorary section assistant-secretary given sole responsibility for new technology issues. Since then a 'pro-active approach' has been promoted within the section. However, by this time development on the Bedford Project had ceased. The application of such a strategy to the Bedford Project, although uncertain and speculative in its direct impact, could have been influential for future computerisation in the Prison Department. If greater consideration had been given to union involvement, precedents in the form, level and type of consultation and negotiation could have been established to the overall advantage of CPSA members. Whilst it is not possible to detail how a 'pro-active approach' could have been applied at Bedford - such decisions resting with the union officials and members concerned - it is instructive to speculate how it may have operated.
Opportunities for Union Involvement

11. The major factor dictating the CPSA's strategy was the limited time national officials could devote to the project. However, there was local involvement of CPSA members in the project which could have potentially formed the basis of the CPSA strategy, with the appointment of a local representative as a line of direct communication to national officials keeping them fully informed of day to day developments. This would have given greater visibility of the CPSA at Bedford and involved more people working for the union, whilst not unduly increasing the workload of already over-extended national officials. Greater efforts could also have been made to involve CPSA representatives on bodies such as the 'user liaison committee' forming the basis of union representation on higher level and more strategic decision-making committees. Involvement on these committees could have been on the basis of independent participation. In addition, this involvement may have provided a suitable forum for the POA and HOTUS to unite on common objectives towards technology bargaining in order to collectively shape the introduction of technology in the interests of Prison Department workers.

12. The importance and potential for developing and sustaining an independent participative strategy is demonstrated by this case study. The traditional reactive strategy of HOTUS proved ineffective at the local level and resulted in the conclusion of what amounted to a rather weak new technology agreement. Whilst the agreement could provide the basis for extending union intervention within the existing bargaining procedures and organisational structure, its interpretation tends to be limited to securing substantive employment guarantees. In addition, the divisive nature of industrial relations in the Prison Department tends to be exacerbated by the reactive and conservative strategy. Moreover, this
strategy provided little means of effective union intervention in the early critical stages of the computer system's design and development process.

13. The design and development process of the Bedford Project involved various departmental groups and committees. This resulted in a number of apparently ad hoc strategic proposals being formulated for the Prison Department. At the local level development of the project was the monopoly of Home Office ADP specialists. The failure of the project resulted in a number of lessons being quickly absorbed by the departmental management thus leading to the formulation of a clearer overall strategy and a recognition of the importance of obtaining and securing user involvement. It is these developments around user involvement that may overcome systems failure and provide an opportunity for potential union intervention.

14. The introduction of technology for automation of uncertain and undefined information systems, as the Bedford Project demonstrated, requires not only the acceptance by the workforce but also their willing co-operation to divulge their tacit knowledge and understanding of the existing system and the non-routine procedures adopted in their work. Whilst this may present an opportunity for extending union involvement, it cannot be effectively accommodated by traditional reactive or passive co-operative strategies. It is the independent participative strategy that would be more suitable for such involvement. This is a strategy which is pursued in the DVLC and Land Registry case studies.
CHAPTER FIVE

THE DRIVER & VEHICLE LICENSING CENTRE CASE STUDY
Introduction

1. The Driver and Vehicle Licensing Centre (DVLC) case study describes the technology bargaining over the Replacement Mainframe Computer Project and in particular an initiative by the local branch of the CPSA to evaluate a 12 month trial of the 'integrated input procedures' (IIP) of the project. The replacement mainframe computer project arose when the existing computers, originally installed in the early 1970s, came to the end of their useful life. This provided the opportunity to re-design the existing clerical production system from a flowline system, based on the division of labour into a number of simple and discrete tasks, into the IIP system, based on integrating these tasks to form small teams of workers. The flowline system had been unresponsive to changing work demands and provided boring and alienating work experience. This resulted in a despondency and lack of motivation for DVLC workers over their work. During the mid-1970s and under the guidance of behavioural scientists from the civil service 'Job Satisfaction Team' an attempt was made to combine a number of discrete tasks to broaden the content of individual jobs in order to provide a more congenial work experience. However, the configuration of the original computer system restricted the extent of job enlargement. The IIP system was a means of overcoming this restriction to enable the extension of the job enlargement philosophy.

2. Throughout the project the local management had been keen to engender good industrial relations in order to ensure a smooth implementation and operation of the computer system and so avoid the kind of adverse publicity the DVLC attracted when it was first established in the early 1970s. This involved the establishment of various union/management working parties within the Whitley system to discuss the considerable documentation generated from the design and development stages of the
project. However, union involvement in these forums was restricted to consultation, often after important decisions had already been taken on the future shape of the new work procedures. These restrictions on union involvement and a lack of local resources placed the local unions in a reactive and defensive position. At a later stage in the project's development the local branch, under the direction of the Author, undertook an independent evaluation of a pilot trial of the IIP system immediately prior to its implementation throughout the DVLC.

3. The case study describes the DVLC in terms of its function within the Department of Transport and its division of labour; these being characteristic of many large centralised information processing centres to emerge in the 1960s and 1970s. The development of the Replacement Mainframe Computer Project and IIP is traced, as are the forms of technology bargaining and the local unions' response. Particular attention is paid to the circumstances and conditions surrounding the CPSA's independent evaluation initiative and the limits these imposed on such activity, as well as discussing how it was established and giving an assessment of its operation. A feature of this case study is the Author's involvement in the independent evaluation of IIP by the CPSA. The Author's role and influence in this initiative is discussed in relation to the forms of expertise required by local union branches confronted by the introduction of new technology.
PART 1. THE DRIVER AND VEHICLE LICENSING CENTRE AT SWANSEA

1. The DVLC at Swansea in South Wales forms a major part of the Driver and Vehicle Licensing Directorate (DVLD) of the Department of Transport (DoT)(1) The DVLD has responsibility for administration and issuing of driver and vehicle licences and collects vehicle excise duty.(2) The DVLD consists of the DVLC at Swansea, which holds records on over 26 million drivers and 23 million vehicle licences, issuing some 5.5 million drivers licences annually, and 53 Local Vehicle Licensing Offices dispersed throughout Britain.(3) The DVLD employs over 5,500 people, of whom 4,200 work at the DVLC.(4) The specific function of the DVLD permits it a degree of autonomy from the DoT, demonstrated by the influence it has over policy formation and control of internal administrative affairs. The DVLD receives its own annual expenditure vote from parliament which for 1984-85 amounted to a cash limit of just over £100m, although the expected excise duty raised and paid directly to the Treasury consolidated fund amounts to over £2,000m.(5)

2. The centralisation of driver and vehicle licensing records at Swansea follows a recommendation made by a Parliamentary Working Party in 1965 - taking advantage of available computing technology.(6) Swansea was selected as a suitable site because of its "reserve of untapped labour" and "enough land available for a project of this size".(7) This was in harmony with government policy for the dispersion of civil service establishments away from London and the South-East of England.(8) However, it has been pointed out that:

the policy of dispersal was less about reducing congestion in London and providing employment in the regions, than it was for overcoming employment consequences of introducing office technology - in particular, de-skilling and employer control over the labour process. By locating in Swansea, 'The Civil Ser-
vice' was able to take advantage of the large reserves of female labour in Wales by filling relatively unattractive jobs with willing and well qualified workers.  

This argument is vindicated by the resulting organisation of work at the DVLC originally based on a Tayloristic design and following Scientific Management principles with task fragmentation and a high division of labour. In addition, the DVLC is typical of the many centralised civil service establishments which emerged during the late 1960s and 1970s and were made feasible by the availability of large mainframe computers. These all have a characteristic clerical labour process identified by workers and union officials in such establishments as a 'clerical factory'.

3. The DVLC began issuing drivers licences on 1st March 1973 and began vehicle licensing and excise collection on 11th October 1974. However, it was not until 1979 that all work was centralised at Swansea. In its first few years of operation, the DVLC attracted considerable adverse publicity over lost and delayed issuing of licences and the expenditure incurred in establishing and operating the computerised system. Amid these criticisms an internal review of the entire DVLD was undertaken to identify changes necessary for increasing effectiveness of the DVLD. The resulting report (known internally as the 'Mendoza Report' after its author, a senior official within the DVLD) was highly critical of the way the DVLC had been established. It pointed out that "the decision to set up the DVLC was not preceded by a detailed feasibility study" and instead cost calculations, staffing levels, etc., rested on generalised investigations leading to not unexpected differences from those originally forecast. In addition, there was "insufficient time allowed for planning and preparation resulting in faults not being revealed until work had been transferred from local authorities to Swansea".
4. The 'Mendoza Report' concluded that the main difficulties experienced by the DVLC were associated with features that had been designed into the system. In particular it identified three problems with the design. Firstly, all transactions are processed centrally at a location far from most of the centres of population in Britain, making it time consuming and awkward to resolve difficulties. Secondly, the computer system was designed around traditional clerical procedures which had been operated in the local offices, and did not address itself to the possibilities that might result from a strategic review. Thirdly, the main files of the computer system could not be interrogated by teams responsible for resolving discrepancies, i.e. the system was not accessible on-line. The report went on to identify that these problems could be reduced but not "completely overcome without fundamental changes to the system as a whole."(14) The replacement computer system was viewed as an opportunity to address some of these problems.

Organisation and Division of Labour at the DVLC, Swansea

5. The DVLC at Swansea is organised into five major divisions which comprise 98% of the total workforce. The other 2% are employed in medical and legal specialist divisions and are the senior management of the DVLD all of whom are located at Swansea.(15) The organisation of the DVLC is illustrated in diagram 6. The majority of workers at the DVLC are employed in one of the clerical operational systems - Clerical Drivers (CD) and Clerical Vehicles (CV) - or in Management Services Division who are responsible for operating the large mainframe computer installation including the fast-keying of information into the computer.
Diagram 6


DIRECTOR

Management Services Division (900)
Vehicle Licensing & Registration (1261)
Replacement Computer Division (550)
Drivers Licensing Division (943)
Staffing & Services Division (500)
Legal Division (10)
Medical Division (27)

(* Figures in brackets are the approximate numbers of staff for each division)
6. The DVLC has two distinctive features. Firstly, the scale of its operation, illustrated by the receipt of over a quarter of a million postal items every working day.\(^{(16)}\) And secondly, its highly fragmented clerical labour process due to the division of labour being organised around a flowline system with the complete process cycle broken down into thirteen different tasks.\(^{(17)}\) In the original organisation of work each task was undertaken by separate teams of workers and documents were sequentially processed. This system resulted in routine jobs providing a boring and alienating work experience which contributed to poor productivity and inefficiency from a poorly motivated and disillusioned workforce.

7. To alleviate the problem of staff motivation, the local DVLD management, in conjunction with behavioural scientists from the Civil Service Job Satisfaction Team (JST), reconstructed the flowline system integrating single tasks to form enlarged jobs extending across a range of functions.\(^{(18)}\) However, despite the well-intentioned efforts of the JST initiative, workers at the DVLC maintained that few jobs provided any intrinsic interest or satisfaction. As one worker remarked about task integration, "all that happened was that one boring job was replaced with several boring jobs".\(^{(19)}\) It would therefore appear that the intervention of JST did not fundamentally change the flowline system although it did enlarge the number of tasks undertaken in individual jobs.

8. Similar clerical operations are performed in both CD and CV divisions; the difference being in the number and type of forms processed, with CV dealing with a slightly greater diversity and quantity than CD. Work on both CD and CV can be divided between routine work and case work, the former involves the processing of documents into batches ready
for input to the computer, whilst the latter deals with non-routine work which cannot be processed in the flowline system. Clerical Officer (CO) grades undertake the majority of case work whilst Clerical Assistant (CA) grades undertake routine work. The low skill and low value work in these divisions is reflected in the proportion of COs to CAs, i.e. approximately 60% of workers are CAs and 30% COs. However, the proportion of case work is considerably higher than originally forecast when the DVLC was established. Whilst the majority of work in CD and CV is routine, it requires an operator 6-12 months to become fully conversant and competent to undertake all work of either CD or CV divisions. The length of time for workers to become proficient with the process restricts the large scale movement of staff from one division to the other restricting the flexibility of the workforce at the DVLC.

9. After batching, documents from CD and CV divisions are input to the computer. The batch input is undertaken by Data Processor (DP) grades supervised in teams by Senior Data Processor (SDP) grades. The DP fast keying job is particularly routine requiring the minimum of discretion by the operator. The job consists of keying information from coded documents using a specially adapted computer terminal and all discretion is designed out of the system with error checking facilities built into the machine. The DP grades structure is separate from the clerical structure, the remuneration of DP and SDP grades being slightly higher than the CA and CO grades. In addition, DP grades have the opportunity for gaining a productivity allowance. The different grade structures, difference in pay rates and different conditions of work have created a distinct division between the clerical areas and machine (computer) areas.
10. The management structure of the DVLD also has distinct divisions of labour. These exist between the 'senior' and 'line' management: the former being associated with the strategic decision-making and policy formation of the DVLC, the latter with responsibility for supervision of a specific area of work within the bureaucratic hierarchy. However, within the line management further divisions are detectable in the style of control. For example, the CD management are considered to adhere to an authoritarian style as compared to the conciliatory and paternalistic style of CV management.\(^{(23)}\) The DVLC also has its own 'culture' based on the traditional civil service culture but with its own particular identity. The production process, autonomy within the DoT and geographic isolation are factors which have engendered a rather parochial and defensive attitude among all DVLC workers. Within the Civil Service a managerial appointment at the DVLC is referred to as 'going native'.\(^{(24)}\) A similar attitude pervades the local CPSA branch officials who pride themselves on their isolation and independence from the rest of the CPSA.

**Industrial Relations and the CPSA at the DVLC Swansea**

11. Formal collective bargaining is undertaken at all levels through Whitley Councils. The 'union side' of these councils provides the constituent unions with a regular and consistent joint body ensuring a degree of co-operation for negotiations and consultation with the 'official side'. The DVLC is itself the Local Whitley Council and the DVLD the Departmental Whitley Council. The next level of negotiation is a Central Whitley Council combining the DoT, Property Services Agency (PSA) and Department of the Environment (DoE). The link between the Departmental and Central Whitley Councils is not direct and issues are only referred up in exceptional circumstances; the majority of negotiations concerning the DVLC being resolved at the departmental (DVLD) level. The local and
departmental levels both meet with the official side at the DVLC, making the distinction between the two bodies unclear. The union side of the Whitley Councils consists of the major civil service unions, with both levels dominated by the CPSA and SCPS. (25)

12. The concentration of workers at the DVLC and a production process which creates a routinised and alienating 'clerical factory' type of environment, are ideal conditions for union organisation. In addition, the revenue collection function and the use of information from the DVLC by the security forces make the DVLC easily susceptible to disruption by industrial action. This provides the local unions with a bargaining strength considerably greater than many other civil service establishments. However, whilst the DVLC is undoubtedly a strong branch within the Civil Service, given all its organisational advantages such as a branch membership of over 2,500 (larger than many CPSA sections), it is instructive to consider why it is not more powerful. Why, for example, does it not compare to the industrial strength of a large manufacturing site with a similar division of labour and production process.

13. Why the DVLC branch is not stronger, which is not to deny its relatively powerful position within the CPSA, is attributable to a combination of historical, environmental and organisational problems. The branch was established in 1973 following the centralisation of the DVLD and the opening of the DVLC. The new branch consisted of the entire DVLD with a membership of over 5,000, a quarter of whom were organised in the geographically dispersed local offices which formed sub-branches. However, with few experienced union representatives at the DVLC and geographic dispersion of the sub-branches, the organisational structure was found to be ineffective. (26) In 1979 the branch was re-organised giving
the local offices full branch status and creating the single DVLC branch at Swansea. This improved the organisational problems of the DVLD. However, the size of the DVLC branch, whilst providing potential industrial strength, generates its own organisational problems.

14. The DVLC branch is organised like other CPSA branches with an elected Branch Executive Committee (BEC) and seven honorary officials.\(^{(27)}\) The branch is organised in the DoE/DoT Section of the CPSA. The large membership poses a major problem of communications between CPSA representatives and members. In place of the informal relationships and contact built up from the close working proximity of union representatives and members, characteristic of most CPSA branches, the DVLC tends to create one-way, top-down communications from distant branch officials to members - with the danger that branch officials become out of touch with their membership. In recognition of this a system of 'floor representatives' operates, although with uneven effectiveness. This has been partly attributed to the lack of involvement and responsibility given to floor representatives in the decision-making and operation of the local branch.\(^{(28)}\)

15. The DVLC branch receives sufficient facility time for its local honorary officials to undertake CPSA work for the equivalent of four full-time officials. In addition, the branch shares a suite of offices with the other local unions and the DVLD Whitley Council union side officials.\(^{(29)}\) This provides a nucleus of local union officials whose jobs are closer to that of full-time national union officers rather than local representatives - a position accentuated by the geographic isolation of the branch from the rest of the CPSA. However, this close-knit community of union officials tends to centralise control and decision
making of the local branch excluding floor representatives and other members. In addition, the branch is not immune from the political infighting factions within the CPSA, these having been loosely organised around the 'broad left' and 'moderate' groupings. The split in the broad left nationally in 1984 had little impact upon the local branch. This reflected more the branch's geographic isolation rather than being indicative of a well worked out political position.

16. The size of the branch has repercussions for the rest of the CPSA; not only for its substantial block vote cast at national and section annual conferences, but also because the DVLC represents one of the strongest branches in the country and is able to establish precedents for other branches to follow. Its geographic isolation and autonomy from the national CPSA structure is countered by the proportion of time the DoE/DoT section officials devote to the branch, which contains more than one quarter of the entire section membership. (30)

17. Industrial relations at the DVLC are also influenced by the circumstances of the local environment. South Wales has continued to suffer a decline in traditional industries of coal mining and steel production which has brought regional economic, social and employment deprivation. The scarcity of jobs combined with opportunities for employers to seek alternative labour are factors likely to inhibit union activity. In addition, the workforce of the DVLC is primarily female and women have traditionally been less unionised than the male dominated workforces. (31) However, the emergence of a greater confidence and political awareness by women in the late 70s and 80s is changing how women view themselves and how unions view women, challenging all forms of institutionalised sexism - one form of which is women as secondary and low-skilled wage earn-
ers.\textsuperscript{(32)} In an area of high unemployment and low wages, women at the DVLC are often the primary wage earner and/or are providing a subsistence income to low income families. Whilst economic necessity may promote union awareness it can also inhibit forms of industrial action which involves loss of income.\textsuperscript{(33)}
PART 2. CONSULTATION AND DEVELOPMENT OF THE REPLACEMENT
          MAINFRAME COMPUTER PROJECT (1976-1982)

1. Operational difficulties at the DVLC in the mid-1970s had indicated
   the desirability of re-organising the existing work procedures. The
   opportunity for this arose with the Replacement Mainframe Computer Pro-
   ject. As the 'Mendoza Report' noted:

   senior management of DVLD are already directing substantial
   effort to consideration of radical improvements they plan to
   make as soon as the existing machines come to the end of their
   useful life. (34)

During 1976 Senior Management were involved in the "early policy making
stages for the Second Generation computer services"(35) resulting in a
Senior Principal grade being appointed in Autumn 1976 to take charge of
all planning for the new system. (36)

2. The DVLD unions had been involved in discussions over the opera-
   tional problems through the local Whitley system, although the first
   formal reference to the replacement computer project was at a departmen-
   tal Whitley Council in June 1976. Later that year the unions were
   informed that the development of the project would follow an:

   evolutionary approach and adopting a wide ranging consultative
   procedure in the design and development of the project. To
   this end management hoped that the trade unions would also be
   able to feed in their views, particularly the views of their
   members in the local offices who had most contact with the
   public. (37)

Similar sentiments were expressed over the next three years calling for
union involvement and participation in the project. However, union
involvement was largely marginalised to consultation through Whitley
meetings, reducing the unions' role to observations and opinions being
expressed on management proposals for the project.(38) Recognising their
limited involvement and influence over the project, which the unions had
quite correctly identified to be partially due to a lack of information, the unions proposed a framework for the disclosure of information to provide "a broad idea of future developments and in order that assessments could be made on the impact of the project for the existing workforce". (39) Despite a number of informal meetings between the unions and project representatives to discuss how this framework might work, the suggestion was never adopted.

3. During this period there was ample opportunity for union intervention in the process of developing the project. For example, during the first half of 1977, discussions were undertaken with selected DVLD customers as well as DVLD divisional heads and line managers to establish what issues needed to be addressed in the design of the new computer system and to help define a 'broad policy base' from which detailed planning could proceed. However, the unions were specifically precluded from these discussions, their involvement being restricted to the Whitley Council consultations. The outcome of these discussions - the broad policy base - reflected the interests of Branch Heads and line management of the DVLD. (40)

4. The policy was for the functions of DVLD to remain unchanged although the method of operation was. This included assessing the advantages of remaining with a centralised system over introducing a regionally distributed system. In addition, it was stressed that the project should follow an 'evolutionary' development as opposed to the 'revolutionary' way the DVLC had originally been established. (41) Ministerial approval was given to the policy, and a second round of discussions with other interested government departments, notably the Home Office and Treasury, began from the middle of 1977 - again, however, with no direct
involvement of the DVLC unions. These discussions and further planning led to a 'Preliminary Study Report' being distributed to Ministers in March 1979.

The Preliminary Study Report

5. The 'Preliminary Study Report' outlined the system that was to be subject to further examination as well as the decision-making procedure for selection of that system. Five alternative systems were proposed which could fulfil the broad policy base. The first was a continuation of the existing flow line system with batch processing. The second was to retain the flow line system but with direct access to the main files permitting complete integration of all the tasks to one job (this formed the basis of the system selected). The third and fourth options were based on de-centralising the system and the fifth involved replacing the computers with a manual system. (42) In addition, some thirteen 'development modules' were identified which could enhance some or all of the alternatives. (43)

6. The five alternatives and development modules were assessed against their applicability to the clerical drivers (CD) division only, clerical vehicles (CV) division only and both CD and CV thus generating a quantity of comparative information. (44) The fifth, the manual system, was dropped because it could not meet the basic requirements, and eight options combining the basic systems with various development modules were presented in an 'Alternative Systems Report' to DVLD senior management. The eight options consisted of three based on the first alternative and three on the second alternative and one each on the third and fourth. (45)
7. The final selection of retaining the flowline system with direct access to the main computer files and with enhancements based on mainframe computers was made by DVLD senior management on the basis of a common criteria for comparing the eight options. This system demonstrated a continuation of the Job Satisfaction Team's philosophy for improving efficiency and productivity by full integration of the flowline work procedures. The decision for continuing a centralised system over moving to a de-centralised system was influenced by a variety of factors. Primarily, it would have been politically unpopular, and in the short term at least, economically wasteful for any government to make changes to the DVLC resulting in mass unemployment and thereby increasing the regional deprivation. Furthermore, it was in the senior DVLD management's interest, all of whom were located at the DVLC, to preserve the status quo as any changes may have been detrimental to their own careers.

8. The DVLC unions were excluded from the decision-making process to select a system for further planning. Instead, the unions were presented with the selected system as a 'faitaccompli' at a formal presentation on the 4th July 1979. This was the first time the unions received substantial detail on the project, receiving the Preliminary Study Report in the Autumn of 1979, along with details on how the project would proceed; this being in the development of a 'Full Study Report' on which work had already begun. However, with mounting union concern over the project and management keen to sustain good industrial relations, a meeting on the 3rd July 1979 opened discussions to "consideration of a dialogue on Mainframe Replacement to take account of Departmental and Local Negotiations." These discussions led to the establishment of the Joint Working Party which first met on the 17th December 1979.
The Joint Working Party and Full Study Report

9. As with earlier union/management discussions, the role of the Joint Working Party was one of consultation rather than negotiation. As the management side's chair's opening remarks on the role of the working party indicate:

> to tell you the unions as early as possible the ideas we have on equipment replacement so that you can be made fully aware of what is planned and its implications. (49)

At an early meeting of this committee, the Preliminary Study Report was discussed, although by then development was well advanced on the next stage, a Full Study Report, making all consultation largely irrelevant. The unions complained that "the Preliminary Study Report had been issued and decisions had been taken to pursue in the Full Study Report the recommended option without consultation with the staff side."(50) This was a complaint largely ignored by the management. The role of the working party thus became a forum for discussing the many documents being generated from the Full Study Report.

10. The Full Study Report was a comprehensive overview of the proposed Replacement Mainframe Computer Project.(51) The project was, at that time, the largest computer project within the Civil Service, estimated to cost in excess of £18m(52) and involving changes to almost all the work procedures at the DVLC.(53) The report was prepared by a 'Project Team' under the direction of a 'Project Management Group'.(54) A degree of user involvement in the development was facilitated by a number of 'consultative groups' consisting of line management and ADP specialists forming inter-disciplinary groups reporting to the Project Management Group.
11. The consultative groups were responsible for specifying user requirements and formulating 'Model Systems Reports' for specific areas of the DVLC. The role of these groups was an important feature of the evolutionary strategy adopted towards developing the project by involving people in all functions and at all levels. However, the procedure of this form of user involvement, i.e. members of the consultative groups (senior line management) consulting with junior line management who in turn consulted with workers under their direct supervision, was considered, by the more junior grades, to be intimidating and inhibiting people from expressing their true feelings. Union involvement in this process simply consisted of consultation over the documentation produced. (55)

12. The quantity of information for discussion at the working party posed a problem for the unions. After negotiations, 30% extra facility time was provided for two union nominees to deal with all the documentation. The unions also requested that the more technical papers should be written in a simplified form or for a synopsis of the papers to be provided. (56) This request was partially fulfilled and short synopsis and specific presentations arranged. (57) However, the unions consistently complained of the lack of relevant and usable information. They found that they were receiving too much information of too little relevance and in a form not conducive to discussion through their respective BEC. The unions' complaints underlined a perceptual and structural problem with their response. For example, in seeking relevant information, which they had identified as the project's implications for staffing and grading, they were requesting the unobtainable. Information of this kind at such an early stage of a project's development would not be accurate and could only provide an indication of the project's objectives rather than its implications. (58) Furthermore, the unions were confronted with other
problems, including a structure geared to the needs of a reactive organisation and the limited resources of the local branch creating restrictions on the workload of the local officials. Moreover, the BEC meetings were not conducive to detailed consideration of complex documents.(59)

The Issues Raised by the Replacement Mainframe Computer Project

13. Despite its restrictive operation, the Joint Working Party identified the issues which were to prevail throughout the 'bargaining' over the project. The major issue was grade demarcation that arose from the changing employment boundaries which, in turn, were a consequence of the implementation of the project. The integration of the flowline system involved workers in both the clerical and data processing grades undertaking the new 'integrated input procedures' (IIP) job. This was to directly affect over 2,000 lower grade DVLC workers, the majority of whom were CPSA members.(60) Although the management professed a "flexible approach to subjects such as grading which could be discussed with the (unions)"(61) at the last meeting of the working party in December 1980, no settlement of this issue was concluded. Instead both sides had stated their preferences: the management preferred the clerical grades CO and CA for IIP, whilst the unions preferred the higher paid SDP and DP grades.(62)

14. Negotiations over the grade for workers in IIP was complicated by the grading structure being determined nationally and operating throughout the Civil Service. The repercussions of the grading issue at the DVLC, along with similar demarcation disputes emerging elsewhere in the Civil Service, led eventually to a national grading review and introduction of a new grade structure as from the 1st January 1987. The new structure combines both the clerical and DP grades into a single Adminis-
ration Officer (AO) and Administration Assistant (AA) grade with SDP and DP grades receiving a new ADP allowance. Paradoxically, this new structure did not resolve the IIP grade issue at the DVLC.

15. In addition to a re-organisation of the flowline system there were more immediate changes to work procedures in the 'computer operations' area. The replacement of an ICL computer and a tape based system with an IBM computer and hard-disc system resulted in fewer computer operations staff being required and a 24-hour cover of operations no longer being needed. It was, therefore, proposed to move from a three-shift to a two-shift working pattern with the redeployment of a number of computer operations workers. This raised three specific issues. Firstly, the selection of workers for redeployment. Secondly, compensation for computer operators loss of a 'shift disturbance allowance.' Thirdly, changes to the work procedures of computer operators using the new IBM hard-disc systems. The initial union position sought to secure the existing terms and conditions of employment and in the first round of discussions the unions were able to obtain the concession that 'the retention of the three shift system in computer operations would be included as an alternative for further study."(63) However, upon further study by the management three shift working was rejected.

The Loss of Jobs Issue

16. The introduction of new technology in the workplace has commonly been associated with the loss of jobs. Job loss arising from the implementation of the replacement computer was not a problematic issue after the unions accepted a guarantee of 'no compulsory redundancy' written into the staffing and grading proposals of the Full Study Report.(64) The existing number of staff in 1980/81 was approximately 2,717 and by
86/87 (the estimated completion of the project) this was estimated to fall to 2,268. With an annual wastage rate of around 750 people the compulsory redundancy clause could be easily given and was acceptable to the local unions.\(^{(65)}\) However, a consistent demand from the unions was for the need to ensure the expansion of the functions of the DVLD in order to increase the number of workers at the DVLC. Suggestions included: computing services to the DoT and other government departments; a system of renewal notices for Ministry of Transport (MOT) vehicle test certificates; and general improvements to vehicle safety legislation. These suggestions by the unions were neither proposed nor forthcoming in any detail.\(^{(66)}\)

**Management Information**

17. The majority of reports arising out of the investigations and the documentation provided to the unions elicited little, if any, comment. However, one of the papers to be given substantial consideration was on 'Management Information Systems' (MIS). The response of the unions, and in particular the CPSA, to MIS is interesting because it demonstrates the benefit of an agreed and clearly articulated union policy over a specific issue. For example, the CPSA, with a national policy against the use of any form of performance measurement, were able to negotiate an agreement limiting the use of management information to operational purposes and not "to monitor or measure individual or group performance for disciplinary or annual reporting purposes\(^{(67)}\). The national CPSA policy over performance measurement provided the impetus and direction for the local policy. However, such policy formation was the exception rather than the rule and it was apparent that an overall union policy for the direction and development of project was lacking.
18. In the absence of detailed policy formation there was a tendency for union objectives being set to conserve so far as was possible the existing conditions and maintain the status quo. The lack of a sense of direction helps to account for the unions' bewilderment at the quantity and quality of information received from the local management in the Full Study Report. With little guidance nor any mechanism to determine what was relevant and important as against what was of interest but not important, union officials were left attempting to assimilate all the information on a pragmatic and piecemeal basis. In the process they felt overburdened and overwhelmed. (68)

Completion of the Full Study Report

19. The Full Study Report consisted of various documents, including 'Model Systems Reports', which consolidated together formed the comprehensive overview of the project. Originally the timetable envisaged completion of the Full Study Report by August 1980 with equipment orders being placed before the end of 1981. However, the process of completion took longer than anticipated, frequently requiring revision following comments and feedback from various DVLD branches, and resulted in slippage of the timetable. (69)

20. The final report was endorsed by DVLD management in December 1980, although departmental (DoT) management endorsement was not given until July 1981. The next stage was to incorporate all comments arising from the reports in order to issue 'operational requirements' for the various items of technology. This was scheduled to have occurred by December 1981. However, a dispute over the basis of tendering for the contracts between DVLD Management, responsible for implementing the project, and Government Ministers, responsible to parliament and the public for the
DoT, resulted in the issue of the 'operational requirements' being delayed until the middle of 1982.\(^{(70)}\)

21. The completion of the Full Study Report coincided with the end of the first formal stage of technology bargaining over the project and also with the last meeting of the Joint Working Party on 3rd December 1980. The management's estimation of the working party was one of success having obtained the unions' qualified endorsement of the project's reports and adhered to what they perceived as good industrial relations practice.\(^{(71)}\) For the unions the working party had not only identified future issues for negotiation, but had also helped define both the union's position and the procedures for bargaining over the project.\(^{(72)}\)

22. The Joint Working Party was on terms largely defined and controlled by the management placing the unions in a reactive and deferential role. For example, the timing of documents arising from investigations and released to the unions was a management decision. One particular document on staffing proposals taken from a costing section of the Full Study Report was released to the unions before completion in order to incorporate their views. Other documents, which were unilaterally decided by the management as not being of direct concern to the unions, were provided well after action and decisions had been taken. This is not to suggest that had the unions received such documents earlier it would have resulted in a different union policy or different outcome, but is indicative of how the management perceived and largely controlled the union's role in the project. The unions had been excluded from the early policy making and were only asked for their comments on proposals after they had already been unilaterally decided upon by management.
23. The traditional reactive role that the trade unions had been placed in, and had largely accepted in the operation of the working party, may be seen as a means whereby management controlled the agenda for discussion identifying certain areas as the legitimate interest of trade unions, whilst other areas remained strictly the prerogative of management. Therefore, rather than opening up discussion and meaningful participation between management and trade unions, the working party may be seen as a way of closing down and limiting the influence of the trade unions on the system's design and development process.

Future Negotiations

24. Following the series of Joint Working Party meetings in 1980, and whilst Ministerial approval for the project and tendering procedures were sought, consultation between unions and local management over the project virtually ceased. Preparing for the future the unions made a formal request to the management in the middle of 1981 to discuss "machinery for future consultation and negotiation". At an informal Departmental Whitley Council in September 1981, it was resolved to follow the precedent established by the working party, but devolving certain consultation to the local level of DVLC in order to "deal with matters of local significance", whilst negotiating major issues, such as grading and staffing, at the departmental (DVLD) level. This two tier system was established in the Spring of 1982, with a Departmental Joint Working Party and Local Joint Working Party.

25. The motivation for the unions to become actively involved in consultation over the project at a time when little development work was going on can be attributed to the delicate stage of national negotiations over the national new technology agreement. At the September 1981 meeting
discussion concentrated on the national agreement and its direct consequences on the negotiations for the project and the DVLC. (75) The DVLC, being a high profile branch within the national union, had been identified as an establishment for possible selective industrial action in order to strengthen national negotiations. However, with the rejection of the national new technology agreement by CPSA National Conference in May 1982, negotiations for a Departmental level agreement began at the CPSA section and Central Whitley Council level. Having already obtained a 'no compulsory redundancy' clause written into the documentation of the Full Study Report and also having reached agreement on procedural arrangements, the unions and management perceived no need for a project new technology agreement at the DVLC. (76)

1. The operational requirements for the replacement computer attracted proposals from two companies, Honeywell and IBM, for the major components of the project. Both companies supplied terminals and associated computing equipment to permit evaluation and "to develop the ideas and procedures being planned, and to demonstrate these ideas to planners, users and the trade unions". However, in March 1983 Honeywell withdrew from submitting a formal tender, leaving IBM as the major equipment supplier. The equipment order was formally placed in December 1983, although from April to July of that year development equipment was installed with the replacement mainframe computers being installed in November 1983. The arrival of the development equipment marked the end of the preparatory stage of the project and the beginning of the 'programming' stage, i.e. development of the new IIP system and 'file conversion' changeover from an ICL to IBM system.

2. Along with the introduction of the project's hardware were a number of organisational changes to cope with the disruption created by the development and implementation of such a large and pervasive project. For example, in order to provide a period of stability, a two-year freeze on changes to both vehicle and driver operations began in July and August 1983 respectively. In addition, the management of the project was put into a more formal structure with the creation of a 'Project Board', chaired by the DVLD Director to oversee the entire project with various 'Sub-Project Boards' reporting directly to the Project Board with delegated authority for specific aspects of the project. The Sub-Project Boards were a further extension of the user involvement strategy being adopted as part of the 'evolutionary approach' to the project. They were
interdisciplinary groups combining managers from a variety of branches and specialisms. This resulted in many individual managers having a complex array of responsibilities both within the hierarchy of the DVLD and in the project management structure. This in turn led to a system of 'matrix management' being fully adopted following recommendations by consultants hired to provide advice and support for the project.\(82\)

3. The 'matrix management' system worked through individual managers identifying their vertical and horizontal responsibilities - vertical responsibilities being largely the normal supervisory line management tasks and horizontal responsibilities in co-ordinating and liaising with other people throughout the DVLD over the project. To undertake development work a new Replacement Computer Division had been established. One of the new and novel branches within this division was Input Systems branch formed in February 1983; its function was to facilitate the smooth transition from the existing flowline system to the IIP system. Composed of both ADP specialists and administrative grade managers, its role was essentially as a 'go-between' the ADP specialists developing IIP and the 'end users' (both management and lower grades) of the new computer system.

The Local and Departmental Joint Working Party

4. During this period of development, i.e. from the issue of the operational requirements in the middle of 1982 until the installation of the mainframe computers towards the end of 1983, consultation and negotiations with the unions were divided between the Local Joint Working Party and the Departmental Joint Working Party. The local working party became a forum for discussion of some 27 'user requirements' reports and was a consultative rather than negotiating body, allowing the unions to be
informed of the development of the project. (83) In contrast, the departmental working party became the major forum for negotiations. This included: the grading on the new IIP system; redeployment and compensation of computer operations workers; and selection of people to work in an IIP trial area.

5. The renewal of negotiations over the IIP grading and computer operators issues and the growing prominence of the departmental working party followed a period of upheaval within the CPSA with three changes of the full-time section officer in less than eight months. In April 1983 a period of stability was promised by the permanent appointment of a senior CPSA full-time officer to the DoE/DoT section. He took a prominent role in the negotiations over the project and improved the internal communications of the local union by distributing a regular 'Negotiations Bulletin' circular to all members and holding a series of consultation meetings throughout the DVLC. In addition, and following greater activity on the project as it moved from its 'preparatory stage' to 'operational and pilot testing stage,' greater attention was given to clarification of CPSA policy over the major issues raised through earlier consultations.

Grading and IIP

6. At the CPSA DoE/DoT Annual Section Conference in May 1983, a motion was passed calling for the grading of the new IIP system to be appropriate to the specialist DP/SDP grade. This was a substantial change in union policy which had hitherto considered that the grading issue would be resolved following the outcome of a proposed trial of the IIP system. (84) However, during the intervening period, between this assurance being given in April 1982 and the CPSA Section Conference in May 1983, the Treasury had unilaterally issued new national grading guidance,
changing the job descriptions of clerical grades to include the use of technology, e.g. operating VDU terminals. In addition, the DVLC began recruiting people at CA grade who were then temporarily promoted to DP grade for working in the fast keying areas in anticipation of being transferred onto the IIP system in the future. Although this had been previously agreed with the unions in preference to the appointment of temporary workers at the DP grades, it did not deter the CPSA from adopting a 'hard line' in response to what they perceived as concerted management attempts to pre-determine the grading of IIP at the lower paid clerical level.

7. The CPSA policy for IIP grading was formally discussed at a special meeting between CPSA and DVLD management on the 27th July 1983, with both sides reiterating and justifying their grade preferences, i.e. DP for the CPSA and clerical for the management. In response to the CPSA policy the Official Side offered to consider increasing the grade mixtures of the IIP job in favour of the higher CO grade. Although a substantial improvement to the working conditions of CPSA members increasing promotion opportunities, the offer was rejected by the local union representatives. Following this meeting an extensive consultative exercise with all CPSA members at DVLC was undertaken which demonstrated that local union representatives had membership support for the CPSA position. At the second formal meeting on the 10th November 1983 the CPSA strategy, supported by the other local unions, was to register a disagreement over IIP grading and refer the issue to a higher negotiating authority. The DVLD management had no control over the grading of IIP after they had been instructed by the Treasury to settle the issue within the existing civil service structure and not to make the IIP grade a Data Processing grade, i.e. the Treasury had implicitly restricted IIP to a clerical
grade. In registering a disagreement the CPSA sought, under the conditions of the Whitley System, to involve a complete halt to all development on the project. The threat of such action was of particular concern to the DVLD management because of the critical stage of the project's development. However, a compromise was reached by referring the issue to a higher Whitley Council and the cessation of all training and recruitment of staff for IIP, but not of the development on the actual project.

8. At the national level, the CPSA were becoming increasingly aware of the changing grade demarcation boundaries resulting from the introduction of new technology. The grading guidance issued in 1982 without regard to the unions had focused attention on this issue. In addition, grading disputes similar to IIP began to emerge throughout the work areas of CPSA members. In response to these developments, the CPSA put forward a request to the Treasury for a "joint review of the grading, pay and conditions of service of the clerical and data processing grades in relation to the impact of office technology on these grades". Following discussions between the CPSA national officials and the Treasury representatives, a 'National Review of Clerical and Data Processing Grades' began in 1984. However, despite attempts by CPSA national officials, the review did not involve the CPSA. Instead it was carried out as a joint initiative between the Treasury Staff Inspectors and the Cabinet Office Manpower and Personnel Office with the CPSA's role being marginalised to consultation. Negotiations with the CPSA only began after completion of the review.
The Computer Operators Issues

9. In addition to the IIP grading issue, and at the same 10th November meeting, the redeployment conditions of computer operations members displaced by the project was formally raised. The unions' policy, including that of the CPSA, was acceptance of the changes, but on condition that adequate compensation be paid to all workers affected by moving off of shift-work and so losing a shift disturbance allowance. This was a 20% addition to normal wages for shifts finishing past 00.30 a.m. and 12½% for shifts up until 00.30 a.m. For those remaining on the shift system, the unions claimed for the finishing time to go beyond 00.30 a.m. and thus maintain the higher allowance. Similar changes to shift working were becoming the focus of attention in other computer centres, notably at the DHSS Newcastle Central Office. Attempts by DHSS management to alter shift completion times at Newcastle resulted in a local strike action that began in April 1984 and did not finish until February 1985. Negotiations over the DVLC computer operations compensation were suspended for the duration of this dispute in order to assess its outcome and relevance to the DVLC.

The IIP Pilot Trial

10. Towards the end of 1983 a further issue was raised relating to the selection of people for the first trial stages of the IIP system. A series of trials for the IIP system had been proposed consisting of: 'system testing'; 'user acceptance trials'; and a 'pilot trial'. System testing began in November 1983 and was essentially a test of the hardware and software capabilities. The user acceptance trial involved workers from the DVLC using live work to test if the IIP system could provide a minimum workable system "suitable for trialling or [alternatively] they could] reject it for later trialling". The final stage - the IIP
Pilot Trial was a 12 month intensive test involving over 170 workers on a full operational test of the new system.

11. It had been proposed to select people for the user acceptance trial on the basis of moving complete teams of workers from the clerical drivers (CD) and clerical vehicles (CV) divisions. However, the CPSA, observing this as an attempt to impose clerical gradings in IIP, responded by arguing for selection on the basis of seniority and willingness of people to move from both clerical and data-processing areas. With the user acceptance trial scheduled to begin in February 1984 and selection of workers a priority for the success of the trial, the management therefore agreed to comply with the CPSA demands, although selection for the much larger pilot trial was left subject to further negotiation.

Resolution of the Issues

12. By March 1984 the CPSA were becoming increasingly frustrated with the negotiations over the project. They had registered disagreements over five issues at the Department Whitley Council. These were: first, selection of people for the IIP pilot trial; second, the grade ratio of people in the IIP project trial; third, the final grading of IIP; and the fourth and fifth involved compensation for the loss of shift disturbance allowance by computer operations shift-workers. The disagreements were the subject of a Central Whitley Council meeting of the DoE/DoT held on the 29th March 1984. Although none of the issues were resolved it was agreed to delay the start of the IIP pilot trial until 1st June 1984, thus permitting more time to resolve the outstanding issues.
13. Dissatisfaction with the Central Whitley meeting resulted in the CPSA threatening industrial action.\(^{92}\) The following negotiations in April 1984 were held in a climate of deteriorating industrial relations. However, the brinkmanship of the CPSA achieved some concessions. For example, on selection of people for IIP, it was agreed to create four out of the eight teams on the basis of seniority and willingness, and two of the other teams with an experimental higher grade ratio.\(^{93}\) In addition, there was an increased offer of compensation for computer operations workers losing their shift allowance.\(^{94}\) The IIP grading had, by this time, become a national issue subsumed by the 'National Review of Clerical and Data Processing Grades.' The CPSA claim for DP grades in IIP was, therefore, refused on the basis that it would prejudice the outcome of the concurrent grading review.\(^{95}\) The claim for shift disturbance allowance compensation was suspended awaiting the outcome of the dispute in the DHSS at Newcastle. Workers at Newcastle had called upon support from DVLC shift workers in the form of reciprocal strike action. However, the Swansea workers, after considerable debate and discussion, and despite support for strike action by the local BEC, decided not to pursue such a course of action in fear of the repercussions on their own claim.\(^{96}\)

14. By the end of April 1984 the local CPSA branch officials and BEC, under the guidance of the CPSA section full-time official, felt they had exhausted negotiations. They recommended that the pilot trial of IIP should proceed before resolving the outstanding issues in recognition that the grading of IIP and compensation to shift workers was beyond the control of either the DVLC management or the local CPSA branch. A recommendation to accept the negotiated conditions was, therefore, put before CPSA members at the DVLC.\(^{97}\) Meetings with members were held at the end
of May 1984, followed by acceptance of the proposals. The start of the IIP pilot trial marked the suspension of negotiations on the grading and computer operations issues until 1985. The remainder of the negotiations for 1984 mainly involved the establishment of the CPSA Independent Monitoring of the IIP Pilot Trial.
PART 4. CONSULTATION AND DEVELOPMENT OF THE REPLACEMENT MAINFRAME COMPUTER PROJECT (MAY 1984-JULY 1985)

The CPSA Independent Monitoring of the IIP Pilot Trial

1. The IIP pilot trial has been described as the "maiden voyage of the new system rather than a period of experimentation". (98) Officially it was considered "important that the trial is regarded as a closely monitored evaluation of the operational IIP system detailed in the full study report and not as an experiment". (99) Therefore, its status was one of proving the design of IIP and not of further development of the new system. (100) The adverse experience of the original system at DVLC required that its replacement should be thoroughly investigated before widespread implementation. Details of how this evaluation would be conducted were contained in a comprehensive Monitoring Plan for the IIP pilot trial, a summary of which was supplied to the unions in May 1984. The unions were invited to consider "the form in which the factual information once gathered can be discussed". (101) The full Monitoring Plan had identified the information that would be of most concern to the unions with an implicit assumption that the unions' role would follow the precedents established in the various joint working parties. This amounted to co-operating, but only in a passive manner. (102)

2. A further development in May 1984 was the publication of a report by the DVLC Job Satisfaction Team (JST) 'People and IIP'. (103) The report arose from recommendations by the project consultants and by the DVLC JST Steering Group, a joint management and union body who were considering how the principles of job satisfaction could be involved in the IIP pilot trial. (104) The report was critical over how information on the development of the project had been communicated to people working at the DVLC. It was particularly critical of communications between the DVLC unions
and their members. (105) Although the unions were aware of the continual need to improve communications with their memberships, they largely rejected the criticism and the report for its shallow depth of analysis and its political naivety. The rejection of the JST criticisms underlined an ambivalent attitude among local union representatives towards the involvement of the job satisfaction and 'human relations' type of approach. (106)

The Author's Involvement in the CPSA Response

3. During this period of negotiations, the Author became actively involved in the CPSA response to the project. Observation of the existing technology bargaining over the project, and in particular IIP, had identified the marginalised influence of the DVLC unions through the existing procedural forms of involvement, i.e. the joint working parties. This involvement had been consistent with management endeavours to engender union participation in the project. However, it ensured that the management maintained their prerogative on the important decision-making stages of the project. The existing involvement of the DVLC unions was on terms and conditions that, if not defined by the management, were certainly under their control.

4. The DVLC unions were in a reactive position, a role which, in place of any viable alternative and in keeping with traditional activity, the unions had accepted. Instead of this reactive position and forms of passive involvement, the Author suggested that a more 'pro-active' position could be adopted and sustained in the evaluation of the pilot trial of IIP. Specifically, it was suggested that the CPSA undertake its own independent evaluation paralleling management evaluations of the IIP pilot trial. This suggestion was first proposed to DVLC branch and
section officials during the annual CPSA Conference in May 1984, their interest being demonstrated by an invitation to discuss the proposal further with the DVLC BEC on the 7th June 1984.

5. The BEC were receptive to the potential for adopting an independent participative strategy over the evaluation of the IIP Pilot Trial. Local union officials suggested applying what amounted to an independent participative strategy to change the role of the JST in the IIP pilot trial. The role of the JST in IIP had become a further issue of negotiation between DVLC unions and management.

6. At the instigation of the JST the management financed the entire CPSA DoE/DoT Section Executive Committee to visit the DVLC for a two-day presentation in July 1984 in order to discuss how the JST could work in IIP. The presentation was essentially a means for the JST to sell themselves to the CPSA in order that the role of the JST could survive at the DVLC. The CPSA wanted to be involved in the JST as a means of getting union representatives directly involved in monitoring the pilot trial. (107)

7. The presentation also permitted the opportunity for numerous informal meetings with section and branch officials, where the concept of 'independent union participation' was discussed at length. As a result of these informal discussions the CPSA refined its position towards the evaluation of the IIP Pilot Trial. For example, the CPSA originally sought to change the role of the JST whilst preserving its traditional union role to "involve the facility for [section and local representatives] to meet and talk with members on the IIP pilot in the usual way on trade union matters." (108) However, by the 1st August 1984, this
demand had changed to:

full and unfettered facility time allowed for at least 2 CPSA and 2 SCPS BEC nominees who have regular access to the IIP Teams during the pilot period, and to the areas from which those teams are drawn. Their representatives would report back, both verbally and in writing, their findings and problems that have emerged, to their respective BECs for resolution through the normal negotiating arrangements like the Local Joint Working Party.

(109)

The change in demands reflected an awareness of the possibilities of constructing a parallel 'union evaluation team', independent of managerial or JST involvement (the unions were making separate demands over the involvement of the JST). This change also reflected the influence of the Author over the unions's policy towards the project. Furthermore, it can be seen that the newly orientated demand follows the 'independent union participative' approach that had originally been suggested to the CPSA officials in May 1984.

8. At the beginning of September 1984 the implications of the CPSA policy for monitoring the IIP Pilot Trial were beginning to be recognised. The management, whilst "welcoming the wish of the (unions) to become fully involved in the monitoring process"(110) demonstrated an incredulity of the union's ability to undertake their own monitoring activity (the local management were also suspicious of the changing CPSA position).(111) In addition, it was pointed out that the CPSA proposals for the JST undermined their role at the DVLC by changing the professional composition of its team members and the independence it professed to maintain from both the unions and the management.(112)

9. The CPSA policy also created tension and divisions among the DVLC unions. The SCPS, having neither participated in the JST debates nor developed any clear position over involvement in the IIP Pilot Trial,
were being led by the CPSA's initiative. However, SCPS officials at the DVLC had formally complained about a lack of information from the CPSA over its IIP monitoring proposals. This complaint reflected a suspicious and cautious attitude underlying relations between the DVLC unions as well as a lack of a coherent SCPS policy for the issues surrounding the replacement project. (113) This criticism of the SCPS's lack of articulated policy could also be made of the CPSA's general response to the project.

The Development of Union Policy

10. The 'independent participative' approach promoted a more pro-active form of union involvement in technology bargaining and stands in contrast to the more traditional reactive role evident in earlier rounds of consultation. A pro-active form of involvement seeks to shape the development of technology in a manner conducive to the interests of unions and their members. However, herein lies a challenge to the development of union policy which can articulate the members' aims and objectives for the use of technology and specify how these could be achieved.

11. At the DVLC it was clear that the unions lacked any coherent policy for the project. Instead they had a set of generalised rhetorical statements with little articulation of how they could be applied to the actual workplace, and in particular the new IIP system. (114) In addition, people working at the DVLC and on the IIP trial system found it difficult to contemplate alternative work procedures or arrangements which could provide a more intrinsically satisfying work experience. (115) However, the suitability of the new IIP system for the production process at the DVLC made it difficult to conceive how it could have been improved. It fully embodied the principles of 'job enlargement' as
originally proposed by the JST in the mid-1970s. Although the production process of the DVLC, i.e. the centralised processing of information, imposed considerable restrictions on the potential forms of work organisation. (116)

12. Throughout the DVLC unions there was a lack of awareness and knowledge of potential alternative working arrangements. Without a clear vision or example of an alternative work organisation the workers and union representatives found it difficult to perceive, let alone articulate, any alternative to the experience of their daily routine. Exclusion from any strategic decision-making did not foster experience among union representatives in the kind of planning activity and abstract thinking necessary to initiate a new design. This, combined with an overall lack of awareness in the procedures involved in the computer system's design and development process, denied local CPSA representatives experience in formulation of policy - and strategies to support such policy - which moved beyond traditional reactive positions towards pro-active forms of involvement. For example, at a CPSA BEC meeting on the 3rd September 1984 the Author criticised the DVLC unions for their lack of coherent policy over the IIP system and pointed out the importance of such a policy in order to sustain the CPSA's independent monitoring of the IIP pilot trial. The general feeling of the meeting was an acceptance of these criticisms, although, whilst the Author was attempting to get a response on what the CPSA objectives for IIP were, it was clear that the BEC were looking to the Author, and the technical expertise which he represented, to define their objectives for them. With little or no experience in initiating a pro-active approach they did not know where or how to start.
13. The lack of a coherent policy was partially resolved by a suggestion from the Author for the BEC to issue two documents: a 'Technology Charter', a union policy statement on the use of technology at the DVLC; and proposals for the CPSA 'Independent Monitoring of the IIP Pilot Trial'. The latter document fulfilled requests from the management for further information on the union's proposals for their independent monitoring and was crucial in securing the legitimacy of the CPSA initiative.\(^{(117)}\) The management, particularly the DVLD senior management, were favourably disposed towards the CPSA proposal as an advancement of union-management co-operation at the DVLC.\(^{(118)}\) However, the procedures for achieving the independent monitoring became an issue of negotiation. The CPSA demanded two people, who had been nominated by the BEC, to form a union 'Monitoring Team' provided with 100% facility time. The initial management response was to offer 50% facility time for both people - an offer the unions rejected.\(^{(119)}\)

14. Negotiations over this issue had three outstanding characteristics. Firstly, the reversed positions of both sides, i.e. the management were now responding to the initiative of the unions, as opposed to the unions responding to the management's initiatives. Secondly, the determination of the unions to pursue the monitoring of IIP on the basis of their proposal.\(^{(120)}\) Thirdly, the complexity of negotiations which introduced further issues in order to resolve the original one. The monitoring procedures issues was resolved at a special meeting on the 2nd October 1984. The role of the JST in the IIP pilot trial was introduced into negotiations; this allowed a settlement to be reached by reducing this role to one of completing a follow-up report to 'People and IIP' and undertaking a 'Human Issues Review of IIP' in conjunction with the unions. It was agreed that both members of the CPSA Monitoring Team
could receive 100% facility time provided they formed the union input into this review. These proposals were accepted by the CPSA and the monitoring exercise formally began on the 8th October 1984.

The IIP Pilot Trial

15. The IIP pilot trial officially began on the 1st June 1984. However, at the start it was little more than an extension of the user acceptance trial, introducing live work on a gradual basis so that by December 1984 CV and CD teams had access to 90% and 70% respectively, of transactions undertaken by the old system. The teams were introduced sequentially onto the new system at approximately monthly intervals. By February 1985 there were over 170 people in eight teams involved in the trial. The teams were equally divided between CD and CV with each composed of 1 EO, 4 higher grades (CO or SDP) and 16 lower grades (CA or DP). In addition, two of the teams, the last to be formed in each division, had an experimental grade mix of 10 higher (CD or SDP) to 10 lower (CA or DP) grades.

16. The trial was supervised by CD and CV line managers and the 'Input Systems' branch through the matrix management organisation. Line management maintained responsibility for the throughput of work and staff supervision whilst the Input Systems branch management had responsibility for implementing the new system, including training of staff and the monitoring and evaluation of the trial. Progress of the trial was formally controlled by pre-identified 'decision points' when specific issues were required to be settled, the majority of which occurred before December 1984. At the end of every three months a comprehensive progress report was required by the Project Board, the first being completed at the beginning of September 1983.
17. The CPSA independent monitoring of IIP was undertaken by a team consisting of two CPSA BEC members. They were selected by the BEC on the basis of union experience and suitability for the task. The initial team had skills which complemented rather than overlapped, i.e. whilst one had research and report writing skills the other had good communicating and inter-personal skills with the largely female membership of the IIP pilot trial. Each member of the team initially attended a two week training course for IIP. This permitted them to become acquainted with the operation of the new system and critically assess the form of training. After completion of training, the teams were accommodated adjacent to the members on the IIP trial and the Input Systems branch management.

18. The physical location was important for establishing a working relationship with the Input Systems branch to ensure, where necessary, that the CPSA monitoring team paralleled the Input Systems branch evaluation role. It also permitted the monitoring team to build a relationship with CPSA members working in the pilot trial. The close proximity with the members resulted in the team becoming actively involved in fulfilling what may be described as a 'personnel' role, i.e. dealing with a myriad of accommodation issues and union personal cases. This role changed when the team, along with Input Systems branch, were moved from the location of the pilot trial to provide accommodation for the last two IIP teams, in February 1985. Contact with members became more formally based on scheduled meetings and appointments. The monitoring team found themselves concentrating more on a formal desk-based research role, i.e. analysing and writing reports, issuing circulars, investigating specific and outstanding issues, etc. A change to the composition of the team
occurred when one of the original members was elected to an honorary official post at the DVLC in March 1985. She was replaced by another BEC nominee.

Supervision and Support for the CPSA Monitoring Team

19. The monitoring team's activities were largely self-determined. Formal supervision was on a weekly basis reporting to the senior branch officials and detailed reports were also presented at the monthly BEC meetings. In addition, a diary of work was maintained by the team to account for their facility time to the DVLC management. However, this formal supervision did not always proceed smoothly. The weekly meetings became erratic as other more immediate issues were preoccupying the time and energy of the branch officials.\(^{126}\) Moreover, the attitude of the BEC was to consider the IIP issues resolved through establishment of the monitoring team, rather than dealing with the multitude of new issues and information being generated by the monitoring team's activities.\(^{127}\)

20. These shortcomings in supervision of the monitoring team exposed the already existing organisational and structural problems of the CPSA branch. The monitoring activities placed a strain on the existing democratic structure of the branch. One member of the monitoring team said, "we could deal with management - we could take on all negotiations between us - we could become a branch within a branch".\(^{128}\) The fact that this did not occur was largely due to the honesty, integrity and commitment of the individuals comprising the monitoring team. However, the potential for the creation of a 'branch within a branch' illustrates the team's isolation. There was also a lack of recourse to easily accessible information and research resources.
21. Support for the monitoring team was provided by the Author, although his location in the West Midlands limited the extent and availability of his assistance. The Research Department of the CPSA, who may have been able to provide support for the initiative, were not generally utilised due to the geographic separation and because branch officials regarded them as not being appropriate for the kind of assistance required by the monitoring team.\(^{(129)}\) The kind of resources available from trade union resource centres, such as the 'Coventry Workshop'\(^{(130)}\) would have been ideal to support the monitoring teams, but no such facilities were available convenient to Swansea.

Activities of the CPSA Monitoring Team

22. The monitoring team undertook a diverse range of activities. They represented the CPSA on a variety of project sub-committees;\(^{(131)}\) they were members of the CPSA's negotiating team on local and departmental working parties; they reviewed and critically assessed the considerable documentation generated from the management's evaluation team; they organised meetings with members and were available to members in the IIP pilot; they administered a questionnaire among the CPSA members at the DVLC; and they organised meetings with a variety of management representatives in order directly to resolve minor issues. In addition, they represented and took an active part in the information gathering stages of the JST's 'Human Issues Review.'\(^{(132)}\)

23. The Human Issues Review began towards the end of November 1984 with interviews among people working at DVLC; these were completed in January 1985. However, publication of the report, which was highly critical of the IIP pilot trial, was delayed for several months over what CPSA officials perceived as internal management conflict in its findings. The
review made recommendations to the project board for an 'experimental stage' to follow the pilot year and a need for further examination of management supervisory functions within IIP. Furthermore, it identified numerous problems with the accommodation, ergonomic and health and safety aspects of the IIP system, many of which had been previously identified by the monitoring team and had already been brought to the appropriate management attention.

24. The sharp criticisms of the Human Issues Review describe a scenario of the IIP system which contrasts with that described by the evaluation reports from Input Systems branch. It had been originally proposed that they would complete an evaluation assessment of the pilot at three-monthly intervals. The first, completed in September 1984, had an overall assessment of the pilot trial as progressing well and that there were "strong grounds for optimism about the future success of IIP as it develops". The second report, completed in January 1985, concluded that "the optimism for IIP, expressed in the first report, has been fully realised". The third, completed in May 1985, stated "IIP works successfully and is meeting its objectives of improving job quality and transaction turnaround". However, after implementation and experience of using the IIP system, it would appear that the pessimism expressed by the Human Issues Review was closer to what was happening than the Input Systems branch reports were. For example, in late 1986 it was considered necessary to review the IIP job design due to the level of discontent over its operation. It would appear that little attention had been paid to the recommendations of the Human Issues Review.
25. The monitoring team were members of the CPSA's representation at the Local Joint Working Party and the Departmental Joint Working Party. The majority of issues raised by the monitoring team were discussed at the local working party. Inclusion on these bodies was considered desirable because of the knowledge and awareness of developments and membership feeling in IIP that the monitoring team could provide to the meetings. As a result, the trade union side of these Whitley Council meetings was often better informed than the management side, who were represented by the senior management reliant upon the Input Systems branch and line management for their information on the state of developments in IIP. The monitoring team's influence on negotiations was to extend the unions' understanding and knowledge over issues on the IIP system and increase the number of issues for discussion. By extending the range and depth of negotiations, the unions were able to strengthen their overall bargaining position through having more to bargain with. In the view of CPSA officials, the overall bargaining position of the CPSA was at its zenith during the period of the monitoring team's existence.

26. The strengthened position of the DVLC unions could not be attributable to the existence of the monitoring team alone. There were a variety of influences at work. For example, the delicate and uncertain stage of the project's development requiring the acceptance and goodwill of the workforce and the building of membership awareness by the unions since the middle of 1983. However, the activities of the monitoring team did significantly contribute to the overall strength of the CPSA's presence at the DVLC.
Management Response to the CPSA Monitoring Team

27. The monitoring team was established as an 'independent participative' approach. An important feature of this approach was to sustain involvement and co-operation without fear of becoming hostage to a managerial perspective (thus losing sight of the union perspective), a fear which traditionally favours 'arms-length' forms of participation by union representatives. The relationship between the monitoring team and DVLC management was, therefore, crucial for the success or otherwise of the initiative, because it was the domain where the monitoring team were liable to become imbued with a managerial rather than a union perspective.

28. In its application, the concept of independent union participation was vindicated by the monitoring team. Despite their isolated position, they maintained a strong union identity which was fully recognised by the various management representatives with whom they dealt. Throughout the duration of the pilot trial, the team felt no ambiguity over their role. (140) The retention of this identity was partly attributed to the way the initiative had been established by prior discussion between the CPSA branch officials and the Author over the role of the monitoring team, and the union documents - the 'Technology Charter' and 'Monitoring Plan' - providing a framework for their work (although all these planning activities could have been substantially improved). Furthermore, having a team rather than an individual undertaking the task ensured a degree of mutual support which was important given the isolated nature of their task. Also, the team members, whilst lacking experience of undertaking such an approach to participation, had considerable local union and negotiating experience.
29. The response of management representatives varied between different management groups. For example, the senior management and Input Systems branch management considered the union initiative as providing a useful and positive role to the pilot trial. The Input Systems branch management in particular were sympathetic to the monitoring team, with an awareness of the relevance of strong trade unionism to facilitate a smooth period of organisational, structural and environmental change, in harmony with rather than against the workforce.\(^{141}\) In contrast, the line management, whilst initially helpful, soon demonstrated hostility towards the monitoring team - which became greater as the IIP pilot trial developed.\(^{142}\)

30. This hostility of the line management was observed, by the monitoring team members, to arise because the monitoring team posed a direct challenge to the line management's authority, particularly in the early stages when the teams were fulfilling a more personnel orientated role. Also, the monitoring team were undertaking activities requiring a high degree of discretion, self-control and personal motivation (tasks not normally associated with the monitoring team's grading levels) and were, therefore, transcending the existing hierarchy of responsibility. According to the monitoring team their activities were tending to undermine confidence in the management's ability which engendered "intellectual arrogance about us (the monitoring team) during this work; they (the line management) think COs or CAs can't do this type of work".\(^{143}\)

31. Line management hostility towards the monitoring team was not uniform. The clerical drivers (CD) management were more open and prepared to discuss issues with the monitoring team than the clerical vehicles (CV). This reflected the differences in the managerial style, which has already
been discussed in Part I, paragraph 8, above, as well as in differences in the managerial preparation for technological change. For example, whilst CD management were putting considerable effort into the planning and development of IIP, with more EOs concerned with planning and maintaining contact with ADP management, CV management had less resources in development and less ADP management contact resulting in more complicated and sloppy software being produced for the CV clerical process. To the monitoring team "the internal organisation of CV was out of tune with the overall humanistic approach adopted in IIP".(144)

Negotiations over IIP and the Replacement Project

32. During the 'pilot year', whilst the CPSA monitoring was underway, two major issues were negotiated. Firstly, the redeployment of computer operations workers. Secondly, the grading level of IIP workers. Discussions over redeployment resumed following the settlement of the DHSS shift workers dispute at Newcastle in early 1985. However, the position of each side was affected by the Newcastle settlement. In place of 2 years shift disturbance allowance for people moving off shift work, the unions increased their claim to 3 years.(145) In response the management increased their offer from 3 months to 9 months in March 1985.(146) This offer was rejected by the shift workers and, following further negotiations, the management increased their offer to 12 months which was accepted unanimously by the shift workers on the 22nd March 1985.(147)

33. The settlement of the shift disturbance allowance compensation payment resolved the computer operator issues other than discussions over the detailed selection and redeployment of shift workers. In contrast to the resolution of this issue, the IIP grading issue proved more problematic and by 1987 was still an outstanding and controversial issue. The
IIP grading issue tended to over-shadow and dominate all industrial relations at the DVLC, limiting the role of the CPSA IIP monitoring team by focusing CPSA members' and branch officials' attention on this single outstanding issue.

IIP Grading

34. The formation of the IIP Teams included a mixture of both clerical and data processing grades undertaking the same task yet receiving a significantly different remuneration.\(^{148}\) This created an underlying discontent among all workers in the IIP areas all doing the same job but at different rates of pay. However, settlement of this issue was beyond the control of DVLD management and the subject of the national review. These changing circumstances had led the local CPSA branch to amend its position at the 1984 section conference. Instead of DP/SDP grades in IIP areas, the CPSA called for DP/SDP 'rates of pay' recognising the potential of the review to initiate a new grading structure.

35. It was against this background and considerable growing tension among IIP and DVLC workers, that results of the national grading review fieldwork were published in May 1985. However, these were published without recommendations or suggestions as to how the national and IIP issues could be resolved. The ambiguity of the fieldwork report increased the frustration of IIP workers anxious to resolve their grading and that of union representatives anxious to resolve the issue in order to concentrate on other matters and other issues, including a proposed joint seminar to discuss the evaluation of IIP. In order to facilitate unhindered discussion over the grading issue, the management put forward the completion of the IIP pilot trial one month until July 1985.\(^{149}\)
36. With an increasing sense of frustration over the issue felt by members and representatives at the DVLC, the local CPSA Branch began to precipitate events. Firstly, the CPSA General Secretary, the national official leading negotiations in the national grading review, visited the DVLC on the 30th May 1985, to discuss the review and its local implications with people working in the pilot area, local union representatives and the Director of DVLD, and pledged national support to DVLC workers for their position on IIP. Secondly, the Branch sought and obtained, on the 4th June 1985, financial backing from the CPSA 'National Disputes Committee' for strike action over the issue. Thirdly, a mass meeting of all 2,500 DVLC members was held on the 6th June 1985 with promises of financial contributions and moral support being pledged for IIP workers should strike action prove necessary. In addition, the CPSA monitoring team had prepared for possible strike action as part of their union organisational role in the IIP Pilot Trial. This had consisted of collecting addresses and contact telephone numbers of all IIP workers, as well as identifying the most susceptible parts of the system for disruption from industrial action. It was widely recognised that the withdrawal of six workers in an ADP area controlling the IIP system would result in the total stoppage of the entire IIP system.

37. These measures were a co-ordinated CPSA branch strategy designed to pressure DVLD and the Treasury management to urgently resolve the IIP grading issue. However, the strategy suffered from being co-ordinated and led by the local branch pressurising the local management whilst the issue could only be resolved along with settlement of the national grading review which was being negotiated centrally by the national CPSA and the Treasury. There was a lack of internal cohesion in the CPSA's position which resulted in a bitter division between the local branch and the
CPSA nationally.

38. The CPSA General Secretary returned to the DVLC on the 26th June 1985 with an interim offer from the Treasury. This consisted of back-dating any pay award arising from the review to the beginning of the user acceptance trials (February 1984) and an advanced payment of £100 for people working in the IIP area for 12 months or more plus £50 for those with 6 months experience. The offer was contingent on the CPSA proceeding with the IIP project and not claiming similar conditions for any other project. Moreover, it was promised that the results of the review would be made available "by the end of July this year [1985] as the basis for early discussion with the CPSA at this time". To the national officials, including the General Secretary, the offer appeared as a positive indicator that the review would result in substantive benefits for CPSA members in return for their acceptance of the introduction of new technology. However, the response of the DVLC Branch Executive Committee was to consider the offer as "derisory and an insult to the staff". They recommended members to reject the offer, which they overwhelmingly did in a workplace ballot on the 8th July 1985.

39. The local management response to the offer was to maintain a hard-line attitude towards the unions, threatening to take executive action if the offer was rejected. However, whilst the CPSA DoE/DoT Section Executive Committee endorsed the DVLC branch rejection of the interim offer, the CPSA nationally, perceiving such action as potentially jeopardising the back-dating of pay for workers in IIP and the national negotiations over the grading review, as well as inhibiting nationally co-ordinated industrial action at a later date should national negotiations break down, withdrew all support for industrial action. As a
consequence the local branch officials were isolated and felt that national officials were undermining the policy of the local branch. Some local officials even felt a conspiracy was being formed against them between CPSA national officials and the DVLD and DoE/DoT management. As evidence for this they pointed out that the letter containing the original offer had been dated the same day that the CPSA General Secretary travelled to Swansea bringing with him sufficient copies for distribution to all members who worked in the IIP area, although he would have left well before office hours. Whilst details of the offer were obviously known well in advance to the General Secretary, the example really illustrates the differences of perception between national and local officials on the merits of the offer. In attempting to impress the local branch with the substantive gain they had obtained from the national negotiations (at a time when to gain anything from the Treasury was seen as a major victory) the General Secretary under-estimated the strength of local feeling or the raised expectations among the local officials and members on the outcome of the review. The enthusiasm of the General Secretary for the offer was consequently perceived by local officials and members as contemptuous of their situation. While they, in turn, demonstrated little appreciation on the state of national negotiations for which they had little knowledge or understanding.

40. The withdrawal of national support from the CPSA effectively undermined the branch's ability to sustain industrial action for a prolonged period. With the CPSA divided and the local branch isolated, DVLD management proceeded to take executive action and implement the IIP system, selecting people on the basis of their suitability to the local management rather than their willingness, as had been negotiated from the precedents established in the user acceptance trial. Furthermore, man-
agement withdrew all CPSA facilities, such as independent monitoring. In response, the local branch attempted to maintain a policy of non-cooperation with the implementation, although with threats of disciplinary action to workers not complying with management instructions the demoralised workers were coerced into IIP, leaving the CPSA policy ineffective.

41. The CPSA independent monitoring was thus brought to an unceremonious end. Proposals for joint union-management seminars to discuss the pilot trial were just one of the casualties of the worsening industrial relations at the DVLC. The results of the grading review were published on the 17th August 1985 and the proposals for amalgamating the DP and clerical grades to form the administrative assistant and administrative officer grades (with an ADP allowance for people working in traditional ADP areas) was accepted by a national membership ballot in April 1986. The local DVLC branch ended their policy of non-cooperation with a local membership ballot to accept the interim offer at the end of September 1985. However, by then the branch had become demoralised and lost the momentum of activity it had gained in the negotiations and monitoring activity leading up to the summer of 1985.

42. At the beginning of 1987 a new joint union-management initiative, based on the experience of the IIP Monitoring Trial, was formulated to investigate the job design in the IIP system, which by this time had tended to revert to work practices found in the old system. (159) Paradoxically, the national grading review did not resolve the IIP grade issue and at the end of January 1987 the CPSA submitted a new claim for the ADP allowance to be given to people working in the IIP area - a claim essentially no different to the policy first pursued in 1982. (160)
PART 5. DISCUSSION OF THE DVLC CASE STUDY

1. The DVLC case study has two interesting aspects. The first, underlying all activity around the project, is the contrast in the management strategy for the introduction of the current wave of new technology compared to the former strategy adopted for the establishment of the centre in the late 1960s and early 1970s. The second, and more pertinent to this study, is the development of union policy at the DVLC, specifically the CPSA who led negotiations over the replacement computer project and, under the instigation of the Author, adopted an independent participative strategy for the evaluation of the IIP project trial.

Management Strategy for the Project

2. The replacement mainframe computer project sought to replace equipment which, through the pace of technological advance, had become outdated. This was taken as an opportunity to restructure the existing clerical production process to overcome deficiencies of the original flowline system. The flowline design can clearly be identified with the dominance of a Tayloristic Scientific Management perspective of work organisation, with the labour process divided into its smallest number of mechanical operations. In practice this system proved counter-productive because it neglected the social importance of work for labour; workers operating the system had little empathy with the segmented tasks and had little motivation in their job. Moreover, the system lacked flexibility and required production faults to be corrected by re-processing through the whole system and not just at the location of the fault. In addition, the number of non-standard cases that could not be processed through the flowline system was greater than originally envisaged. (It is interesting to note that the company responsible for the original design, Logica,
was able to win contracts for similar systems in other countries as a consequence of and not despite their experience at the DVLC). (161)

3. The replacement project was influenced by the 'human relations' perspective of the Civil Service 'Job Satisfaction Team' (JST). The design of the IIP system was an extension of the job enlargement initiative that had been previously introduced by the JST to overcome operational difficulties with the original system. The management strategy for the project was defined as evolutionary and sought to broaden involvement beyond computer specialists in all aspects of the system's design, development and implementation processes. For example, specifications for the project were drawn up by inter-disciplinary teams of management representatives; formation of a matrix management structure which spread responsibility for the project across DVLC managers; creation of the Input Systems branch who combined technical and administrative management fulfilling a liaising role between computing specialists developing the IIP system and those responsible for using the system; and an extensive trialling and evaluation programme to ensure a thorough systems test. Attention was also given to ensure unions were informed of the project's development and were involved in the project by establishing suitable procedural arrangements, i.e. various joint working parties (these are discussed below, paragraphs 6-9).

4. The replacement project strategy stands in marked contrast to that of the original system, showing sensitivity to the workers of the system and greater attention to its social and organisational environment along with an awareness towards future technological developments. (162) However, its attention to user involvement and the social and human consideration of the system's development process was restrained by the
bureaucratic operation of the civil service. For example, user involvement was largely based on creating procedural structures to enable management grade involvement as opposed to lower grades involvement, when in fact it was the lower grades who would actually be operating the system. Underlying this form of user involvement is a well established division between those with discretion over their job (management) and those without discretion over their job (lower grades). This is characteristic of the Civil Service bureaucratic ethos.

5. The contrast between the original and replacement system demonstrated a change in the perceived technological imperative within the design of the computer system. The original system was a product of its specific era. The centralised batch processing of driver and vehicle licences appeared, in the 1960s, an ideal process for automation through a large mainframe computer, providing considerable economies of scale. The availability of unskilled, mostly female, labour in the South Wales region made Swansea a suitable location for the DVLC. The replacement project was able to use the experience from establishing the original system to construct a more robust and responsive system. Moreover, the replacement project had a greater choice of technological options and its designers were in a more informed position to predict future directions of emerging technologies. In addition, there was a more widespread public appreciation and acceptance of technology in the late 1970s and early 1980s. However, the formation of the DVLC at Swansea made a departure from a centralised to de-centralised system which, whilst technologically achievable, would have been socially unacceptable for the region and probably very expensive thus making it a politically unpopular option - although it would appear movement to semi-decentralised systems could be pursued with future replacement computer projects. (163)
Industrial Relations and Union Involvement

6. A feature of the management strategy for the replacement project was the maintenance of good industrial relations. The local unions had been kept informed about the project since its early formulation in the mid-1970s. However, the extent of union involvement and influence in the project was marginalised and controlled by the local management. It was the local management who supplied the quantity and quality of information on the project and they clearly identified and decided which issues would be subject to consultation and which to negotiation. In this respect, the local management legitimated areas of union concern, controlling the agenda of discussion. Consequently the unions were largely concerned with addressing themselves to traditional economistic issues, although, with varying degrees of success, continuing to seek greater influence over the development of the project.

7. Union involvement and bargaining over the project developed through three phases. The first, from the mid-70s to 1979, was when important and decisive strategic decisions were taken over the shape and form of the future replacement system. This was not identified by the local management as an area for union involvement in the decision-making. Instead these decisions were taken unilaterally by management in agreement and consultation with government ministers and other departmental representatives; the unions were informed and their comments invited, although it would appear little attention was afforded to these comments.

8. The second phase of union involvement was from 1979 until 1984. This occurred with the construction of formal procedures, based on the Whitley Council, in the various joint working parties to discuss the
project. During 1979 the issues, which were to dominate negotiations in the following years, were first identified, i.e. the grading of people working in IIP and the redeployment of computer operations workers. The various joint working parties permitted greater consultation over the project, although the degree of actual union influence appears minimal. This is partly attributable to the lack of union policy for the project. In place of a coherent, well articulated set of demands, the unions' policy was disparate and largely rhetoric in addressing itself to traditional and already well defined policy issues. Moreover, the formation of this policy arose in response to issues raised by the management underlining the reactive position of the unions with the procedural arrangements which placed the unions outside the main arenas of decision-making.

9. The third phase of union involvement developed from around May-June 1984 until the collapse of industrial relations at the DVLC in July 1985, and coincided with the Author's influence in the CPSA's policy formation. This influence led to the local branch adopting an independent participative strategy over the monitoring of the IIP pilot trial - a response to the project which was fundamentally different from previous traditional approaches. The shortcomings of these traditional approaches of both reaction and passive involvement were the basis upon which a pro-active approach for the local union's independent monitoring of the pilot trial was developed. Pro-active forms of involvement had been widely recognised as a means of improving a union's effectiveness in the shaping of technology, not only towards their members interests, but also to the wider needs of society in a socially responsible way. However, the application of such an approach is limited by the environment and circumstances in which it is operating. At the DVLC these limitations included the exist-
ing procedural arrangements for technology bargaining which the initiative was attempting to extend.

Independent Monitoring

10. The CPSA's independent monitoring of the IIP pilot trial was an adoption of an independent participative strategy at a late stage in the project's development. But this was too late to alter fundamentally the system or to shape the technology to any radical extent. This would have required adoption of such an approach at a more strategic period of decision-making. However, intervention at these stages may not have been effective, due to the union policy lacking any strategic, and in many ways alternative, vision of the future.

11. The independent monitoring initiative re-defined the union/management relationship, introducing a new form of union participation and involvement. It was adopted as a means of improving CPSA representation in the IIP pilot area and provided a reliable and independent source for information to both CPSA representatives and members on the pilot trial's development. It was an extension of the existing joint working parties remit and a component of the local unions' response to the project. Whilst it could raise issues and topics for discussion, the monitoring was not providing members with an alternative representation and operated within the democratic decision-making organisation already established within the CPSA. For example, the DVLC has a distinctive decision of labour based on gender, i.e. women mainly occupy the lower clerical grades whilst men mainly occupy the higher managerial grades. Consequently, the majority of CPSA members at the DVLC are women. However, the monitoring initiative did not address itself to issues of gender and inequality. Whilst obviously pertinent to the DVLC these were
seen as outside the scope of the initiative and thus reflected the limitations of the local unions political agenda.

12. The independent monitoring initiative utilised and developed opportunities for union involvement permitted by a management strategy that sought to ensure convivial industrial relations. Moreover, the local unions were able to extend involvement beyond what the local management had originally envisaged. However, this challenge to management authority, whilst contributing to an overall improvement to the CPSA's bargaining position, could not restrict management ability to obstruct and delay unwanted change. This was demonstrated in the bargaining that surrounded the provision of rest areas and rest breaks in the IIP work areas. This illustrates two obstacles to union involvement in the technological change process: firstly, the need for unions to obtain legitimisation from the management for their involvement; secondly, the lack of positive union policy formation over adopting a pro-active position.

13. At the DVLC the local unions were required to obtain management compliance with the monitoring initiative in order to obtain the necessary 'facility time' for union officials to undertake the tasks and to gain access to the pilot trial. This clearly exposes the inequalities of the bargaining process in favour of the employer. To overcome this inequality requires the establishment of procedural arrangements enabling unions greater rights for involvement. These could be achieved through agreements or legislation, although either form would require a commitment to more democratic forms of decision-making within the enterprise.
14. The local unions' lack of experience in policy formulation around a pro-active position was demonstrated by the discussions held between the Author and union representatives that covered the aims and objectives they had for the development of technology at the DVLC. It was clear that the unions had no clear direction for the deployment of technology at the DVLC; instead, they were looking to the Author to define the position for them. This placed the Author in an invidious situation. If the Author dictated what the local unions should be seeking to achieve it could alienate them from the initiative, because it would be perceived as something thrust upon them and not developed by them. In addition, the internal divisive factions of the local unions increased the potential for isolating particular groups ideologically opposed to certain proposals.

15. The policy statements that did emerge (the 'DVLC Technology Charter' and 'CPSA Monitoring Plan'), despite being the result of considerable discussion, were similar to the broad rhetoric so characteristic of union policy and were neither the well defined nor the detailed and articulate policy originally sought. The operation of the monitoring initiative suffered from this lack of policy development, along with a lack of attention paid to planning and supervision. This all detracted from the smooth and efficient application of the monitoring team's activities and was an area that in retrospect could have been substantially improved.

16. The lack of the formulation of detailed policy by the local branch is rooted in traditional reactive union strategies and reflected in the organisation and structure of the CPSA. The instability of the CPSA's organisation, with its unpredictable annual elections for posts from local representative to national president and the competition for these
posts from the various internal factions, has created a situation which detracts from the formation of long term policy that can embrace social change rather than merely concentrating on more short-term initiatives. Such initiatives are often more to do with gaining sectional advantage within the union than with the longer-term interests of CPSA members. Moreover, the limited time afforded to representatives for union business, and a perennial shortage in some areas of people able and willing to become union representatives, are factors which contribute to the adoption of reactive short-term policy options over more strategic approaches. As a consequence little experience in the construction of more pro-active approaches is gained by union representatives.

17. Activities which may be construed as pro-active have a similarity with the practice of strategic or executive management. These include: the abstract construction of alternative scenarios; the development of potential options; the calculation of cost and benefits for options; and the planning and co-ordination of actions. Therefore, to sustain pro-active policy options and effectively pursue independent participation as a form of union involvement, it would appear that unions need to develop similar managerial practices, as well as reviewing existing forms of decision-making and policy formulation and the resources for education, research, organisation, etc., to support and facilitate such activities. These potentially far-reaching and widespread reforms of union structure and organisation are discussed further in chapter 8.

18. The CPSA monitoring team working the IIP pilot trial were performing two potentially conflicting functions. They were seeking to improve the local organisation of the CPSA in the areas where they were working, creating a strong awareness and support for the union. At the same time
they were monitoring the project to ensure that a smooth and successful implementation could proceed. The organisational role was to promote the union in recognition of the fundamentally opposed interests to the employer and consequently engenders a conflict-based relationship with the employer. On the other hand, the monitoring role was conciliatory to gain a consensus for mutually acceptable solutions. The position of the monitoring team reflected a union/management relationship as a fragile and delicate balance of diverse interests, some conflictual, some consensual.

19. For union participation to be independent and effective requires a complex mixture of compromise and a mutual respect, with both sides demonstrating an understanding and appreciation of the other's perspective and point of view. To be successful requires costs to be borne by all parties in reaching consensus and/or obtaining an acceptable compromise of differing interests. However, the political inequality of bargaining, demonstrated at the DVLC by the advantageous position of the local management in establishing the terrain of the bargaining agenda through their monopoly and hegemonic position over the system's design and development process, resulted in the costs being largely borne by one side. For effective union involvement and a greater democratisation of the system's design and development process requires the management to surrender their monopolistic position and certain areas of their prerogative. This did not occur in the IIP pilot trial where the local management were reluctant to meet the substantive union demands. The repercussion of this lack of compromise was to engender greater union opposition to the project, accentuating the conflict element of the monitoring team's activities over the consensus element. Consequently, the monitoring team were in a paradoxical position; they were attempting to under-
take a positive role in the development of the project which, through the political process surrounding its construction, may have also placed them in a negative role of opposition to the project.

The Author's Role in the Independent Monitoring

20. The CPSA monitoring initiative was inspired by the Author whose role was to provide specialist assistance to the union. This had been the original objective of the research project from whence this study arose, established in recognition of the existing limited resources supporting union activity over technology bargaining. However, the establishment of the initiative had to overcome several hurdles; for example, both the Author and the concept of independent participation had to gain acceptability to local union representatives. Divisions within the union based on the political factions and the instability of its own organisation tend to create suspicion of the motivation of any outsiders in working for a trade union. Moreover, the branch at DVLC, geographically isolated from the CPSA nationally in London, sought to maintain and preserve its autonomy and independence of operation. In addition, union representatives display an anti-intellectual bias, often based on a crude workerist position that observes all people not involved in productive labour, particularly academics, as parasitic on society. At the DVLC acceptability had to be sensitively and diplomatically built up on the basis of trust and integrity between the Author and union representatives from the local branch and the DoE/DoT section.

21. A further difficulty of the relationship between the Author and the union representatives was more to do with the structure and organisation of the CPSA itself. This was constructed and well developed around the needs of an essentially reactive organisation which had survived without
recourse to specialist assistance. Consequently, the Author found that for unions to utilise specialist assistance, it would first be necessary to build a structure around which such specialism could be deployed. Thus, a major part of the Author's time was involved in establishing the monitoring team and only after it was formed did his role change to one of supporting them in their various activities.

22. The problems of specialist assistance to union representatives was demonstrated by the adverse experience in another collaborative research project involving the DVLC unions and a university department. The JST, in a similar observation to that of the Author's research project, had identified the DVLC unions' lack of access to independent research expertise, hindering the unions' involvement in the replacement project. To overcome this deficiency they proposed that a post-graduate student complete his MA thesis by assisting the DVLC unions in response to the JST 'People and IIP' report. However, the venture proved less than satisfactory. Local CPSA representatives considered the student's report "did not tell them anything they did not already know" and were dismissive of the student's involvement whilst at the DVLC, which they considered did not make any significant contribution to the unions' activities. (165) In the introductory statement to his report, the student remarks:

What will become clear throughout this study is that the issue of identifying a research area was never wholly arrived at as a consequence of the constant uncertainty as to the direction of research and the role of the CPSA in that research. (166)

The lack of detailed CPSA policy, as discussed above in paragraphs 13-16, appears not to have provided the basis or the vision of the future around which the research could be developed. The exasperation is felt by the student when he states:
I tried long and hard to reconcile the approach of the CPSA to any research. I was not wholly convinced that what the CPSA required and what I could produce were reconcilable. (167)

23. In contrast to the above experience and in place of providing a short-term research facility, the Author's involvement consisted of assisting the branch to establish a pro-active form of strategy which could then make use of the Author's expertise. Considerable time, energy and effort was, therefore, expended into gaining the acceptance of the Author's proposals for an independent evaluation of the IIP pilot trial by union representatives at both the local and section levels. This was followed by involvement and advice in the negotiations for gaining management acceptance of the initiative. Once adopted, the Author's role changed from facilitating the adoption of the independent participative policy to one of support to the monitoring team.

24. The geographic separation of the Author (located in the West Midlands) together with other work demands, however, limited the availability of the Author's support to the monitoring team. The support consisted of sporadic visits to Swansea and telephone conversations which proved more suited to the earlier forms of involvement, i.e. facilitating the initiative to be established. Decision-making to establish the initiative was taken over a three to four month period at irregular intervals, formally through the local Branch Executive Committee and the Departmental Joint Working Party, and informally through discussion with small groups of influential union representatives, more often than not meeting in the proverbial 'smoke filled' rooms. The irregular visits to Swansea could coincide with such meetings and encouraged further consideration of the independent participative policy options.
25. The support provided by the Author to the monitoring team initially consisted of advice and assistance in undertaking the evaluation tasks. Even for an experienced researcher the proposed task of the monitoring team was formidable, and was therefore all the more difficult for people with little research experience and who were used to a very different mode of union activity. Instead of responding to situations their role was more to do with initiating action and taking the lead over events. The early meetings to discuss this role were crucial for establishing the momentum of the initiative. In addition to these meetings, which continued at regular intervals up until December 1984, seminar discussion groups led by the Author and involving other local representatives were held.

26. The discussion groups were established to obtain a more informed understanding of what the monitoring initiative represented as a pro-active form of policy option together with the repercussions this had for overall union activity and to also develop union policy over technological change. However, despite the well intentioned efforts by all concerned, organising of such seminars proved difficult, clashing with numerous other engagements and the demands of those involved. In the event, two out of a proposed five took place: one on long term health risks associated with VDUs, the other on trade union experiences of technological change. The former was very successful, dealing with a subject which had a direct relevance to the work of local representatives and the monitoring team. The latter was not so successful. The subject dealt with more strategic union policy with no immediate and direct bearing on the work of local representatives. The differences in the responses to the seminars reflected the degree of pragmatism displayed by the local officials who were more concerned with the
immediate issues of the day than the consideration of longer term and more politicised policy.

27. A major contribution of the Author was the administration of a questionnaire among CPSA members involved in or going to be transferred into the IIP system. This was to test the extent of membership satisfaction (or dissatisfaction) with the union's actions over the IIP system proposals and was also a poll of opinions around issues related to IIP. This was a new activity for the CPSA branch and had a dual purpose. Firstly, to test the criticisms made of the union's communications and to register membership feeling towards specific issues. Secondly, the more political purpose of increasing membership awareness of the issues and bringing attention to the CPSA's actions over the IIP system. Without the Author's assistance in helping to formulate the questionnaires and arranging for them to be returned confidentially to the Author for analysis (using the computing facilities of Aston University) the exercise would not have been possible. This and other forms of assistance through suggestions, debate and discussion, i.e. a facilitating role similar to that adopted in establishing the initiative, together formed the major areas of intervention by the Author.
CHAPTER SIX

THE LAND REGISTRY CASE STUDY
Introduction

1. The Land Registry case study describes union bargaining over the 'Registration of Title' project. It concentrates on negotiations surrounding a new technology agreement between the constituent unions of the Departmental Whitley Council and the Land Registry Department. A feature of these negotiations was the Author's involvement in promoting an independent participative strategy which helped to overcome deficiencies of the existing CPSA policy and strategy for the project.

2. The project was a proposal for automation of the clerical procedures in the production process of the thirteen District Land Registries (DLRs) geographically dispersed throughout England and Wales. The production process of a DLR represents a complex clerical labour process which has operated little changed since 1925. Since the mid-1970s the Land Registry Department, supported by early experience with mainframe computers, has identified the potential for the utilisation of computers to store and process 'Registered Titles of Land.' Under the influence of computing specialists within the department, the 'Registration of Title' project was first devised in 1976, proposing the creation of a central database supporting and linked to the thirteen DLRs. Automation of the DLRs was to occur sequentially, starting with Plymouth, moving on to Gloucester, and so on, until completion near the end of this century.

3. The project met with numerous delays and setbacks. In 1980, the original project was revised with control and authority broadened to give administrators and non-specialists more influence, although the basic design and overall strategy remained unchanged. During the early 1980s a number of trials were undertaken at Plymouth, although the project was not fully implemented until late in 1985.
4. Negotiations with the unions focused on bargaining at the departmental level over a new technology agreement. However, with the project's delays and setbacks, there was no urgency to conclude the agreement until 1986. In early 1985 the CPSA, at the suggestion of the Author, adopted an independent participative strategy which helped to sustain a more strategic response to the project and improved the organisational structure of the union and linking local developments at Plymouth with national negotiations.

5. The case study describes the structure and organisation of the Land Registry Department along with its production process. The industrial relations of the department and organisation of the CPSA are also described. This provides a background to the development of the Registration of Title project and the extent, level and form of negotiations undertaken. Particular attention is given to the events surrounding the CPSA's independent participative initiative which emerged with the involvement of the author as a member of the CPSA Land Registry Section's negotiations team. This strategy follows on from that applied at the DVLC, Swansea, and is a further example of an independent participative strategy being applied although in a different bargaining situation.
PART I. THE LAND REGISTRY DEPARTMENT

1. The Land Registry Department administers a 'Registration of Title to Land' covering owners of land and holders of mortgages over that land, together with condensed details of matters affecting the land arising from the transfer of ownership over the years. Land registration has been undertaken for over 100 years. The present system under the jurisdiction of central government has evolved from the 1925 Land Registration Acts. However, not all land in England and Wales is registered, for example, in 1984 registration covered areas containing 73% of the population. Although more recent government proposals for de-regulation of house conveyancing included commitments for 100% compulsory registration by 1994. Therefore, unlike the majority of civil service departments, the Land Registry is undergoing a period of expansion rather than contraction.

2. The structure of the Land Registry Department is illustrated in diagram 7. There are 13 District Land Registries (DLRs) geographically dispersed throughout England and Wales. Each has responsibility for all registry work within their respective areas. Each DLR has an Area Manager and District Land Registrar. The former has administrative responsibility for the DLR whilst the latter has a legal responsibility for land registration. In addition, there is the headquarters in Lincoln's Inn Fields which co-ordinates and implements policy as well as providing common services such as personnel, training, etc., to DLRs. There is also the Land Charges establishment, which is located in Plymouth following government re-location programmes to move civil service work away from London and the South-East.
Diagram 7

HM LAND REGISTRY ORGANISATION (1984)

Chief Land Registrar

| Senior Land Registrar
| Chief Executive
| (Under Secretary)

Computer Services Division
Controller
(Management Services)
(Assistant Secretary)

| Head of Computer Services
| (Senior Principal)

Principal Establishments
Officer
(Assistant Secretary)

| 13 Area Managers

Controller (Registration)
(Assistant Secretary)

| 13 District Land Registrars

Birkenhead District Land Registry
Croydon
Durham
Gloucester
Harrow
Lytham
Nottingham
Peterborough
Plymouth
Stevenage
Swansea
Tunbridge Wells
Weymouth

Land Charges & Agricultural
Credits
Department
(Superintendent)
3. The Land Charges establishment maintains a computerised record of all bankruptcy and outstanding debts on land held by individuals or organisations and provides a service, primarily used by solicitors, of recording outstanding land debts held by potential purchasers of land. The computerised system was introduced in September 1974, replacing a manual index which had been in use since 1925 and designed to deal with 36 searches per day. In 1984, Land Charges handled over 20,000 searches per day and the IBM mainframe computer held over 5 million records of charges affecting some 3½ million estate owners. The computer systems were enhanced in 1977 to provide a credit accounts system for regular users of the search service - used extensively by firms of solicitors - and an 'Index of Proprietors Names'. In 1984 there were over 10 million records of proprietors and over 5 million title records. \(^{(3)}\)

4. The Land Registry Department is required by statute to cover its administrative costs from fees charged for registration services. However, its income (over £90m in 1984/85) is paid directly to the Treasury consolidated fund and has in recent years been greater than its administrative costs - just over £79m in 1984/85. \(^{(4)}\) The major expenditure is incurred on salaries for the 6,845 Land Registry workers, amounting in 1985/85 to £51.718m. \(^{(5)}\) The majority of workers in the Land Registry Department are employed in the DLRs.

The Division of Labour in a District Land Registry

5. The clerical production process in a DLR consists of 'First Registrations', i.e. creation of a register when land is registered for the first time and 'Dealings', i.e. when changes are made to an existing registration, for example a change of land ownership. The DLRs have traditionally provided a service used predominantly by solicitors,
although de-regulation of house conveyancing will challenge solicitors' virtual monopoly on conveyancing and open it up to a wider range of institutions and individuals.\textsuperscript{6} The division of labour and work flow in a DLR follows a standard procedure, although some regional variation exists due to the type of land, such as rural or urban, and the evolution of traditional local office working practices.

6. The work flow of a DLR is illustrated in diagram 8. Incoming mail from an applicant is opened, sorted and categorised at 'Taking In.' Applications are then 'Daylisted', the 'daylist' being an index of all 'Requests' currently being processed within the DLR. The registers are either created for First Registration or retrieved from storage for Dealings. The registers and other relevant documentation, such as maps from the 'Map Store', are passed to the 'Legal and Plans' section where the register is created or amended. Legal and Plans is itself separated with Legal involved in drafting the register and Plans defining and drawing land boundaries. After verification by an examiner the register itself is 'Typed' before being checked in 'Compare and Despatch' and sent off via the 'Post Room' to the applicant or solicitor with appropriate copies being sent to the 'Filing Branch.'

7. The 'Preliminary Services' and 'Registration Support' tasks (see diagram 7) are carried out by lower clerical and typists grades, whilst the majority of DLR staff (approximately 60% in each DLR) are employed in the Legal and Plans section. Unlike the DVLC and similar flowline type information processing systems, jobs in a DLR require a higher degree of discretion and knowledge of the department's function in determining the correct legal wording of a register and limits of a land boundary. This is reflected in the grading of Legal and Plans sections, 60% of whom are
clerical officer (CO) and 30% are executive officer (EO) grades with very few clerical assistant (CA) grade workers. In addition, DLRs employ a small number (approximately 2% of a DLR's total complement) of 'Legal Examiners' who have a legal qualification. A proportion of examination work is carried out by external examiners, although this has continually been declining in recent years. The use of this 'outside counsel' has been an issue of contention for the middle management union the SCPS.

**Industrial Relations and the CPSA in the Land Registry Department**

8. Industrial relations in the Land Registry Department are dominated by the operation of Whitleyism. Whitley Councils operate at two levels: locally at each DLR and including Lincoln's Inn and Land Charges; and nationally, at the departmental level. The Trade Union Side of these councils has active representation from the CPSA, SCPS, FDA and CSU. However, the CPSA and SCPS, having the larger membership, tend to dominate union policy. The effective nature of the Whitley system in the department ensures a close working relationship between the constituent unions.

9. The Land Registry management has a distinctive 'paternalistic' style. This has developed from: the department's relatively small size; the commonality of function across each DLR; size and autonomy of each establishment; and traditional working practices having developed around well established procedures. This has fostered a 'unitary' approach with the management promulgating the adoption of a consultative and participatory approach to change through the well established Whitley system. However, the growing militancy and politicisation of the unions' member-
ship has been demonstrated in recent years by Land Registry staff striking in 1983 for the first time in the department's history over attempts to change traditional working arrangements. The unions perceived this as the down-grading of EO to CO grade work. This episode in the industrial relations of the department was known as the 'wider issues dispute'.

10. CPSA members in the Land Registry are organised in their own section consisting of sixteen branches, i.e. thirteen DLR branches, Land Charges branch at Plymouth, Lincoln's Inn branch and the Registry of Scotland branch which administers registration of land in Scotland under a separate judicial system within the Scottish Office. Penetration of membership levels within each branch as at 1st June 1984 is shown in diagram 9. The variation in the extent of membership between branches range from 39% at Peterborough, to 93% at Registry of Scotland. This reflects differences in the bargaining strength and organisation of branches across the section. The section has its own Section Executive Committee and constitution, and operates from CPSA HQ in London, administered by a full-time national officer, (an Assistant Secretary who has responsibility for this and the Department of National Savings Section of the CPSA). The Land Registry section of the CPSA is dominated by the Broad Left faction and all the senior section officials are members of the Broad Left.
Diagram 9

MEMBERSHIP PENETRATION OF THE CPSA IN THE LAND REGISTRY SECTION

1ST JANUARY 1984

Aston University

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(from CPSA, Land Registry Section, Circular LR/SEC/2/84)
PART 2. CONSULTATION AND DEVELOPMENT OF THE REGISTRATION OF TITLE

PROJECT 1976-80

The Feasibility Study

1. In the mid-1970s, following the establishment of the computerised Land Charges Section, a high level departmental 'Computerisation Steering Committee' commissioned a 'Feasibility Study' on the viability of automating a DLR to electronically produce land registration documents. The study, completed by departmental computing specialists concluded that such automation was feasible, offering considerable economic benefits. It was completed and accepted by the Steering Committee at the end of 1976.(11) However, Treasury approval and funding for the project was delayed for two years owing to a "shortage of available funds".(12)

2. The report from the study contained the philosophy of the project which was to dictate development over the following ten years. A centralised data base was to be established at the existing Land Charges mainframe installation in Plymouth, linked to all the DLRs. A novel feature of the proposed system was that the input, output and amendment of data at the local DLR would result in an instant update of the central data base in Plymouth. It was proposed that the 13 DLRs would undergo sequential automation with the Plymouth DLR, located some two miles from the Land Charges establishment and where the mainframe computers were housed, being the first. A factor favouring the selection of this site was that the departmental computing specialists were located in offices adjacent to the Plymouth DLR. The second DLR proposed for automation was Gloucester, selected primarily because of its accessibility to Plymouth.(13)
3. The Departmental Trade Union Side of the Land Registry Whitley Council were first informed about the project when the Feasibility Study was undertaken in 1976. The resulting report was passed to the unions for comment. The strategy for developing the project was presented to the unions for information rather than as issue for negotiation.

4. The strategy contained in the Feasibility Study reflected a strong technical bias of its authors, the department's computer specialists. This was demonstrated by: the project's 'holistic' approach endeavouring to automate every activity where technically feasible, rather than individual functions being determined on the basis of economic or social desirability; the preference for a centralised system over a decentralised system - the former placed control with the computer specialists whilst the latter would have given control to local DLR staff and a system design based on a mechanistic model of Land Registry functions, thus mirroring existing clerical functions rather than undertaking a more strategic review of the department's operations. The project was technologically led, rather than by operational demand, under the control of the computing specialists. It was apparent that the Feasibility Study had effectively restricted the options for automation to either full computerisation, based on the central use of mainframes, or maintaining the existing clerical operation. This was in place of a more 'organic' development building up awareness and experience of computing through a number of small systems under the control and direction of local DLR management.

5. In 1978 development work on the project began with a micro-computer being installed in the offices of the department's computing specialists and linked to the nearby Land Charges mainframe computer. In the
January of that year the unions were informed that there would be "some advance in the Registration of Title project" with an assurance that the project "would only proceed in full consultation with the unions". (16) However, the limited extent of consultation was demonstrated in August 1978 when the unions were informed "that machinery had already been installed at Plymouth DLR" without prior awareness by the unions nationally. (17)

6. The development of the project was planned in two phases referred to as 'REP I' and 'REP II' (acronyms for the Registration of Title Evaluating Project relating to Phase I and Phase II activities). REP I was concerned with the preliminary service functions, whilst REP II was concerned with developing a system for processing substantive applications and creating computerised registers. (18) The unions maintained a policy of accepting the project as outlined in the Feasibility Study and co-operating with its development contingent on 'normal working methods' being resumed after every trial and before negotiations were held. In addition, the unions had requested "dual computer and manual systems to be run side by side during the trial". (19) The management, whilst agreeing with the former demand claimed it was not technically feasible to operate parallel automated and manual systems. Throughout the project interpretations of trials and experiments were a contentious issue with the unions demonstrating a lack of understanding of the computer system's design and development process. This became more acute as the management strategy became more sophisticated adopting various forms of user involvement in the project.

7. In 1979, in response to the project, a Computerisation Sub-Committee of the Departmental Whitley Council was established with representatives
from all constituent unions. This sub-committee was to consider technology in the Land Registry and specifically to "monitor any progress and have arrangements for the union representatives to visit the Plymouth DLR and Computer Centre on a regular basis". The unions also enlisted a representative with computing expertise from the SCPS HQ, although in the early response this expertise was not utilised, reflecting the largely reactive and defensive nature of the unions' involvement and strategy which had little opportunity for deployment of such resources. From the very beginning it is clear that all negotiations over the project were under the control of the unions centrally and there was little, if any, involvement of the local unions at Plymouth.

The Revised Feasibility Study

8. By 1980 concern within the Land Registry was being expressed over the project being the sole responsibility of the computer specialists. The growing awareness of the potential application of computing through the use of micro-electronics had increased understanding of the important strategic organisational implications of technology in general and the 'Registration of Title' project in particular. It was recognised that the existing proposal was technologically orientated, leading to a highly mechanistic system which, it was feared, would largely ignore the users' demands for the system.

9. The project was changed through three lines of action. Firstly, the project was redefined in a Revised Feasibility Study although in general differed little from its original formulation. Secondly, an 'Organisations and Methods' division of the department became more closely involved in developing the project. Thirdly, an experienced administrative grade manager became involved in the project in the role of 'user
representative' and as a liaison between the computer specialists and the users of the system. In the words of the user representative the project became "more user-orientated by knocking off all the clever bells and whistles."(21) However, the concept of 'user' was primarily restricted to that of departmental management. This excluded from direct involvement in the decision-making both the unions as representatives of the project's end users and the lower grades staff who would actually be operating the system.

10. Union involvement in the project was undertaken centrally and had adopted a traditional reactive strategy. For example, the unions' approach towards the Revised Feasibility Report was to await its publication and use it to form the basis of further discussion with management over the project.(22) As with the earlier report, the unions were in the position of responding to events and to the initiatives of the departmental management, allowing the agenda to be restricted to issues unilaterally defined by management rather than considering a more strategic policy aimed at shaping the technology deployed in the Land Registry. In addition, negotiations over the project in the Departmental Computerisation Sub-Committee throughout 1980-1981 were largely concerned with procedural matters for future negotiations rather than with substantive issues raised by the project. For example, assurances from the management that "computerisation will not be implemented until agreement with the staff side has been reached"(23) were forthcoming and it was later agreed that "when REP I is in operation it will be reviewed jointly by both sides".(24) When the first visible component of the project emerged which directly affected union members' work, it proceeded with the agreement of the unions on the basis that it would have no effect on
the staffing complement. This was an experimental system known as the 'Mechanised Day List'.

11. The Mechanised Day List was an experimental and temporary arrangement for automating the Day List. It was introduced in November 1980 as a compatible forerunner to REP I. It involved putting the Day List of cases being actioned in the DLR onto a computer for interrogation and replaced a manual arrangement of index cards stored on large carousels. The experiment proved successful not only in assisting staff in familiarising themselves with computer techniques well in advance of the eventual computer project, but also in developing the project on the basis of the users' experience enabling them to make requests for alterations to the system. The involvement of union members in developing the project locally was beyond the control of the unions who were negotiating centrally; they were unaware of the extent of local involvement or the opportunity this presented in shaping the development of the project and the repercussions this had for the design of new work procedures, etc.

12. The Mechanical Day List had evolved as a supplement to the original REP I stage, although it later became an integral feature of the ROT project. Arising from the experimental day list project, a further supplementary and experimental 'Case Bag Location' project was developed in 1980. The case-bags contained an individual register and associated documentation. As these moved around the various departments within a DLR their location was read off of a bar-code label. Underlying the development of these two supplementary projects was a general inadequacy of the original Feasibility Study with its emphasis on a complete 'holistic' automation of a DLR. The 'Revised Feasibility Study' had sought to address such deficiencies.
13. The Revised Feasibility Study was a more comprehensive version of the 1976 Feasibility Study. Its major conclusion was that due to increased labour costs and changes to treasury accounting methods, the profitability of the project had increased. In 1980 a Full Study Report on the project had been completed permitting the Revised Feasibility Study to establish precise machinery requirements for each DLR. These were presented to the Treasury in early 1981, although not approved until May 1982. The project became modified as it evolved over the next three years and this was symptomatic of a lack of overall project control, a point clearly identified by a consultant study in 1984 (see part 3, paras 16-18 below).

14. The project followed the strategy originally devised in 1976 which were oriented around and constrained by the department's activities. For example, the nature of a DLR's work could not permit an interruption of its function whilst automation was undertaken. Moreover, the decision to automate the entire production process necessitated a relatively fast and trouble free implementation and change-over from a manual to an automated system. At Plymouth, it was proposed that the implementation should take around 9 months and approximately 6 months thereafter in other DLRs. This requirement resulted in a concentration of effort on the design and planning stages with extensive pre-live testing of the software. The majority of the software was being developed in-house, leaving the equipment supplier, IBM, to provide reliable and proven hardware.(28)

15. Concentration of effort on the early stages of a computer system's design process has implications for the degree of involvement and control over the project's development, as well as for its ability to cope with changing and uncertain circumstances. With the majority of development
on-going behind the scenes, the visibility of the project was limited to the controlled experimental prototype systems. Control over the project was thereby firmly held by the computing specialists with limited involvement of other Land Registry management. This not only restricted union involvement in the system's design and development process, but also that of other Land Registry management. For example, the area managers of DLRs had no provision for involvement with the project until it was their turn for computerisation. Progress reports on the project was revealed through various channels, such as circulars, newsletters, etc., although this information was considered to be often over-technical and failed to keep people appropriately informed of developments.\(^{31}\) Even at Plymouth the Area Manager felt his own authority undermined when he discovered that alterations he wished to see implemented, that had arisen from the experience of the experimental systems, had to be justified to a lower grade member of staff from the computing specialist branch.\(^{32}\)

16. Emphasis on the early design stages of the system's development process raises doubts about the flexibility of an information system to cope with an uncertain and changing environment encountered when it is implemented in the workplace. The project was being developed on the basis of being thoroughly tested before implementation to minimise the potential operational difficulties and, more importantly, on the assumption that the specification and design had taken account of all eventualities and had a sufficient implementation programme to deal with any unforeseen problems arising from the project.\(^{33}\) However, the application of computer based information systems, and office automation in particular, are capricious events, prone to failure and often uncertain in their outcome. The Land Registry project was attempting to automate a
complex manual process where there was a distinct probability that certain functions could be overlooked in the design specification. It is, after all, logically impossible to determine in advance all future events. In addition, the project should be capable of responding to future government policy and not impose its own burdensome restrictions upon future policy changes. The equipment supplier, IBM, had identified this lack of flexibility, along with a lack of suitable contingency arrangements to overcome unforeseen circumstances, as a deficiency in the project and suggested a 'change control' procedure. This was based on having a central authority to administer and co-ordinate changes to the planned system.(34)

17. The project's development brought the two-stage REP I and REP II phases closer together. In the process and in respect of other changes to the project their respective titles were changed to 'Revised Mechanised Day List' and 'Register Creation Project' or 'Redetext'. Each stage was based on building modular sub-systems which together formed the complete system. In the Revised Mechanical Day List, for example, there were 48 modules or sub-systems divided into three major groups: 'data capture'; 'output for substantive application' and 'support services'. However, the overall lack of project control resulted in development delays through bottlenecks created in the modular sub-system software development. In order to function smoothly, the software development process of specification, programming and systems testing required that each sub-system module be delivered to the system's testing stage in an orderly fashion. But some modules were easier to programme than others, and some were proving more complex than originally anticipated. In addition, the Land Registry had a problem in attracting and retaining
sufficiently qualified staff. Consequently, delivery of modules for systems testing was erratic and badly co-ordinated. (35)
PART 3. CONSULTATION AND DEVELOPMENT OF THE PROJECT 1981-84

1. In 1981 negotiations over the project became more prominent due to the precarious state of national negotiations over the National New Technology Agreement and the publication of the Revised Feasibility Report. In May 1981 the Council of Civil Service Unions (CCSU) had identified the Land Registry project as suitable for non-co-operation in order to strengthen their bargaining position for the national agreement. This undermined the unions' section policy for co-operation on the basis of full consultation which had progressed to the establishment of a Joint Working Party to discuss the project (see paragraphs 3-8 below). Following a series of meetings between Land Registry union representatives and CCSU officials, a compromise was reached whereby the unions would not agree to any implementation of the project beyond the first stage, or "to any further practical experimentation in advance of a new technology agreement and the satisfactory conclusion of departmental negotiations". (36)

2. The Revised Feasibility Report was received by the unions in February 1981. This was a long-awaited document which the unions felt would give them something substantial to respond to and enable them to pursue their policy for involvement with the project. However, the unions were disappointed in the report and associated documentation, because it "did not contain sufficient detail as to the changes in work practice and procedures which would result from the REP II plan". (37) In order to facilitate more detailed examination of the project, and its implications for work procedures in particular, it was agreed in April 1981 that a Joint Working Party be established. (38) This began discussions in September 1981 and had four meetings before presenting a report on its
deliberations to the Whitley Council Computerisation Sub-Committee in January 1982.

The Joint Working Party

3. The Joint Working Party discussed the working arrangements of four work systems which were detailed in the 'Full Study Report'. These were: 'First Registration', 'Non-Computerised Dealings'; 'Computerised Dealings'; and 'Transfer of Parts' i.e. where a plot of land is divided into separate plots, such as a new housing estate development. Only the First Registration proposal was agreed, although even here there was concern by the unions over a new application form which would involve the applicant in supplying more information and thus would require less clerical handling in the DLR. This would enable information to be computerised at an earlier stage of the procedure and thereby reducing the amount of work undertaken at a later stage. (39) In response to a potential reduction in their members' work, the unions argued that the quality of applications received at DLRs threw doubt on this proposal; under the computerised system the need for accuracy would be increased, something which could not be guaranteed by information supplied by the applicant. (40) The unions also argued that the need for greater accuracy also emphasised the need for the ending of examination by outside counsel.

4. The other three work systems had been rejected by the unions on the basis that they sought to displace the work of CO grade. The CO job was involved in drafting the manuscript or drawing the cartographic details of a Land Register following well defined procedures. The computerised system was well suited to encapsulating many of the drafting procedures and supplying them in the form of computer programmed instructions, making the CO manuscript drafting job redundant. To appease the unions
four alternative systems were proposed by management for both the Non-computerised Dealings and Transfer of Parts. However, these were considered "no more attractive than those originally proposed."

5. One of the options that engendered considerable discussion concerned the down-grading of examination work from EO to CO grades. The management argued that this would ensure the continued need for CO grades, thus maintaining the CA to EO career progression, and because Non-Computerised Dealings would decline as the number of Registered Titles were put onto the computer. Moreover, they argued that the greater number of CO Examiners would provide the kind of labour profile suitable for handling computerised dealings in future systems. The unions rejected this proposal, arguing that it involved work inappropriate to the grade and amounted to computerisation being used as a means to introduce working methods which could not be agreed under the manual system. It was this issue that resulted in the 'wider issues dispute' of 1983 (see reference 9).

6. At the end of the working party's deliberations the management considered the unions to have been negative in their attempt to perpetuate existing working practices and their desiring duplication of certain tasks. Whilst this did reflect the overall union policy to the project (pursuing reactive and defensive positions) there were specific areas where the unions had put forward positive and constructive proposals. For example, the unions had suggested that more preparatory work for computerisation should be undertaken in all DLRs concurrent with the implementation of the project at Plymouth, in particular that all First Registrations should be recorded on a computer ready for automation at a
later date. This would reduce the quantity of work involved in converting all titles into a computerised format and create more work in the DLRs, therefore would require more staff. (44)

7. The overall conservatism of the union's position was a reflection of their lack of coherent policy for the project. What policy did exist was disparate, relating to either broad rhetorical and almost meaningless statements, such as 'more satisfying work', 'gaining benefits for members', etc., or on specific outstanding issues not wholly related to the project. For example, the SCPS had maintained a long term aim to end all 'outside counsel' work, i.e. examination of Land Registry documents by private solicitors rather than Land Registry employees. The unions' response over this specific issue was noticeably more articulate and successful.

8. The working party served as the initial forum for union involvement in the development of the project. However, the forum served as little more than a detailed consultative exercise with the unions simply becoming more informed about the management's intentions for the project - it did not serve to alter the design of the system in any substantial way. (45) The unions' position was, as already discussed above, lacking in any strategic policy and was undermined through little awareness of an alternative design or organisation of work for the project. Where policy was well defined, such as the 'outside counsel' as well as 'health and safety' issues, the unions were able to be more purposeful in their approach. However, with limited resources for union activity, and limited attention afforded to the working party by the union officials, the potential for sustaining an alternative vision for the project was never
seriously considered. It was clear that the agenda and issues for discussion at the working party were defined by the management and even the alternative options for the work procedures, when forthcoming, were further management proposals. This maintained the unions in a reactive position.

The Project's Development

9. The experimental REP II system, which later became named after its in-house software package the 'Redetext experiment', was introduced in July 1982. The unions had been informed about it at the working party meeting in November 1981. The Redetext experiment was conducted in parallel to the manual system operating in the Legal Drafting, Type and Proof Read/Amend sections of the Plymouth DLR. The experiment was developed as a prototype system although both the project's consultants and CPSA members operating the system considered it only a partial system which as such did not and could not demonstrate what the final system would be like or what the working conditions would be.\(^{(46)}\) From 1982 until the system was implemented in 1986, the three experimental systems, i.e. Redetext, Case-Bag location and the Mechanical Day List, were all that constituted the visible part of the project. During this period procurement, programming and extensive testing was carried out by the computer specialists, and documentation of job descriptions, user requirements and work flows, etc., was carried out by specialists from the Organisation and Methods division.

10. The unions' view of the experimental systems differed from that of the management. The union understanding and consequent policy perceived experimentation as being on a formal basis with established procedures for completion of the experiment along with the resumption of
existing arrangements whilst the experiment was evaluated and the results negotiated with the unions. This perception of the computer system’s design and development was out of touch with both the management view and the manner in which experimentation was being developed in the project. The experience gained in developing the system and an awareness to emerging trends within the computing industry led to a less formalised and more sophisticated approach to experimentation and prototyping. Consequently, union demands in this area were often unrealistic or unrealisable and technically impossible to fulfil.

The New Technology Agreement

11. The original suggestion for a departmental new technology agreement (NTA) came from the management who proposed it at the conclusion of the Joint Working Party in recognition of the absence of a national agreement. The unions were at first cautious in their response, but with a growing realisation that any national agreement would not contain a 'no job loss' clause, the unions, and in particular the CPSA, considered it necessary to supplement any national agreement with a departmental one. The changing attitude of the unions reflects an internal change to the departmental Trade Union Side. Up till this time negotiations had been dominated by SCPS officials. From the beginning of 1982 they became dominated by CPSA officials. This change was due to the increasing confidence and competence of the individuals from the CPSA who formed the union representation, rather than any wider social or political changes within the unions. The need for a departmental NTA became even more apparent after the rejection of the national agreement by both CPSA and SCPS conferences in May 1982. Following this, and with an awareness of the need to publicise the project to members as part of the CPSA national technology campaign of 1982, the CPSA union representatives drew up what
they called an 'Eight Point Plan'. This defined the conditions upon which the ROT project would be accepted by the unions. Later this was supplemented by a contentious ninth point which called for a shorter working week to accompany the introduction of new technology - it was thus later known as the 'Nine Point Plan'.(48)

12. The Eight Point Plan represented the first coherent union policy for the project and provided the basis for future negotiations at the national level. The eight points were presented to the management in early 1982.(49) In response the management produced a draft departmental agreement which the unions considered to be unacceptable due to its vague and inconclusive wording which guaranteed no safeguards for union members.(50) In turn the union response was to produce its own draft agreement based on the Eight Point Plan and which the management considered to be unacceptable. By the end of 1982 it was apparent that both sides were some distance apart over concluding an agreement. To overcome the stalemate, the Land Registry management suggested a new working party should be established solely to negotiate a departmental NTA.(51)

13. The working party set up to discuss a departmental NTA was a forum which failed to conclude any form of agreement. It met only twice against a deteriorating industrial relations climate which reached a low at the end of 1983 with the 'wider issues dispute'; a situation not helped by management hostility to technology bargaining being heightened by the Treasury and Cabinet Office following the withdrawal of CCSU from the National NTA.
14. Before the first meeting of the Working Party in April 1983, union representatives attended a 'computer appreciation course' held at Plymouth DLR. The course was designed for local DLR management to acquaint themselves with the project, although it also served to provide the union representatives with a further appreciation of the project. Despite this demonstration of goodwill in inviting the unions to attend the management presentation, management declared at the first working party meeting that "an agreement was desirable, but (they) were not obliged to reach one". (52) In contrast the unions desired several substantive guarantees over the project based on what had become their 'Nine Point Plan'. (53)

15. Similar to discussions held in 1982, the management drafted an agreement, although this time the unions were able to agree certain details. Union disagreement was over the major substantive issues, specifically the extent of employment security clauses. (54) With the project itself encountering development difficulties and the worsening industrial relations in the department, both sides were content to hold these negotiations in abeyance to be "resumed in the future when the view of the eventual system becomes clear". (55) Meanwhile, development of the project would continue, although the unions were becoming impatient with the pace of development and requested precise information on timing of the project's introduction and the staffing and grading levels "office by office, grade by grade and year by year" in order to continue negotiations. (56)

16. By 1984 the extent of the project's delays had attracted the attention of the Treasury and the Central Computer and Telecommunications Agency (CCTA). At the latter's insistence the Project Committee enlisted the services of an external consultancy "to provide such guidance and
advice as are necessary to aid the successful implementation of the project." (57) Their first task was to undertake a review of the entire project. This took from February to April 1984. (58) The unions, concerned over the delays of the project, welcomed the consultants' intervention to review the project.

The Consultants' Report

17. The consultants' report was a comprehensive document covering all aspects of the project. Whilst praising the department for providing "a technically elegant solution to a complex and in many ways original requirement," (59) it criticised aspects of the project's development. It suggested that:

The first implementation at Plymouth should be treated as a further stage of experimentation and operation and service levels monitored closely ... [because] ... until line running commences it is extremely difficult to be sure that the equipment will provide the service level expected. (60)

The report was particularly critical of the project management which had been based on the CCTA approved 'PROMPT' project management control methodology. (61) However, due in part to the "lack of resources and experience in the area of project control ... [there were] ... still considerable problems to be overcome" which the consultants recommended to be rectified "from top down so as to implement a project organisation superstructure which can function above PROMPT." (62)

18. The majority of these recommendations were adopted by the Project Board which helped to give a renewed impetus to the project. In addition, the extension of compulsory registration throughout all of England and Wales was announced, placing the department in the unique situation
within the Civil Service as an expanding rather than contracting Department. With this future assurance and commitment for the project, negotiations with the unions resumed.

Union Negotiations

19. The growing prevalence of office technology in the Land Registry made it timely to re-organise the negotiating machinery to deal with the many issues and problems raised by its introduction. The Departmental Sub-Committee was re-named the 'New Technology Sub-Committee' with a remit to discuss all technology within the department, i.e. the Register of Title project, a digital mapping project, use of personal computers or wordprocessors, etc. The status of the committee was raised inacknowledgement of the increasing importance technology was playing in the department, to such a point that it reported directly to the full Departmental Whitley Committee instead of the General Purposes Committee.

20. At a formal meeting in the middle of 1984, the unions had requested three documents "before negotiations could begin in earnest". These were: firstly, a 'Re-costing Report' on the financial viability of the whole project including information on projected staffing and grading levels; secondly, an 'Organisation and Methods Study' of the Plymouth DLR organisation for computerisation with details of floor layout, work locations, etc.; and thirdly, a review of the suitability of clerical and data processing grades using the computerised system. However, this last review became incorporated into the National Grading Review and thus the responsibility of the CPSA nationally. Towards the end of 1984, the Organisation and Methods Report along with details of the work-flow were
distributed, although the Re-costing Report was delayed awaiting completion of negotiations between the Land Registry management and the Treasury for financial approval of the project. In addition, the consultants' report had been made available to the unions. In order to renew negotiations over all these documents and the project in general, a presentation of the project at the Plymouth DLR was arranged for early 1985.
PART 4. INDEPENDENT UNION PARTICIPATION IN THE PROJECT

1. The presentation on the development of the project to the unions took place over two days in early February 1985. This permitted the union representatives not only to become more informed about the development of the project and discuss its implications at length with the assembled senior management, but also gave them the opportunity to consider and discuss a union strategy for technology bargaining over the project. It was at this stage that the Author became directly involved in the unions' response.

2. As in the DVLC case study, the Author had been studying the development of the project and the unions' response. This led to a number of observations being made about the project. For instance, it was clear that the departmental management had consistently been keen to engender involvement of staff in the project and consult the unions over the development of the project. This was demonstrated by the various experimental systems and also the recognition of the complexity of the labour process and need for staff co-operation in automation of the DLR production process. Involvement of staff and consultation with unions was consistent with the paternalistic traditions of the industrial relations in the department. But, whilst expounding the importance of union involvement in the project, the departmental management had marginalised this to little more than a consultative role, maintaining a strong managerial domination over the system's design and development process.

3. The union's response to the project was clearly reactive and defensive and even though they had a distinct policy, encapsulated in the Nine Point Plan this had not been developed enough to be applicable at the
workplace level. The Nine Point Plan was a set of rhetorical statements concerning minimum guarantees in return for union acceptance of the project. Moreover, the union's policy lacked any strategic development resulting in technically unrealisable demands and also in what appeared as missed opportunities for union involvement. Whilst the unions had identified the economistic demands and had been able to encapsulate them in the Nine Point Plan, they had largely neglected the development areas such as job content.

4. It was also apparent that negotiations conducted at the national level were often out of touch with developments at the local level and consequent day to day problems in the development of the project. There was also considerable scope for improving the existing communications between local members and union officials at all levels. In addition, the experience at the DVLC in establishing the IIP independent union monitoring team had demonstrated several advantages of an independent participative approach to technology bargaining. This included: extending the agenda of negotiations; ensuring union representatives were better informed; and strengthening the overall organisation of the unions.

5. There were numerous differences between the Land Registry and DVLC computerisation projects: the stage of proposed union intervention was earlier than at the DVLC; the level of union intervention was guided centrally by the Land Registry Section rather than locally by the DVLC branch; the Land Registry project was geographically dispersed and not centralised like that of the DVLC; and the production process in a DLR was more complex than at the DVLC, making the work of Land Registry members intrinsically more interesting with well defined career pathways.
and greater opportunity for career progression. (65) Moreover, there was a difference between DVLC branch officials and Land Registry section officials in their political awareness and political influence. This was related to the internal divisions within the CPSA as well as those within the wider social sphere.

6. The section officials in the Land Registry were located at a strategically important and prominent level within the CPSA. They maintained a high political profile and a strong identification to the broad left faction within the CPSA. Nevertheless, the Author's views on the need for unions to adopt a more pro-active approach, particularly through independent participation as a strategy for union involvement in the introduction of technology, were presented to the CPSA section officials from the middle of 1984 onwards. Through discussion at meetings, formal presentations, etc., and through various forms of written communications, memos, etc., these views were accepted by the senior section officials as pertinent to negotiations over the project.

The Union Strategy for Negotiations

7. The outcome of the various discussions between the author and the CPSA section representatives was to devise policy and strategy that had the objective of securing a satisfactory NTA, as defined by the Nine Point Plan, through the establishment of a new joint working party (or negotiating committee) supplemented by establishing an independent information resource for the unions. This working party was to take the form of a Local Computer Negotiating Committee reporting directly to the 'Departmental New Technology Sub-Committee' with provision for extra
facility time to be made available to a departmental union official to undertake a more comprehensive monitoring and evaluation of the project. It was proposed that this official would serve on both committees as the unions' full-time project officer using the additional facility time to organise the local union representatives' assistance in monitoring the project as well as to ensure that local issues arising from the implementation of the project were dealt with to the satisfaction of the section officials. These proposals were presented to the management at a formal departmental meeting in February 1985 following the Plymouth presentation.

8. The proposal for establishing a negotiating committee to conclude an agreement was accepted. However, the demand for a local committee and extra facility time were initially refused by the management. They argued that greater clarification was required to define the limits of a local committee's responsibility and that its location within the Whitley system would be problematic, i.e. whether it would be reporting to the Plymouth DLR Whitley Committee or the Departmental New Technology Sub-Committee. In addition, they argued that extra facility time for union officials was not warranted before implementation of the project. The management did not reject the unions' proposals but required greater clarification of what the unions were proposing to do in their monitoring activities and how they were going to be operated. Consequently, negotiations over the NTA were held in abeyance until the procedural issues were resolved which provided the unions with an opportunity for developing the Nine Point Plan into a more coherent draft departmental NTA.
9. Through negotiations in May and June 1985, the 'terms of reference' defined by the unions for the local committee were accepted and a compromise reached over its location within the Whitley system. It was resolved that it would report directly to both the Plymouth DLR Whitley Committee and the Departmental New Technology Sub-Committee. However, the unions pointed out that the local committee would not fulfil any meaningful function without the support of additional resources. This, they argued, could be provided by extra facility time for union monitoring of the project. To clarify what would be involved in the union monitoring of the project, and in order to allay the suspicion of the management, it was agreed that a union representative would receive sufficient facility time to carry out an investigative study defining how the union monitoring could provide a constructive contribution to the project.

10. The investigative study was undertaken by a CPSA representative who later became the union representative monitoring the project - the 'Union Project Officer'. Among all the constituent union representatives one of the CPSA's was the outstanding candidate for this task (the monitoring initiative was a CPSA proposal reflecting the ascendancy of the CPSA in leading departmental negotiations). He was also the individual responsible within the CPSA Land Registry Section for all technology issues, and thus had considerable experience with the Registration of Title project, being involved in departmental negotiations since 1980. In addition, he also had experience of technology bargaining more widely within the department, negotiating an 'Index of Proprietors Names' project NTA and a departmental wordprocessor NTA. He also supported and was enthusiastic towards the concept of applying an independent participative approach for technology bargaining and demonstrated an awareness and
understanding of how such a strategy could be applied within the department.

11. The investigative study was undertaken during June 1985, with two documents being produced: a discussion paper on the project, primarily for the unions to consider; and a long communication to the Project Implementation Officer detailing the role of the union computer monitoring initiative. The discussion paper for the unions provided a more detailed and richer analysis of the project than had hitherto been produced.\(^{(69)}\) It detailed the importance of pursuing an independent participative strategy, arguing that as the project evolved the existing literature and knowledge of the system would "only provide a picture of the basic system ... (and would) ... not show how the system is translated on the shop floor" and that emerging changes "can only be detected and their implications analysed through continued close monitoring".\(^{(70)}\) It went on to point out that negotiations "should determine what absolute decisions on work procedures and grading can and have to be made prior to either implementation at Plymouth or on the conclusion of a Departmental Agreement".\(^{(71)}\) The communication to the Project Implementation Officer expanded on several points already made to the management, for example stressing the role of monitoring in supporting the local and departmental negotiations by ensuring union representatives were correctly and adequately informed about events surrounding the issues being negotiated.

12. These documents proved to both the union and the management the constructive contribution union monitoring could provide to the project and the legitimacy of the unions' aspirations to further their involvement in the project. Consequently it was agreed that the union's nominee be provided with two extra days per week facility time which, combined
with his existing allocated time, made him, in effect, a full-time union official with responsibility for monitoring the project. In addition, suitable arrangements for extra facility time for local union representatives to attend local negotiations and undertake local monitoring were also provided, coming into effect from the 15th July 1985.

**Negotiations over the New Technology Agreement**

13. The procedural arrangements were established consistent with the union's demands and before negotiations over the departmental NTA were resumed. Whilst these negotiations over procedures were going on, the unions, led by the CPSA, had prepared a new draft agreement based on their Nine Point Plan. In contrast, the departmental management remained with the same position as when the previous negotiations over the NTA broke down in May 1983. (72) When negotiations over the NTA resumed, the unions had a consistent and coherent policy adapted to the new procedural arrangements, whilst the management were relying on an old policy combined with a consultative arrangement not unilaterally defined or controlled by them. This stands in marked contrast to the earlier forms of technology bargaining over the project.

14. The first formal meeting to discuss a departmental NTA was held on the 17th July 1985. Discussion was based on the unions' submission although, in response to the unions' draft, a management revised draft NTA was hurriedly produced during the all day meeting. The contrast between the two documents indicated that both sides were as far apart as they had ever been; although through the ensuing discussion it transpired that except for the issues of staffing and grading, which included the work procedures for the new system, most of the unions' draft agreement was, with some amendment, satisfactory to both sides. (73)
15. The unions had refined their policy over the staffing issue in their draft agreement. In place of an all encompassing 'no loss of post' clause, the unions sought a three-stage guarantee encompassing: firstly, those staff currently working in the department; secondly, those future staff to be recruited; and thirdly, the posts rather than individual jobs in the department. The revised staffing figures based on the extension of compulsory registration using the computerised system had forecast a rise in the Land Registry staffing complement from 6,804 in 1985, reaching a projected peak of 8,344 in 1991, and tailing off at 7,888 in 1997. Therefore, the unions argued that with an increasing workforce the management should not refuse "to include a commitment to maintain the complement for the period 1986 to 1998". However, the Land Registry management were constrained by the Treasury in the form of wording that could be included in a NTA and were compelled to seek Treasury guidance on the staffing clause before concluding the NTA. They were, therefore, only willing to provide a 'no compulsory redundancy' clause and reluctant to provide any form of guarantee to particular future staffing levels.

16. The contention over grading and work procedures demonstrates both the challenge the managerial prerogative and the extent of union intervention had expanded into the design of the new system. The unions, in recognition of the changing content of jobs following computerisation, sought to negotiate all grading levels for the changed jobs as well as the work procedures. Union interest in the new work procedures arose primarily from the experience which led to the 'wider issues' dispute in 1983 when working practices were unilaterally redefined by the Land Registry management. They also received prominence from the activities of the Unions Project Officer in his consideration of job design in the
project (details of which are discussed in paragraphs 23-24 below). The management correctly perceived union intervention in the grading and work procedures issue as a challenge to their prerogative, and initially would only concede to the unions "a wish to consult on this issue". (77) Although this changed as the conclusion of the departmental NTA and the staffing, grading and work procedures issue became entwined with issues being raised by and the activities of the union monitoring of the project.

Monitoring by the Union's Project Officer

17. Union activity developing an 'independent participative' approach was undertaken by the Union's Project Officer. For example, immediately preceding the allocation of extra facility time in July 1985, an evaluation of how well the Index of Proprietors Names project NTA "stood up in practice" had been completed, resulting in a comprehensive report that made numerous recommendations for improving work practices and the conditions of service in the relevant areas of the DLRs. (78) The evaluation was linked to a CPSA strategy aimed at securing a 'proficiency allowance' for DP grades operating computer terminals connected to the index system (in each DLR between two and four CPSA members operated the system). This strategy proved successful when an agreement for an allowance was concluded and accepted in September 1985. An interesting aspect of the CPSA strategy was the initiative of following-up the implementation of an agreement by a comprehensive and independent evaluation. The effective policing of agreements is an area of union activity notable by its absence.
18. The Union's Project Officer's immediate task for the major Land Registry computerisation project was to establish a local union organisation effective in negotiating the relevant local aspects of the project and the local monitoring of the project's development. The Plymouth branch were considered by the union's section officials to have been badly organised. Although having a good membership density, with 235 out of a potential 304 members, they had been reluctant to take industrial action in the 'wider issues dispute'. In addition, it had proved difficult to recruit and retain dependable branch officers. (79) Within the CPSA the South-West of England has a notoriety for recruitment difficulties, organisational instability and a greater membership apathy than elsewhere in the UK. The CPSA Land Registry Section officials were of the opinion that the project had been developed at Plymouth DLR precisely because of the union's local weakness and a membership who would easily acquiesce to management proposals. (80) However, the decision to develop the project at Plymouth probably had more to do with the location of the existing computing facility and the department's computing specialists. However, these may have been originally located at Plymouth, due to the supply of suitable (i.e. non-militant) labour. It was apparent though that the organisational instability of the branch had contributed to the local branch being very little involved in the project. (81)

19. The Union's Project Officer had, therefore, a dual function to fulfil. Firstly, establishing the unions' independent involvement in, and monitoring of, the project. Secondly, an organisational role to build confidence and stability within the branch. These tasks began in August 1985 when the Project Officer visited the branch to explain the procedural arrangements, organise the union side of the Local Computerisation Negotiating Committee and identify local individuals who had the
commitment to undertake the monitoring activities. This involvement was welcomed by all the local constituent unions, who felt aggrieved that there had been "only token consultation at this level in the past". (82) In a move to ensure the local negotiations did not become an extension of the Local Whitley Branch Committee, membership of the Local Computerisation Committee was composed of members from areas undergoing or soon to be undergoing, computerisation and not just branch representatives. In addition, it was decided to keep membership of this committee flexible in order to match committee membership with the issue being discussed. (83)

20. All the unions sought representation on the local committee, although only the CSU and CPSA were "prepared to play a full part on their local monitoring team" with the SCPS and FDA reserving their right for future involvement, but maintaining only a 'watching brief' through nominated individuals. (84) Before the various system tests stages began, when union members would be directly involved in operating the new computer systems, the monitoring role of local representatives was limited to ensuring all developments were proceeding without danger to their members' interests. The Union's Project Officer relied upon the local representatives for information on development of and membership concerns arising from the project. He also had responsibility for identifying the more strategic and longer term dangers of the project to membership interests.

21. The Union's Project Officer was also to "identify priority issues for discussion at the local committee". (85) At the initial meeting of the committee, on the 4th September 1985, the agenda consisted of issues largely defined by the unions. These in turn consisted of negotiations over local accommodation issues, information on the precise details of
the project's development and identification of issues for referral to the departmental committee. The implementation of the project involved substantial alteration to the existing office accommodation at Plymouth DLR, including the building of new environmentally controlled rooms to house the computerised equipment. This raised a number of minor issues and an 'Accommodation Working Party' was established to fully discuss these and produce satisfactory solutions. The local committee played a useful role in raising many of these issues and ensuring that they were resolved, whilst the monitoring activity complemented these negotiations and discussions. The information provided to the local unions kept them up to date on the project's development and proposed implementation timescale, along with details of the system's testing procedure. The system was due for implementation, i.e. handover from the computing specialists to Plymouth DLR management, on the 1st September 1986. This was to be preceded with a two-stage 'Systems Business Testing' programme involving DLR staff on live work in the first half of 1986. Union involvement for monitoring these tests and in the selection of members to participate in the tests was assured by the local management through the local committee.\(^{(86)}\)

22. The local committee played an important role in extending consultation and union involvement by resolving minor issues and raising others to the departmental committee. It provided a means for the local branches to become involved in the project whilst ensuring union representatives at the departmental level maintained control over negotiations. The value of the local committee was demonstrated when a similar committee was established at the Gloucester DLR which, by November 1985, was being subjected to detailed proposals for reorganisation in preparation for the project's extension.\(^{(87)}\) As at Plymouth, it was the
responsibility of the Union's Project Officer to oversee this process at Gloucester.

23. To improve the internal union communications of the CPSA, the Union's Project Officer devised an awareness campaign and developed a range of educational material. The awareness campaign consisted of a section journal 'Union Voice' distributed to all CPSA members, along with individual Union Voice journals specifically for Plymouth DLR and Gloucester DLR. Proposals were also in hand for journals aimed at specific sections within a DLR, i.e. a different Union Voice for Daylist areas, Proof-Read and Amend areas, etc., informing members of what was happening to their specific jobs and what the policy of the union was relevant to that specific area. Fulfilling his role to strategically review the project he also produced a variety of relevant reports. For example, a security consultancy was contracted to make recommendations on all aspects of the project's security of installations. The Project Officer produced a resumé of the consultants' recommendations and identified the pertinent conclusions in a report presented to the unions for discussion prior to the consultants' being discussed at the departmental negotiating committee. (88)

Conclusion of the New Technology Agreement

24. An important contribution of the Union's Project Officer was his analysis of the new work procedures and job design emerging from the project. In a discussion paper titled 'Computerisation, Grading, Work Procedures and Related Issues' the complexity of 'job design' as a trade union issue was recognised. It made connections between issues such as: work procedures, staffing, grading, job satisfaction, job design and promotion opportunities. This enabled the unions to clearly articulate
their arguments over the grading and work procedures issues and relate this to the staffing issues. The improvements in the unions' understanding of the issues permitted them to negotiate the departmental NTA from a more coherent and well-defined position.

25. By November 1985 the management had conceded their unilateral prerogative over grading, making it the subject of advanced consultation and negotiation. Consequently the CPSA put forward a claim for re-grading in five areas of a computerised DLR. This claim was based on information generated from the monitoring activities and in particular that concerning the investigation of job design in the project. It covered two new areas of work, a 'Computer Room' and a 'Print Room', the latter for 4 Senior Data Processor (SDP) grades working a two shift pattern and the former for a CO and CA grade. The departmental management, whilst agreeing to the Print Room grades, considered the Computer Room more appropriate to CO grade with a complement of 3 staff. The other three areas were: Data Capture; Data Entry and Proof-Read and Amend. The CPSA were claiming for Data Processor (DP) grades with an allowance in the Data Capture area, the Specialist Typist grades receiving the highest permitted allowance in the Data Entry area and CO grades in the Proof-Read and Amend area. In reply the management offered: the DP grade without an allowance for the Data Capture area; the Specialist Typist but only on the lowest allowance for the Data Entry area; and simply a CA grade for the Proof-Read and Amend area.

26. The CPSA re-grading claim was being discussed concurrently with negotiations over the departmental NTA. The unions had submitted a new draft agreement at a meeting in November 1985 and the management submitted a new revised draft at a meeting in December 1985, which conceded
to some of the CPSA's re-grading claim. However, the 'staffing clause' remained the outstanding clause with neither side willing to concede. Following a two-day departmental negotiations meeting in February 1986, the management were becoming exasperated, having gone as far as they could within their 'unavoidable constraints', i.e. Treasury manpower and financial restrictions. They had made a number of concessions "subject to a satisfactory conclusion to the negotiations in all other areas and to the signing of the 'Framework Agreement'".\(^{(90)}\) These concessions were a statement to all staff in the form of a personal letter guaranteeing that 'no compulsory redundancy' would arise from the project and going some way to meet the CPSA re-grading demands in particular making the CA Proof Read and Amend area a C0 grade contingent on the "re-consideration of the design of clerical jobs within the system".\(^{(91)}\)

27. Through further negotiations in March 1986 an agreement was eventually concluded and accepted by the Land Registry membership in May 1986. The contentious 'staffing clause' ipso facto contained the majority of the original demands of the unions, providing a 'No job loss' clause, if not for all future Land Registry staff one which covered 7,880 of them. The Land Registry Departmental New Technology Agreement is reproduced in Appendix II.
1. The Land Registry case study addresses itself to two issues. The development of the Registration of Title project and negotiations with the unions over the project. The project was an ambitious proposal for automation of well-established and complex labour processes. It had an extraordinarily long lead time from 1976, and publication of the initial feasibility report, till 1986, when the Plymouth DLR system was implemented. During this period it was apparent that the unions were excluded from the decision-making process of the system's design and development process, even though changing management strategies sought to engender various forms of user involvement in this process.

The Registration of Title Project

2. The configuration of the project was oriented around the interests of Land Registry departmental computing specialists. It was a configuration that, in the latter half of the 1980s, appears to be the legacy of a by-gone computing age and to have had more to do with the sectional ambitions of the computing specialists rather than a strategic adjustment of the department to cope with the extension of compulsory land registration and changes in land conveyancing legislation in the final decades of the twentieth century.

3. The trend in information technology has been away from the construction of centralised information systems based on large, powerful mainframe computers and the bulk-processing of information towards smaller de-centralised systems based on increasingly more powerful mini-computers. Moreover, it is widely accepted that the progressive convergence of information technologies across communication, office systems
and text-handling will lead to a wider distribution of data and so promote ever greater de-centralisation. The Land Registry project, as defined by the departmental computing specialists, appears a somewhat strange hybrid in this scenario. Its centralised information store working on-line to local offices demonstrates the selectivity of new technology to suit the interests of departmental computing specialists who appear to reject the overall trajectory of technological change towards de-centralisation which would decrease the control and monopoly they enjoy over computing in the department and instead, devolve responsibility and control to local management in the District Land Registries (DLRs). In addition, the failure rate of data processing applications and office automation systems indicate a need for technologically based change to undergo a more organic form of deployment; developing small systems towards eventual integration as and when experience, knowledge and acceptance of technology is more widespread at all levels. The holistic and all encompassing strategy of the Land Registry project stands in contrast to such an organic form of development. It appears the project was motivated more by the elegance and novelty of its technology rather than through an understanding and awareness of the social and organisational environment into which the technology was placed.

4. It was a lack of appreciation of the social and organisational aspects of change that are primarily attributable to the long lead time of the project. Economic acceptance of the project by the Treasury served to delay development and create uncertainty over its future at several stages. For example, in 1976 following the initial Feasibility Report, then in 1980 following the Revised Feasibility Report, and again in 1984 following the re-costing of the project. Had it not been for the government policy of compulsory land registration in England and Wales,
adopted in 1984, it is doubtful whether the project would have continued, particularly since at that time it was delayed due to numerous operational difficulties. A major problem, which the consultants' report addressed in 1984, was the overall lack of project control and co-ordination. This can partly be traced to, though not wholly attributed to the bureaucratic cultural constraints of the Civil Service which engender management practice built around short-term decision-making focused on annual cash limits and remains unfamiliar with the process of long-term and strategic planning that is associated with a project.

5. There was also a problem in retaining specialist staff for the ambitious programming work required in the project. The importance of key programming staff was accentuated by the technical novelty of the project, requiring a considerable programming effort to be carried out in-house that which had to be of a good quality and reliable to ensure that the holistic system could immediately replace the existing manual system. The strategy of the project was oriented around achieving a technically elegant and reliable computing system to replace a well established clerical system.

6. To achieve a reliable and workable system, implemented wholesale to replace the existing clerical system, the project required considerable effort 'behind the scenes' in developing the specifications and software for the system. Consequently it lacked the visibility which could permit a wider involvement and participation in the system's design and development process. The mechanistic approach of the project's development reflected the dominance of computing specialists' perspectives and interests in the design of the project's original strategy. Isolated at
Plymouth from the mainstream of the department's strategic policy deci-
sion-makers in Lincoln's Inn, London, the computing specialists were able
to operate with a degree of independence and a certain amount of 'poetic
(or computing specialist) licence'. However, recognition of their mono-
poly of control and the mechanistic orientation they were bringing to
bear over the project led to a broadening of involvement with organisational
and administrative specialist management becoming directly con-
cerned. This marked an important change in the management strategy for
the project along with the more widespread adoption of developing exper-
imental prototype systems, such as the Mechanised Day List, the Redetext
Experiment and the Case bag location project. All these developments
illustrate a concerted effort by the departmental management towards user
involvement type of approaches to the computer system's design and devel-
opment process.

Union Involvement

7. The form of user involvement in the Land Registry project had simi-
larities with that experienced in both the previous case studies. In
particular is the overtly politicised connotations attributed to the
concepts of end user and user involvement. The end users were distin-
guished between those having direct access to and involvement in the
project's decision-making process, and those without such access. The
former being largely drawn from the higher managerial grades, whilst the
latter were those using and operating the system - the real end users.
This latter group consisted of lower grade workers who had a passive form
of involvement in the project and were specifically excluded from deci-
sion-making bodies. Their involvement permitted the computer system's
designers to derive the Land Registry workers' tacit knowledge of the
system and thus gain an appreciation of the range of informal skills and
non-routine procedures from which the designers hoped to construct a more robust system to fulfil the managerial defined objectives. This form of involvement creates a one-way, bottom-up communication from the operatives of the system to the designers of the system. It can also undermine whatever involvement the union could have in the project, although, it is suggested, this form of involvement could provide the basis of a more interventionist union strategy geared towards the shaping of technological change around the members' interests.

8. Throughout the ten years of the project's existence, the unions had been kept informed about developments. This maintained the paternalistic form of industrial relations in the department and reflected the stability of an organisation whose mode of operation had altered little in over half a century. The need for maintaining good industrial relations was also in recognition of the potential and uncertain changes being introduced through technology which would disrupt those well established working practices. The improvement in efficiency and streamlining of the system would inevitably result in the redundancy of traditional skills and mean a potential loss of jobs unless expansion of the department's function could be sustained at a rate faster than the efficiency gained through automation. It was widely accepted that the automation of the DLRs could not be achieved without the passive acceptance of the technology by the workforce and their active co-operation, with its development. To gain support, all proposals for the project stressed that a greater degree of job satisfaction would be experienced by those operating the new system. However, the promises of increased job satisfaction were stressed only as a means to make the new system attractive to the workforce and the unions; it was not an area that had undergone serious examination in the design and development of the new system.
9. The unions recognised the strategic importance of the project and its potential negative implications, such as the loss of jobs and de-skilling or downgrading of their members' work. However, the unions' overriding concern was always with the more immediate and short-term issues rather than the adoption of a more strategic overview of the project. Their lack of experience in dealing with technology bargaining, combined with an organisational infrastructure and formation of policy more suited to a reactive position, made it difficult to sustain a long-term strategic response. Union activity over the project only became effective when impending implementation of the project made it timely for both unions and management to conclude a new technology agreement (NTA) and when actual changes in the working procedures and environment of members were to occur.

10. Negotiations over the project were distinctive in being conducted departmentally in London with union section officials, even though the project was being developed locally in Plymouth. Whilst this identified the strategic implications of the project across the department, it neglected the importance and relevance of local developments, in particular the various trials and experimental prototype systems. Union policy for the project became coherent in pursuit of a departmental NTA. However, the pursuance of this policy was motivated by a desire to obtain a substantive employment guarantee, i.e. a no loss of jobs clause. This policy was pursued by the unions, in particular the CPSA, because the national NTA (rejected by the unions' 1982 conference) did not contain such a guarantee.

11. Negotiations over the project and the unions' development of a strategy and policy towards it occurred in three identifiable periods.
The first from 1976, when the unions were first aware of the proposed project, until early in 1981 and the publication of the Joint Working Party's report on the proposed work procedures. The second from 1981 onwards with the adoption of a union policy in pursuit of a NTA and the third, a development of the second stage, from 1985 onwards with the adoption of various recommendations by the Author to pursue union involvement on the basis of an 'independent participative' approach.

12. The first period did little more than define the procedural forms of bargaining and identify the substantive issues which were to recur throughout the negotiations. Union policy lacked any coherence consisting of disparate rhetorical statements about the importance of safeguarding jobs and ensuring against the downgrading of work. It was, however, better developed in respect of issues where policy was already well defined and potentially affected by the project, such as in the abolition of examination work by outside counsel. The project had a distinct cleavage between management decision-making responsibility and the unions' role within that. The unions' role, which was defined in forms of involvement legitimised by the management, was marginalised to consultation about developments, but with exclusion from decision-making forums. Moreover the unions constantly sought to extend their role, although their demands and responses demonstrated an overall lack of awareness of the computer system's development process which led to inappropriate demands often technically impossible to fulfil. The development of the project was on-going at Plymouth and negotiations were sustained in London. Consequently, information about the project was frequently received after the event or when decisions had been already unilaterally taken by management. The unions had little influence over the development of the project, maintaining a traditional reactive strategy which
acquiesced into passive co-operation in forums such as the Joint Working Party.

13. The second stage of bargaining was set against the deteriorating industrial relations of the department which led to the 'wider issues dispute' of 1983. It is marked with the adoption of the unions' 'Nine Point Plan' for pursuing a departmental NTA. In addition, it marks the internal ascendancy of the CPSA to lead the unions' response on the departmental Whitley committee. The adoption of the Nine Point Plan represented the formation of a more coherent union policy covering areas well beyond the more traditional economistic demands and seeking an extension of union involvement in the project with a broadening of the agenda for negotiation. However, in application the policy was primarily a means of securing stronger employment guarantees than had been given in the national technology agreement. The policy amounted to little more than a set of rhetorical statements with little development of how they could be applied at the local level. In many respects they were the articulation of conventional union wisdom over technological change. The use of the NTA to secure substantive employment guarantees rather than initiating greater influence over the system's design and development process was demonstrated by the prolonged negotiations over the NTA resulting in several breakdowns, whilst the project continued its own development largely unaffected by union activity. The urgency to conclude the NTA came only with impending implementation of the project at Plymouth in 1986. Moreover, government commitment to expand the department through extending compulsory registration provided the scope for employment guarantees to be confidently set against an expected expansion of the staffing complement.
14. The commitment to expansion of the department provided a lifeline to the project and added a new impetus for implementation at Plymouth. It was around this time that the Author became involved in the project, from 1985 onwards, becoming a member of the CPSA negotiations team consisting of the full-time section Assistant-Secretary and two other senior section officials. This development of the unions' strategy marked the beginning of the third phase from 1985 onwards. The Author's influence in the development of the unions' response was to facilitate discussion among the CPSA representatives in order to collectively consider a more strategic response than had hitherto been adopted. The Author was able to introduce new ideas in the formation of policy based on an independent participative approach. The resulting union strategy reflected the interests of the section officials. For example, an important component was to establish a two-tier bargaining structure and ensuring the local committee remained under the control of the departmental negotiators, supporting and not undermining them or creating a separate power base within the union. The unions' independent monitoring of the project was introduced, operating from the section level and, like the monitoring team at the DVLC, with the dual role of improving the union organisation as well as monitoring the project. In addition, the policy of the unions was developed maintaining its orientation around the securing of a strong employment guarantee in the NTA. This was achieved by developing the employment clause in the agreement, with the unions taking more of the initiative in drafting the NTA and extending negotiations through detailed demands over grading levels. This had the effect of increasing the overall bargaining strength of the unions.

15. The Author's role in the project was more limited than in that of the DVLC case study. This reflected both the firmer control section
officials maintained over the shape and form of union policy, and the
intervention they were sustaining in the project (as with all technology
in the department). Intervention was to assist in strengthening the
position of section officials in the negotiations and was oriented around
concluding a satisfactory new technology agreement and developing proce-
dural arrangements to ensure the organisation of the CPSA was better
placed for future implementation of the project throughout all DLRs in
England and Wales. Rather than constructing mechanisms for intervention,
as in the DVLC, the emphasis was to act in a facilitator role introducing
ideas based upon an independent participative strategy. However, as at
the DVLC, the relationship between the Author and CPSA representatives
had to be developed and established over a long period. Whilst direct
involvement occurred from the beginning of 1985 onwards, contact with the
project and senior section officials had been on-going since 1983.

16. In adopting the independent participative strategy relatively late
in the project's development, the unions were limited in how it could be
applied. It was selectively utilised by CPSA officials around their more
immediate interests. An aspect often raised but given little consider-
ation was the application of this approach to investigate the extent
of the range of services provided by the department. Even though convey-
ancing is being de-regulated and solicitors are losing their monopoly,
the unions did not address themselves to the potential this offered to
promote the services provided by the department in the conveyancing
process. It would appear the Land Registry unions were ideally located
to participate in the many debates around housing policy and the forma-
tion of alliances with pressure groups such as Shelter, Campaign for
Single Homeless People (CHAR), Catholic Housing Aid Society (CHAS), etc.,
as well as interest groups within the Labour Party. This could have
produced an interesting vision for the future role of the department and permitted an insight into how technology may be applied to provide positive social benefits in the operation of a more socially responsive Land Registry.
CHAPTER SEVEN

COMPARATIVE ANALYSIS OF THE THREE CASE STUDIES
Introduction

1. This chapter draws discussion of the three case studies together and explores further the consequences of unions adopting an 'independent participative' strategy. The case studies are first assessed against the results of previous research into contemporary technology bargaining. This assessment concurs with the results of previous research as well as focusing attention on a number of features that arose from the case studies. However, the point of departure between the case studies and previous research is the application of technological expertise to the CPSA and the consequent adoption of a policy based on an independent participative approach.

2. Previous research has consistently pointed to the need for unions to adopt a more pro-active approach to technological change. The DVLC and Land Registry case studies applied such an approach within the confines of contemporary technology bargaining in the Civil Service. In order to differentiate this pro-active approach from more traditional policy options, and focus on the extent to which it can be developed further, an analytical framework is constructed in part 2 locating the three policy options of 'adversarial', 'co-operative', and 'independent participative' against three areas of union activity where policy is formulated, developed and actioned. This analysis provides an indication of some of the widespread changes required in union activity if pro-active policy options are to be successfully pursued by unions. In part 3 the three case studies are discussed with relevance to their location in the analytical framework.
Contemporary Investigations into Technology Bargaining

1. Investigation and analysis into the contemporary wave of technology bargaining, specifically the case studies and reviews of new technology agreements (see Chapter 1, Part I, paragraphs 12-22), allow a consistent picture to emerge with similar observations being made across a variety of industrial sectors. Technology, more than any other issue confronting unions today, exposes the weaknesses of their organisation in terms of: internal communications; presentation to the general public; apathy and lack of membership involvement; and limited resources available to support local representatives. Moreover, the pursuit of sectional interests by unions often leads to divisive actions within and between unions.

2. Technology is seldom introduced for its own sake but follows or permits wider organisational change. As a consequence, bargaining seldom concerns just technology but covers a complex range of issues with repercussions across other areas of work. However, the majority of bargaining is confined to traditional economistic issues largely based upon wage negotiations with less attention paid to the changing content of work. This limits union influence to a narrow range of issues which impinge only marginally upon the corporate and strategic planning processes for technological change. Even though the process of introducing technology into the work place has, in many instances, not been satisfactorily addressed by management.

3. Procedural arrangements for technology bargaining reflect the adherence of unions to traditional economistic preoccupations. In addition, negotiations and consultations are often not appropriate to the level of
managerial decision-making for technological change. Overall, unions are placed in a reactive position and whilst they may seek to extend their influence it is a position they have accepted. This reactive position is reflected in the organisation of unions, how their policies are formulated and pervades the culture of unionism.

4. The new technology agreement policy provided unions with a ready made package encapsulating the spirit, if not the letter, of the influential TUC report 'Technology and Employment'. Investigations have found that the majority of agreements were concluded by white collar unions which whilst reflecting the novelty of technology to office work was predominantly a response to the weakness of organised labour in this sector of employment. In other employment sectors technology has usually been on the agenda of established procedural arrangements. The achievements of unions, from agreements or otherwise, have been limited and members have not obtained a share of potential benefits arising from the introduction of technology. It would appear, thus, that new technology agreements are insufficient on their own for unions to be effective in coming to terms with new technology. However, it has been suggested that agreements are just the beginning of a long term policy and that achievements in areas supported by legislation, such as health and safety, may provide a basis for the development of future union policy.

5. In the introducing of technology into the workplace it is apparent that a range of managerial strategies have been adopted that incorporate various forms of user-involvement to secure workforce compliance and acceptance of technological change. The need for workforce compliance has not been uniform, but has varied on the centrality of workers to the production process and in relation to the form of technology introduced.
New Technology and Organisational Change

6. The application of new technology results in, or permits, wider organisational change. The complex relationship between technological and organisational change requires an understanding of the social, economic, political and not least technological factors surrounding change. A lack of regard to these wider social and organisational factors can lead to a dysfunction between the computer system and the organisational environment into which it is deployed. This is demonstrated in the contrast between the old and new systems at the DVLC, as well as being apparent in the other two case studies.

7. The DVLC replacement system was deployed to overcome the social and organisational dysfunctioning created by the original computer system. The replacement project adopted a strategy which sought the involvement of non-computing specialists in the system's design and development process. This was to ensure that a greater sensitivity was taken to what can be labelled 'the human aspects' of the new system. This is in marked contrast to the original system which was produced by computing specialists constructing a technically elegant, but highly mechanistic, system based on Tayloristic Scientific Management principles.

8. The Bedford Prison project was motivated by the potential labour saving capabilities which appeared to be available through the use of computers in the collection and administration of information within penal establishments. However, and as in the original DVLC system, the application of this technology failed to give adequate consideration and be sufficiently sensitive to the social and organisational dimensions
operating within a penal establishment. In addition, it failed to consider a more strategic re-structuring and re-organisation of a prison's administrative system in order to accommodate emerging new technology.

9. In the Land Registry Department the Registration of Title project also failed to adopt a strategic re-assessment of the existing organisation of work procedures and a re-structuring of the department. The design and orientation of the project was in the interests of the department's computer specialists who created what was described as a technically elegant solution to a complex and in many ways original requirement. The technocratic emphasis of the project was recognised as a problem by the departmental management, who sought to widen involvement of those developing the system to managers who did not have a background in computing. However, whilst a broader view of the project's development was promoted and greater attention paid to the organisational environment of the project, the overall philosophy of the system appeared little altered. And had it not been for the considerable impetus given to the project by the extension of registration of land to all of England and Wales by the 1990s it is doubtful whether the project would have survived.

Organisational Changes and Technology Bargaining

10. The complexity of the relationship between technological and organisational change is reflected by the complexity of technology bargaining. For example, negotiations over the replacement computer project at the DVLC were dominated by the outstanding 'pay and grading' issue for workers in the integrated input procedures (IIP) system. This impinged upon all other issues and was a factor hindering the work of the CPSA independent monitoring of the IIP pilot trial. However, despite the prominence
and centrality of this unresolved issue, numerous others were amicably resolved, such as the conditions for redeployment of computer operators and the legitimacy given to the CPSA independent monitoring initiative.

11. In the Bedford Prison case study negotiations for the CPSA and other unions representing non-uniform workers were oriented around settlement of a satisfactory departmental new technology agreement. The Bedford project was used as a potential bargaining lever for securing such an agreement. However, all discussion of the project was underlaid by a general awareness of a potential to integrate uniform and non-uniform grade work. The contentiousness of such a proposal, whilst off the formal agenda, was apparent in all discussion of the project between management and union representatives. In addition, and as in the project in the Land Registry, the Bedford project was due for replication throughout the department. Both projects were concerned with establishing precedents in new work procedures, as well as in the level and extent of technology bargaining. CPSA officials in the Land Registry did address themselves to establishing precedents which would bear well for future union involvement by adopting a more strategic overview of the project and seeking to independently monitor developments. In contrast CPSA officials in the Home Office gained little and missed the opportunity of learning from the experience of the Bedford project.

Technology Bargaining and Management Concessions

12. A feature of the bargaining in all the case studies was the limited concessions given to the unions and the considerable effort they had to undertake in order to gain just some of their demands. It is also apparent that management rarely conceded on an issue without recourse to conditional union acceptance over some other issue. For example, at the
DVLC the complex settlement of the redeployment conditions for the computer operators issue took over three years to resolve; and legitimization of the CPSA monitoring initiative became contingent on acceptance of the role of the DVLC's Job Satisfaction Team. At the Land Registry, concessions to some of the unions' demands related to the employment security clause of the departmental new technology agreement were conditional on union acceptance of proposed grading levels and work procedures. However, the extension of the bargaining agenda to include grading and work procedures was a part of the unions' strategy to increase the overall bargaining strength of the CPSA.

The Bargaining Agenda

13. The bargaining agenda in all the case studies was dominated by economistic issues related to employment security and levels of remuneration. For example, in the Land Registry and Bedford Prison case studies bargaining concentrated on securing departmental new technology agreements which were primarily concerned with employment protection. In the Land Registry grading levels became a major issue, but only insofar as securing higher rates of pay was concerned. The grading levels for the IIP job which dominated bargaining at the DVLC were pursued for much the same reason. Grading was not viewed as a means for securing improvements to the content of jobs. Issues based on 'job content' (which could include job design, work procedures, environmental conditions, health and safety, etc.) whilst not absent from the agenda, received less attention, with the unions' position often ambiguous and not well defined. For example, the agreements being pursued in the Bedford Prison and Land Registry both had clauses related to issues of job content. The Land Registry agreement, in particular, included certain rights for union intervention in the work procedures with specific levels of grading for
particular work areas, but these were traded for improved guarantees in employment protection.

14. In the DVLC the domination of the IIP pay and grading issue tended to undermine the monitoring initiative, with members demonstrating a lack of interest in efforts to improve the quality of jobs until settlement of the grading issue. This reflected the lack of empathy felt by DVLC workers with their job and the department. The motivation for the job was considered by many members to be financial rather than other less tangible forms of job satisfaction. The membership perception of the relationship between themselves as workers (employees) and management as employers is important in the legitimacy given to, and assumptions made about, the responsibility and nature of the management's authority. This creates a relationship perceived as essentially no different from private industry. The only job content issue where no ambiguity existed over the legitimate extent of union involvement was in health and safety; the 1974 Health and Safety at Work Act gave the unions statutory rights for involvement and legitimised their demands when related to issues of safety.

**Union Influence**

15. The limited extent of bargaining marginalised union influence to a narrow range of issues. In all three case studies the unions were excluded from the early and strategically important decision-making periods of the computer systems' design and development process. This is most clearly demonstrated at the DVLC where, between the years 1977-79, a range of alternative options for the replacement system were considered before selection of the final IIP configuration. Once taken this decision oriented the project along a particular technological trajectory.
The DVLC unions were consulted only after this decision had been taken and when development was well advanced.

16. At the Land Registry the initial strategic decision-making over the project not only excluded the unions but also sections of the departmental management. The computing specialists produced a system oriented around their sectional interests. Although the project was revised in 1982, the unions, on both occasions, were consulted only on the outcome and not included in the actual decision-making process. In the Bedford Project two levels of strategic decision making were discernable (this may have reflected the apparent internal power struggle among management groups within the Home Office). In the Prison Department different committees and working groups were planning various strategic approaches for introducing technology, whilst at Bedford initial planning for the project was undertaken locally. This local development included the involvement of local union members, as part of a managerial strategy to develop forms of 'user involvement' in an effort to gain the members acceptance of the technology. The unions were formally excluded from involvement at both levels.

17. The exclusion of unions from the strategic decision-making over the computer systems reflects a demarcation of the level and extent of union involvement, differentiating between those issues for negotiation and those for consultation. The criteria for this demarcation is a contentious issue between unions and management with the boundaries reflecting the relative bargaining strengths of either side being an indicative measure of the union and management bargaining relationship. However, it is apparent that in this complex relationship the extent of union intervention is largely legitimated by management who control: investment
decisions; extent of introducing technology; re-organisation proposals; corporate strategy; and so on. Unions may exert influence, depending on their bargaining positions, but it is management who determine the technological trajectory a project may take along with all the social, economic and political repercussions.

18. In both the DVLC and Land Registry case studies the CPSA's independent participative initiative, which re-defined union involvement, required considerable effort through negotiations to obtain management legitimation for the conditions to sustain the proposals, i.e. facility time for union representatives to undertake monitoring and unfettered access to the projects. Whilst these conditions were eventually accepted, they emphasise the limitations imposed by management on the bargaining process. As a consequence concepts such as the democratisation of the system's development process were simply off the agenda. Union representatives implicitly recognised these limits and this shaped their interests and concern in the technological change process. For example, whilst some representatives considered speculation of alternative technological systems interesting, the majority were dismissive of such concepts as unsustainable and unrealistic in practice within the existing socio-political climate and subsequently not of interest or relevance to the unions' activity.

19. A further aspect of managerial control of the agenda was in the control of information. The provision of information to the unions from management was in all the case studies considered, by the unions, to be inadequate. At the DVLC the unions complained that it was too much, too irrelevant and received too late to be of any value. The other case
studies echoed similar complaints, particularly with regard to the technical nature of the information. The monitoring initiatives served to provide unions with an alternative and reliable first-hand source of information and focused attention on the form and nature of information that they required. However, these initiatives were limited in what they could achieve. They could not, for example, obtain information on future managerial proposals or where management sought to circumvent the disclosure to the unions. In addition, the bureaucracy of the Civil Service places an important emphasis on secrecy and not releasing information on future developments until after they have been accepted within the confines of the management decision-making process. Whilst the obsession with the secrecy taboo heightens the paranoia of union representatives, it also raises suspicion that management planning was not well developed, being uncertain in its direction with disparate and conflictual interests being pursued by different management groups. The internal chaos of the decision-making over technology in the Home Office and the 'stop-go' progress of the Land Registry project would appear to support this observation.

Bargaining Procedures

20. The extent of union involvement in the substantive issues surrounding technological change are, in part, dependent on the procedural arrangements for negotiations. Inadequacies in these arrangements can be found in the case studies where levels of decision-making responsibility for the projects were not mirrored in levels of bargaining. In the Bedford Prison project this was compounded by a lack of internal union communication; whilst negotiations were conducted centrally, the project was developed locally in association with an isolated group of CPSA members. Similar circumstances were to be found in the Land Registry
project, although this problem was addressed from 1985 onwards as part of the union's developing strategy for the project. Only at the DVLC did the two tier bargaining provide a flexible and robust structure at an appropriate level to discuss issues arising from the replacement project.

21. At the DVLC and Land Registry the introduction of technology served to make the CPSA re-consider and strengthen its organisation at the local level. This formed an important part of the monitoring initiative. In the Home Office such re-organisation and introspective considerations did occur, although not until after the Bedford project had been developed and then only at the national level addressing the wider problems of organising a geographically widespread membership. (The CPSA Home Office Section were later to re-organise their branches on a regional rather than departmental basis).

Union Organisation

22. The underlying strength of a union is the effectiveness of its organisation in collectively combining together to pursue unitary interests. Without adequate organising any union activity will be undermined. It is a union's capability to organise its members and combine with other unions that makes them so potentially powerful and influential. But the pursuit of narrow 'self-interest' or actions taken in adherence to deterministic and narrow ideological beliefs, creates sectionalism within and between unions which leads to a weakening of their position. The internal factional conflict of the CPSA is a major weakness in their organisation, creating instability in its national leadership as well as disputes over the leadership of CPSA sections and local branches. The case studies did not directly address how this internal conflict influenced union policy; it is an area outside the scope of the present study and
could only be adequately accounted for in one study addressed more directly to this subject. In addition, the case studies were dealing in areas where the union representatives had already established control over the particular bargaining unit.

23. Sectional conflict between unions was most apparent in the Bedford Prison case study between the POA and the other Home Office unions. Underlying these differences were political divisions, although the major division was in respect of the differences in interests of the two groups. So great were these differences that the POA were outside the Whitley Council structure of the other unions. The major advantage of the Whitley system was that it provided a forum which ensured the unions would attempt jointly to pursue and determine policy. For example, in the Land Registry, representatives from the SCPS would, at one stage of negotiations, have been willing to accept employment guarantees in the departmental technology agreement which were less than those eventually achieved through joint representation.

24. Divisions within unions were also prevalent. At the DVLC the unions' attention was focused on the IIP Pilot Trial monitoring and members in other workplaces undergoing technological change complained about the lack of 'special attention' given to them. Whilst many of these complaints were based on self-interested pettiness, they indicate a lack of union policy. Without a well articulated policy that can create a clear vision for the direction of union actions, self-interest becomes the means of measuring the effects of managerial proposals. As a consequence sectionalism is engendered in place of the construction of collectivism around agreement to a set of policy objectives.
New Technology Agreements

25. In the early 1980s the CPSA adopted a policy of concluding new technology agreements which provided a ready formulated solution to a subject where they appeared unsure and uncertain over how they should and could respond. The CPSA were in a situation similar to other white-collar unions in adopting such agreements over a subject where there was little previous experience. However, unlike other white-collar unions the CPSA had well established procedural arrangements through Whitley Councils and a long tradition of unionism in the Civil Service - they were therefore better placed than many for technology bargaining. In the Land Registry and Bedford Prison case studies technology agreements formed the focus of technology bargaining although they were adopted essentially as a device for securing employment guarantees against increasing economic and political pressure for reducing employment in the Civil Service. The adoption of new technology agreements to secure employment guarantees in place of a wider strategy towards democratisation of the system's design and development process was demonstrated at the DVLC. The CPSA in the DVLC had been discussing the issue of technology several years before the subject received widespread public attention in the late 1970s. The unions decided that since employment guarantees for the replacement project had been agreed and written into the project's specification there was no need for such an agreement. This limited interpretation of the policy for securing technology agreement and reflects the dominance of a reactive union position with its limited development of union policy.

26. In recognition of these constraints, which presented little opportunity for effective union influence over the introduction of technology, the independent participative approach was proposed. This sought to take
advantage of management strategies that paid close attention to forms of 'user involvement' in the system's design and development process. These were deployed in order to obtain the workers' compliance and consent to technology, and to obtain the workers' tacit knowledge of the informal and non-routine clerical work procedures. For example, in the Bedford Project the local involvement of the CPSA and POA members occurred as part of the development of the project. Although this was not sufficient to ensure a successful implementation, it illustrates a growing awareness of the importance of user involvement. Similarly, at the Land Registry and the DVLC the various prototype experiments and trials demonstrated a keener awareness of user involvement. The DVLC replacement project in particular was motivated to incorporate a strategy in order to overcome the problems created by the original system that was designed on the basis of not involving end users in the project's development.
PART 2. A FRAMEWORK FOR LOCATING THE POLICY OPTIONS OF UNION ACTIVITY

Introduction

1. The adoption of the independent participative approach as illustrated by the Land Registry and DVLC case studies marks the difference between previous research into technology bargaining and this study. This distinctive feature is alluded to above in Part I. In order to discuss this policy option more comprehensively, an analytical framework is constructed tracing both the development of union policy in the three case studies and the dominant strategy of the unions at various stages of the project's development.

2. The analytical framework colligates union activity around three areas associated with the formulation and application of union policy. These are defined as 'union policy', 'union organisation', and 'union involvement'. Each area of union activity is considered against the three ideal-type union strategies, i.e. adversarial, co-operative and independent participative. A summary of the framework is illustrated in diagram 10.

Union Policy

3. 'Union policy' has a broad definition, including defined statements as well as undefined assumptions which are commonly accepted as the union's position over an issue. Formal union policy is, usually, the publicly espoused view or, in collective bargaining situations, the initial bargaining position. There is also an informal aspect of union policy which may consist of a range of opinions, perceptions, etc., which, for reasons of confidentiality and diplomacy, are usually not publicly espoused. Moreover, in the collective bargaining situation
informal policy may represent the minimum acceptable position of the union.

4. The extent of policy development has both a quantitative and a qualitative element corresponding to its range and depth of coverage. The range of policies may be classified into a dichotomy of issues clustered around 'economistic' or 'job content' categories; economistic issues being concerned with the product of labour, i.e. wages, allowances, grading, employment security, duration of the working day, etc.; whilst job content issues are concerned with the experience of work itself, i.e. job design, work procedure, job satisfaction, health and safety, etc. These two classifications are not mutually exclusive. For example, grading has both an economistic dimensions in terms of wage differentials between grades and a job content dimension, in the expected level of skills, qualifications, responsibility, etc., associated with different grades.

5. In the union/management relationship union intervention is traditionally legitimated over economistic issues, whilst issues of job content remain largely hegemonic to management. The shifting bargaining strengths of either side may continue to challenge this norm, such that management may unilaterally awarded pay rises without union acceptance and unions may seek to extend their sphere of activity and intervention by negotiating work procedures. An exception to this situation is health and safety where legislation provides certain rights for union intervention.

6. The depth of policy may be considered as a continuum polarized by rhetoric at one end and 'detailed specification' at the other. Union
policy in the form of rhetoric statements does little more than register the union's collective awareness of an issue, identifying that it has been discussed within the union and a commonly agreed position established. In contrast a detailed specification would reflect considerable attention being paid to an issue and a well defined position established, probably as part of a detailed coherent strategy.

Union Policy: The Adversarial Position

7. A situation where a membership's interests are threatened will involve the union in responding from an adversarial position. The 'threat' of technology may either be direct and real or it could be just perceived, with particular ideological assumptions being made about the politics of technology. A policy based on the adversarial position will tend to seek economic guarantees for employment protection maintaining the status quo. The guarantees sought may equate to 'impossible' demands because they are often being made directly against the intentions of the employers who are introducing technology. The issues of job content will be considered irrelevant because the over-riding threat of technology to the security of employment will make them superfluous. From the more politicised perspective it might be argued that job content issues are trivial and that real gains can only be achieved with the transition to a socialist society.

Union Policy: The Co-operative Position

8. The co-operative position may be based on accepting or even welcoming technology on the basis that it poses little threat and may present sectional opportunities and advantages for specific groups of workers. The politics of technological change are either ignored or treated as an unimportant and irrelevant issue. From this position importance will be
placed upon both economistic and job content issues, the latter because the advantages in the technology may be in terms of increasing control over work procedures and/or providing greater job satisfaction. However, the non-conflictual character of this position may lead to the justification of a managerial prerogative being maintained over the job content issues.

**Union Policy: The Independent Participative Position**

9. The independent participative position is an acceptance of technology, but with due regard to the politics surrounding its introduction, and a recognition of its capabilities to provide social as well as economic benefits. For unions to exert a great influence and to obtain more of the potential benefits of technology requires the democratisation of the process of introducing technology. From this position collective bargaining is a form of democratisation, albeit limited, which needs to be developed in order to permit greater union influence. This needs to occur along two lines of development. Firstly, the bargaining strength of the union must be increased giving it greater leverage in the politics of change. Secondly, the extent of involvement must be increased giving it greater leverage across the range of issues (which will also strengthen its political position). The emphasis of union policy from this position is the articulation of detailed demands over economistic and job content issues. Moreover, by adopting a strategic over-view, which can pose realistic and realisable alternative scenarios, the unions would be instrumental in the formation of a counter-hegemonic position for the deployment and control of the adoption and use of new technology.
Union Organisation

10. Union organisation is concerned with the internal structure from which policy is formulated and supported. It is formally concerned with the nature and extent of union democracy, i.e. how and where issues are debated, who has access to these forums, the level of decision-making, etc. However, within this framework of democratic procedures lie a maze of informal characteristics. Not least of these being the identity of competing internal factions and key decision-makers who hold an advantageous location within the organisation in terms of their access to information, relationship with one another, as well as membership of important committees. A variety of factors influence both the formal and informal decision-making process. For example: the level and extent of specialised resources which can be readily accessed for assistance; the composition and location of the membership; the militancy of the membership; the managerial strategy or style of management; and the centrality of the issue.

Union Organisation: The Adversarial Position

11. From an adversarial position a primacy of importance is placed upon union organisation as a means of supporting industrial action and preparation for conflictual situations. This is attempted by the mass involvement of members in the democratic procedures of the union, which include: the election of union officials; voting on the acceptance or rejection of specific proposals; and attendance or contribution to representative conferences whose decisions become sacrosanct union policy. The democratic principles of the union are encapsulated in the union's rule book. Whilst this prescribes the procedures and practices of the
democratic decision-making, it has the contradiction of limiting involvement in this complicated process to those well acquainted with its operation. A further contradiction of this position is the importance attached to strong leadership in engendering mass mobilisation of the membership in support of the union, which tends to create an oligarchic elite group controlling the union.

12. The role of specialised resources is reduced to providing propaganda material and considered irrelevant detracting financial resources away from the major task of supporting mass industrial action. From the politicised perspective resources for education may be considered important provided this has suitable political aims, although involvement in industrial action may be considered the best form of political education. Furthermore, the importance attached to democratic and collective activity will extend to the desire that all union officials should be elected representatives and that there is an equality of their wages with that of the membership.

Union Organisation: The Co-operative Position

13. In contrast to the above, the co-operative position strives to protect stability within the union's organisation. For example, whilst the density of membership will be important for ensuring sufficient revenue, active membership involvement may actively be discouraged if it is likely to affect the union's stability. Union organisation may be perceived as an hierarchical structure with professional negotiators who represent the members in obtaining the 'best deal' possible. Decision-making is left to the control of the professionals with a semblance of democracy to guide them. Consequently, resources and facilities are centralised in support of these professional negotiators and emphasis of
the leadership is placed on it controlling rather than guiding the membership.

Union Organisation: The Independent Participative Position

14. The aforementioned descriptions represent stereotypes of traditional union organisations, aspects of which may be found in most union structures and have resulted in particular forms of decision-making. The independent participative position, with its emphasis towards the development of detailed and sophisticated policy, does not seek to replace existing practices and democratic procedures which are the basis for membership involvement and control, but it will seek to extend and refine the union's decision-making and formulation of policy. For this to be achieved importance must be placed on the adequate provision of expertise and resources that enable union representatives and members to be supported in their participation in technological change. Furthermore, for these resources to be effectively utilised requires a revision of traditional union decision-making, determining: how 'experts' can work alongside union representatives; how expertise can be accumulated within the union and the knowledge disseminated among representatives and members; and how detailed policy formulation can be sustained.

15. Policy formulation and the detailed planning of strategy are by no means a new area of union activity, although it only tends to be well developed over a narrow range of issues oriented around the economic pursuits of unions, such as annual wage negotiations. It is not an area well developed for pursuing something as strategically important as the introduction of new technology in the workplace. But for this to be sustained requires, at the very least, a rudimentary understanding of the technology itself and the system's design and development process.
Moreover, this understanding is needed in order to achieve a greater democratisation over this process thereby extending the involvement of union representatives and members in technological change and shaping the technology and organisation of work in their interests.

16. Just how union decision-making can be developed to facilitate the formation of policy and the planning of strategy for an influential and effective intervention in a computer system's design and development process is open to question. There are few established precedents to follow, although the activities of computing specialists and management representatives involved in this process could provide a model for unions. The type of strategic planning and methods for computer project management has to be replicated within union decision-making in the context of the other demands of the union's organisation, such as pursuing a democratic and collectivist ideal. There is an inherent challenge to unions in being able to retain the positive elements of the traditional organisation that permit the involvement of the individual member whilst blending in forms of decision-making that can construct coherent, articulate and sophisticated policies along with the strategies to sustain them. The development of union structure should seek to advance in both areas: improving union organisation and promoting greater membership involvement, including membership recruitment; and formulation of a more sophisticated policy, linking the rhetoric of national demands to the 'commonsense' of the workplace with an appeal that can unite workers with the consumers of their product.

Union Involvement

17. 'Union involvement' is concerned with the external relationships of the union, where policy and strategy are actioned and/or applied. Three
categories can be defined of groups with whom the union has some kind of involvement, these are 'employer representatives', 'other unions', and 'interest groups'. Involvement with employer representatives is formally based on the procedural arrangements for collective bargaining, although a variety of informal networks may exist operating outside the established bargaining structures. How the informal and formal aspects interrelate, the extent of this involvement and its level and content will vary considerably between individual bargaining units. Likewise, involvement with other unions and interest groups (these will include pressure groups, political parties, etc.) will have formal and informal aspects with a variation between individual bargaining units.

18. Union involvement is the translation of union policy into action. It, therefore, follows that like union policy, union involvement has quantitative and qualitative dimensions relating to the range and depth to which issues are pursued. The quantitative dimension relates to the range of issues which are on the agenda for discussion or engenders specific action and, again like union policy, this range will have a dichotomy of issues based upon economistic and/or job content issues. The qualitative dimension relates to the depth to which issues are discussed or considered. This can be seen as a continuum, ranging from little discussion to extensive consideration and action. In terms of collective bargaining this continuum can be polarized from consultation to negotiation. The former where the issue is discussed although decisions and action over the issue remain the prerogative of the management, whilst the latter relates to issues where union agreement is necessary. The three categories of union involvement, as defined above, can be considered against the three union policies.
Union Involvement: The Adversarial Position

19. From an adversarial position union involvement will lay stress upon the importance of adhering to the formal bargaining procedures with employer representatives. This is to ensure that union representatives maintain a clear separation of interests between themselves and employers and that union representatives operate within the democratic structure of the union. Informal contact between unions and employers will be deterred because of the overt conflict of interests, although adherence to this position for ideological/political reasons may perceive such informal contact as a form of class collaboration which will undermine the collective class interests of unions.

20. Involvement with other unions and interest groups may be considered important from this position particularly when they are all threatened or all have a self-interest at stake. From its politicised perspective, the joint representation of unions will be considered important to sustain forms of class solidarity among workers and to engender mass class-based industrial action. However, this perspective may result in a greater ideological selectivity of involvement with interest groups, on the basis of class allegiance and political point of view, rather than eliciting a more pragmatic response to an issue which could result in the formation of alliances with groups having opposed class based interests.

Union Involvement: The Co-operative Position

21. From the co-operative position involvement with employer representatives may be encouraged to occur informally as well as formally; the informal involvement amounting to passive union participation which operates in conjunction with the formal collective bargaining. However, the latter may degenerate into more of a 'rubber stamping' exercise with
negotiations being conducted between the union's professional negotiators and employers on the basis of determining appropriate 'deals'.

22. Other unions are, from this position, considered as potential competitors with their own self-interests to pursue, although where a coincidence of interests is apparent then joint approaches may be adopted. The construction of alliances on such a pragmatic basis would probably result in the unions' position being more adversarial than co-operative. Similarly, alliances with interest groups would be ignored apart from where there was coincidental self-interest and then only in opposition to particular issues. The basis of this reluctance to form alliances may emanate from the priority of ensuring stability within the union and a paranoia that any outside interest group may challenge this stability.

**Union Involvement: The Independent Participative Position**

23. For the independent participative position to be effectively pursued requires an involvement with employer representatives which is formally based upon a structure with the flexibility to permit multi-level contact. This needs to create forums for collective bargaining and a means for a more informal exchange of information and discussion over a project (the relevance of 'integrative bargaining' as discussed in Chapter 2, Part 2, paragraph 17, would appear to have some pertinence here). Union involvement could then be undertaken over a widespread range of issues and in a variety of forums. For example, involvement with those engaged in developing the system, i.e. the computing specialists, could be informally constructed around a series of small discussion groups, although union representatives would play a pro-active role by undertaking their own research and formulating their own proposals for the project. Moreover, the independent activities of union representatives must have a
legitimacy and an equal bearing with the interests being pursued by other groups, notably the employer. Involvement in the more strategic decisions of a project might then be extended even through the more traditional collective bargaining forum.

24. Ideally, involvement with 'employer representatives' should permit unrestricted negotiations over all issues. The various levels and forms of involvement should inter-relate, rather than duplicate, being part of a clear and coherent union strategy. This would be underlaid by a clear identification of the union's independent perspective related to how the computer system should develop in order to fulfil the interests of the unions. However, the extent of negotiations is a political consideration dependent upon the power relationships between management and unions. Moreover, because negotiations are legitimated and restricted by management the extent of union involvement is limited. In recognition of this 'political reality' involvement from an independent participative position has two related but distinct aspects. Firstly, involvement with the actual project or technology on the basis of seeking to shape technology in accordance with the interests of the unions and their members. Secondly, strengthening of the union organisation in acknowledgement that unions occupy a subordinate position vis-a-vis the employer which needs to be corrected in order to permit a more equitable union involvement. The extent to which these two aspects are pursued will be dependent upon the political dimension of industrial relations.

25. Involvement with other unions and a wide variety of interest groups is important from this position, only through forming and maintaining such alliances as part of a long term strategy that a counter-hegemonic position be truly developed. It is by widening the sphere of union
activity, relating the workplace activity of union members to their social activity and making connections between the interests of union members with those of consumers, pressure groups, etc., that the role of unions can be politicised. Without such alliances self-interest is narrowly defined and only relates to short term aspirations, lacking the richness and depth of awareness that is necessary to engender a longer term focus aimed at prescribing realisable alternative social scenarios fostering a counter-hegemonic position which should form such an important element of this approach.

Summary

26. A summary of this framework is illustrated in diagram 10. It may be expected that a consistency exists between each area of union activity and a particular strategy. Furthermore, it may also be expected that changes to the bargaining position and circumstances surrounding negotiations should result in corresponding changes to the union strategy. Inconsistency of union activity with regard to strategy and a lack of dynamism in the developing of union strategy alongside changing circumstances would appear to demonstrate a vacillating and/or incoherent position which could detract from the effectiveness of a union response.

27. The three union strategies are abstract ideal types. The adversarial and co-operative positions relates to a traditional reactive union response, whilst the independent participative position proposes a proactive form of response. The framework points to the extent to which union activities need to be developed in order for unions to undertake a more effective and purposeful role over the introduction of new technology. It may be expected that the complex nature of technology bargaining
results in elements of all three strategies being discernible in a specific instance. However, we can still expect to be able to establish dominant features of each strategy in the specific activities of the union and thus enable it to be located within a particular category of the framework. This provides a means of comparing each case study and for exploring how union activity may be developed to permit more effective intervention over a computer system's design and development process.
**Diagram 10**

**ANALYTICAL FRAMEWORK OF UNION ACTIVITY SET AGAINST UNION POSITION(S)**

<table>
<thead>
<tr>
<th>UNION ACTIVITY</th>
<th>Policy</th>
<th>Organisation</th>
<th>Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Adversarial</strong></td>
<td>Opposition. Defensive. Protective from perceived threat. Technology as economically determined.</td>
<td>Supporting Industrial action. Mass involvement of members. Support services to sustain above.</td>
<td><strong>BARGAINING:</strong> Formal Negotiations only. <strong>OTHER UNIONS:</strong> Formal. <strong>Joint Committees.</strong> <strong>INTEREST GROUPS:</strong> Highly Selective.</td>
</tr>
<tr>
<td><strong>Co-operative</strong></td>
<td>Acceptance or even welcome. No perceived threat, coupled with perceived advantages. Technology as neutral/benign, i.e. technologically determined.</td>
<td>Ensuring stability. Professional representatives obtaining best deals. Support services to 'professionals'. Usually centralised.</td>
<td><strong>BARGAINING:</strong> Formal/Informal contact (often acquiescing to passive participation) <strong>OTHER UNIONS:</strong> Potential competitors. <strong>INTEREST GROUPS:</strong> Not promoted.</td>
</tr>
<tr>
<td><strong>Independent Participative</strong></td>
<td>Cautious acceptance. Identifying potential positive aspects in Counter-Hegemonic perspective. Technology as non-deterministic.</td>
<td>Super-structure for developing sophisticated policy. Stress on resources, education and suitable expertise. Developing decision-making and policy formation.</td>
<td><strong>BARGAINING:</strong> Multi-level bargaining with independent research to sustain involvement. <strong>OTHER UNIONS:</strong> Essential, in various forms. <strong>INTEREST GROUPS:</strong> Essential in the formation of alliances.</td>
</tr>
</tbody>
</table>
PART 3. APPLICATION OF THE ANALYTICAL FRAMEWORK
TO THE THREE CASE STUDIES

The Bedford Prison Case Study

1. In the Bedford Prison Case Study two separate union strategies are apparent that relate to the Prison Officer's Association (POA) and the constituent unions (including the CPSA) which form the Home Office Trade Union Side (HOTUS) of the Home Office Whitley Council. The different strategies are indicative of divisions among the unions representing Prison Department workers and reflective of the differences in the location of the bargaining strength of the POA and HOTUS - the former at the local level, whilst the latter is at the departmental level. Furthermore, these differences underlie the perception of the employment consequences of introducing technology, with HOTUS perceiving technology a threat to the clerical and administrative work of its members, whilst the POA perceived no such threat to their members.

Union Policy

2. The formal policy of HOTUS was to obtain a new technology agreement that would cover all areas of the Home Office. The agreement, whilst having provisions for extending procedural arrangements and the range of issues for discussion, was primarily aimed at securing employment protection for workers whose jobs were perceived as directly threatened by the introduction of new technology. The Bedford Project was a component of this policy with specific employment protection guarantees being given for the duration of the project. The Bedford Project was also considered to potentially add to the bargaining strength of the unions pursuing a satisfactory agreement; as the project developed there would be a greater
urgency on the part of the Prison Department to replicate the project in other penal establishments.

3. In contrast to HOTUS, the POA policy welcomed the project on the basis of the tangible benefits it could provide to prison officers. With government commitment for expanding the prison system, with its consequence of increasing the numbers of prison officers, the POA felt confident that the new technology posed no threat to their members' jobs. The orientation of the POA policy was at the local level, although calls were made for a departmental (Prison Department) new technology agreement. The emphasis of their policy was to seek control over the use of the Bedford project after it had been implemented. Underlying this motivation may have been an informal policy of the POA to recruit all workers in a prison into the POA. In relation to the analytical framework the policy of the POA was clearly co-operative, a position with some consistency to their apolitical attitude towards industrial relations more generally. In contrast, and in keeping with their politicised perspective, HOTUS maintained an adversarial position in response to the potential threat of new technology.

Union Organisation

4. The levels at which union policy for the Bedford Project was formulated reflects the organisational differences between HOTUS and the POA. The constituent unions of HOTUS, with branches covering large geographic areas and dispersed pockets of members, had a weak local influence in individual establishments, but as branches that were part of a much larger union, a strong national presence. Consequently decision-making and policy formation were not only centralised but also related to the wider interests of all union members throughout the Home Office. As a
result little regard was given to the Bedford Project and policy remained little developed. The strategic implications of the project for the rest of the Prison Department made it a departmental rather than a local or branch issue. Thus, HOTUS representatives acted towards the project as professional union decision-makers acting centrally in the best interests of all Home Office workers; they used the project as a bargaining lever to obtain a satisfactory technology agreement and paid little regard to neither the more immediate interests of the local members nor the involvement of the local union branches.

5. The POA with their strong and well organised local branches formulated policy locally. The strength of the local branches, along with the weakness of the national organisation, creates branches which operate autonomously and are protective of their independence from the national organisation. The POA at the local level, thus, excluded national officials from the project and formulated policy in pursuit of their own interests. This formulation occurred in a pragmatic way responding to situations as they became apparent and did not develop in any co-ordinated or strategic way. Nevertheless, the experience of the Bedford Project did result in the local branch proposing that the national POA obtain a new technology agreement for the Prison Department.

6. The location of both the POA's and HOTUS's decision-making and organisation within the analytical framework is in the co-operative category: the POA because their pragmatic response, which eventually led to industrial action over who controlled the system, lacked any strategic determination and was, for the major part, non-conflictual; the constituent unions of HOTUS, because there was a lack of membership involvement in the union's decision-making and because of the centralised control by
union officials who appeared unwilling to venture into any form of new policy option. The adoption of an organisational form closer to a co-operative model than an adversarial one, which would have been consistent with the HOTUS policy, demonstrates an organisational problem with the HOTUS response and is discussed further, in paragraph 10 below.

Union Involvement

7. The formal union involvement of the constituent unions of HOTUS with the Bedford Project was through the Home Office Departmental Whitley Council and its technology sub-committee meetings. There was little, if any, informal contact, with direct experience of the project limited to two formal presentations held at Bedford. The structure of HOTUS ensured that the constituent unions combined to maintain a united position over the project, although this was limited to the non-uniform grades unions and did not involve the most important union the POA. Throughout the project the divisions between HOTUS and the POA were apparent.

8. The POA were formally involved through the local Whitley Council and informally through their considerable direct experience with the project as it was developed. In addition, whilst they formally had no contact with other unions they did, on a more informal basis, have considerable contact with local union members and often acted as the mouthpiece for all workers at Bedford. The position of local HOTUS members differed from the formal adversarial response in that locally they were actively involved in developing and co-operating with the project. The inconsistency of the local HOTUS members' actions with that of the departmental representatives is indicative of the organisational problem of the HOTUS unions. Moreover, the formation of alliances with any outside interest groups was non-existent for both HOTUS unions and the POA.
9. In relation to the analytical framework the formal involvement of
the HOTUS unions may be classified as adversarial maintaining contact
only through well established bargaining procedures and only with other
unions with a similar interest, although local HOTUS members did maintain
what can be classified as a co-operative position in their informal
involvement in the project and with the POA. The POA's involvement was
through both informal and formal contact and was based on a co-operative
position.

Summary

10. The approaches to the Bedford Project by the CPSA and POA are
located within the analytical framework as illustrated in diagram 11.
The HOTUS policy was dominated by an adversarial approach establishing
clear but limited economistic principles for the acceptance of technol-
ogy. This was consistent with the formalised involvement in the project
based on well established procedures although was inconsistent with the
organisational weakness of the HOTUS unions in the Prison Department.
This involvement was characterised by highly centralised control and the
exclusion of local members and the local branch from contributing to
policy formation over the project. Whilst it reflected the difficulties
of organising a geographically dispersed membership it was also in the
interests of over-extended departmental union officials to maintain a
monopoly of control and a stability within the union organisation. For
the CPSA the problems of organisation undermined the effectiveness of its
response to the project.
Diagram 11

LOCATION OF UNION ACTIVITY IN THE ANALYTICAL FRAMEWORK: THE BEDFORD PRISON CASE STUDY

<table>
<thead>
<tr>
<th>UNION ACTIVITY</th>
<th>Policy</th>
<th>Organisation</th>
<th>Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adversarial</td>
<td>HOTUS</td>
<td>HOTUS (including the CPSA)</td>
<td>HOTUS (including the CPSA)</td>
</tr>
<tr>
<td>Co-operative</td>
<td>POA</td>
<td>HOTUS (including the CPSA)</td>
<td>POA Plus, informally, HOTUS members at Bedford Prison</td>
</tr>
<tr>
<td>Independent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participative</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
11. The inconsistency of the HOTUS strategy stands in contrast to the POA's consistent co-operative strategy. The POA were able to pose an effective challenge over the control of the implemented system. Whilst this did not address itself to more fundamental questions about the nature of the system's design process or seek to extend union influence directly over this process, it did demonstrate a more coherent policy than that of the other unions and was based on first-hand experience with the project.

12. Locally, CPSA members were involved in the project but with their exclusion from the formal, central decision-making and the political differences and suspicion of sectional encroachment between the POA and CPSA, such local involvement made them hostage to a managerial strategy of user involvement. The extent of this managerial strategy whilst it included the extensive involvement of the local POA members, was insufficient to make the project successful - this demonstrated the need to secure workers' consent and compliance in the project.

The DVLC Case Study

13. In the DVLC case study the CPSA's policy can be observed as developing in response to the replacement computer project through three periods: from the mid-1970s up till 1983; from 1983 till 1984; and the duration of the IIP independent monitoring from October 1984 till July 1985. The DVLC, being constructed around the use of technology, made the introduction of new technology not so much a new phenomenon but more a matter of establishments evolution. The technology itself was not a contentious issue - the implications it raised for the re-structuring of the organisation and work procedures were.
Union Policy

14. In the first period, from the mid-1970s till 1983, the CPSA policy could be described as disparate and incoherent extending across a range of economistic and job-content issues, with the former dominating the latter. The depth of policy varied, largely consisting of union rhetoric, although where well established principles and guidelines had been established policy was better developed and more articulate; for example, in the union policy over 'Management Information Systems'.

15. By 1983, and into the second period, policy had evolved a greater coherence and can be seen to have moved from a passive acceptance that allowed the project to be developed before issues were negotiated, to that of confrontation, establishing demands and conditions for union acceptance of the project. For example, prior to 1983, the upgrading issue had been identified as one of the key and most contentious issues; the CPSA had accepted that negotiations over changing work boundaries and the question of job demarcation would proceed after the extensive IIP trials. After 1983 this position altered with the CPSA demanding settlement of the issue before the trials began - it was this claim that resulted in the national review of Data Processing and Clerical grades. The overall emphasis of the policy was, nevertheless, still oriented towards economistic issues. It was in confronting this problem that the CPSA IIP independent monitoring initiative was established.

16. The establishment of the CPSA monitoring marks the third policy phase. In place of the disparate and incoherent policy a 'Technology Charter' was drawn up which defined the CPSA policy and focused attention on the importance of detailed policy formulation. However, development of this charter was constrained by the limitations of the production
process itself, management's reluctance to permit the extension of union involvement and a lack of experience and available facilities to help union representatives to consider union strategy and the project more strategically. Despite this drawback, and through the work of the IIP monitoring team, many job content issues were raised at the instigation of members in the IIP pilot trial dis-satisfied with some of the conditions in the pilot trial - this extended the range of issues on the union's agenda.

17. In relation to the analytical framework the first period of the CPSA's policy can be located in the co-operative position as the absence of the policy amounts to a passive form of acceptance. The second period can be located in the adversarial position as the contentious issues became defined and the union's policy became more confrontational. In the third period the policy developed into an independent participative form with the independent monitoring and greater attention given to the articulation of policy.

Union Organisation

18. The DVLC branch has several characteristics which contribute to decision-making and policy formation being made locally. For example, a large membership working in close proximity in one geographic location and substantial facility time afforded to branch officials creating what may be considered a group of local full-time union representatives. In addition, the branch's isolation from the CPSA HQ and its large size contribute to its special status. Its prominence ensures that a CPSA national full-time official devotes considerable time and energy to the branch, playing an important role in the decision-making and policy formation of the branch. His or her position is the point of contention
where national officials' attempt to exercise control over the branch, this being contested by the local union representatives.

19. In the first period, the formation of policy was developed ad hoc, usually in response to the development of the project itself. In the second period, 1983-1984, the policy became more defined with greater awareness of the potential adverse effects being gained through experience of the project and as its eventual form and shape became clearer. In addition, greater effort was given to raising the membership awareness of the critical issues and bargaining over the project through extensive floor-meetings and newsletters being distributed. These had the aim of engendering membership support for possible industrial action. However, this initiative has been criticised for being a one way form of communication which limits the active involvement of the membership in the union's decision-making.

20. The CPSA IIP monitoring initiative focused attention on the formation of policy by exposing the weakness of the branch position in not providing sufficient attention to strategically planning policy or strategy over the project. The application of this new resource resulted in greater information being generated and new policy issues being raised for the local branch to deal with, although the infrastructure of the branch failed to meet this challenge. Furthermore, the monitoring initiative brought the members working in IIP into a two-way form of communication with their union representatives which permitted a closer form of involvement with the union's decision-making.
21. In relation to the analytical framework the organisation of the CPSA can be identified as developing consistently with the development of union policy over the three periods. Initially this is located in the co-operative position because of the detachment of the union officials from the membership. In the second period it moves to the adversarial position as attempts are made to involve the membership but only to gain mass support for potential industrial action. The third period is where the independent participative position is adopted through closer contact with the membership in the monitoring initiative and greater attention being paid to the formation of policy.

Union Involvement

22. Bargaining over the project developed along procedures consistent with the Whitley system. This was originally through the Departmental Whitley Council but in 1979 a special 'Joint Working Party' was established, being extended in 1982 to two levels - a local and a departmental joint working party. In 1984 the CPSA independent monitoring of IIP presented a new form of involvement supporting and extending the working parties. The formal bargaining procedures reflected a management strategy which initially excluded the unions from direct involvement in the development of the project but then sought to engender union cooperation to ensure a smooth implementation, and may be seen as part of a wider strategy to overcome the deficiencies in the original design of the work procedures.

23. The involvement of the unions covered a wide range of issues although the information provided to the CPSA swamped rather than informed representatives. The CPSA was placed in a position where they were responding to management documents and although job content issues
featured prominently in discussions, the extent of the union's intervention was marginalised to consultation. The CPSA's monitoring initiative extended union involvement beyond previously accepted boundaries. This posed a challenge to the managerial strategy of user-involvement by constructing a union organisation which could closely monitor and influence the degree of involvement the membership had in the development of the project.

24. The relationship of the CPSA with other unions were formalised through the Whitley system. With all DVLC unions sharing adjacent suites of offices, representatives developed close informal links although the monitoring of IIP was entirely a CPSA initiative. There was no contact with outside interest groups and the formation of such alliances was never considered.

25. In relation to the three periods of policy development, outlined above in paragraph 13, and its location in the analytical framework, it can be seen that there is a consistency between union involvement and the other two areas of union activity. In the first period, the form of involvement can be defined as co-operative with the unions taking a passive role in the project's development through the first joint working party. This developed, in the second period, into an adversarial form as negotiations became more confrontational and oriented towards specific issues. The third period of involvement was based on an independent participative approach with the monitoring initiative creating new forms of union involvement.
Summary

26. The development of the CPSA's policy at the DVLC over the replacement mainframe computer project is illustrated in diagram 12. As can be seen there is a consistency across all union activities as it develops. In the period up until 1983 the unions maintained a co-operative position, based on expectations that the new project would result in tangible improvements in the jobs of members with the re-organisation of work procedures providing a more satisfying work experience and an overall increase in pay levels. The position was consistent with the formulation of union policy which was undertaken by a strategically located group of union officials; they formed, within the circumstances of the DVLC, a local elite group controlling union policy and maintaining their close links with employer representatives through the various working parties.

27. The 1983-1984 period was the culmination of a developing adversarial position with policy becoming confrontational and being defined as a set of basic demands for acceptance of the project. The organisation, although retaining its elitist characteristics, became oriented more towards promoting greater membership awareness of the project, whilst involvement through the established bargaining procedures became focused on negotiating the outstanding economistic issues.

28. The independent monitoring of IIP may be seen as a development of the adversarial strategy as it introduced additional forms of union activity. Policy became defined and clearly articulated so far as it had been developed, and the organisation of the union also improved. However, both these areas had considerable limitations in supporting the initiative. Policy was never fully explored or developed and the organisation did not fully come to terms with the increased resources with
which it was provided. However, it was in the area of union involvement that the greatest benefit of the initiative was felt. It provided a direct means for union intervention and participation in the project without compromise to the union's integrity or independence. Moreover, it provided an approach which could cope with the management strategy of promoting limited forms of user involvement and could constructively counter attempts to elicit a benign compliance and consent from the workers to the project.
### Diagram 12

**LOCATION OF UNION ACTIVITY IN THE ANALYTICAL FRAMEWORK: THE DVLC CASE STUDY**

<table>
<thead>
<tr>
<th>Adversarial</th>
<th>Policy</th>
<th>Organisation</th>
<th>Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPSA (including other DVLC unions)</td>
<td>1983 - 84</td>
<td>CPSA (including other DVLC unions)</td>
<td>1983 - 84</td>
</tr>
<tr>
<td>Co-operative</td>
<td>CPSA (including other DVLC unions)</td>
<td>Mid '70s - 1983</td>
<td>CPSA (including other DVLC unions)</td>
</tr>
<tr>
<td>Independent Participative</td>
<td>CPSA</td>
<td>October 1984 - July 1985</td>
<td>CPSA (including other DVLC unions)</td>
</tr>
</tbody>
</table>
The Land Registry Case Study

29. In the Land Registry case study the policy of the Departmental Trade Union Side of the Departmental Whitley Council can be identified as developing in three distinct periods over the Registration of Title computer project. These were from 1976 till 1982, from 1982 till 1985 and from 1985 onwards.

Union Policy

30. In the first period, from 1976 till 1982, the union policy consisted of vague and disparate demands oriented towards preserving the status quo. Some of these demands demonstrated a lack of appreciation of the computer system's design and development process. For example, the unions demanded the resumption of normal working arrangements following the completion of any trial of the new system, a demand which in the context of the Land Registry system was technically impossible to achieve. Other demands were better defined, particularly where policy was already well developed, such as the call for ending the outside examination of Land Registry work. Overall, the lack of defined policy in this period reflected the unions' passive acceptance of the project.

31. The second period, from 1982 till 1985, developed union policy with the adoption of the 'nine-point plan' as the basis for securing a satisfactory departmental new technology agreement. This provided a coherent policy focused on obtaining satisfactory employment guarantees in the agreement and marked the move towards a more confrontational style of policy.

32. The third period, from 1985 onwards, built on the policy of pursuing a technology agreement by extending it to encompass independent monitor-
ing of the project. The nine-point plan was expanded and the job loss clause is re-defined to permit greater scope for bargaining. Policy was also extended into a greater depth over proposals for new work procedures, job design and levels of grading, although such issues were pursued as part of a wider strategy to strengthen the unions' bargaining in order to secure satisfactory employment guarantees. In addition, union policy, for the first time, addressed itself to job content issues at the local level.

33. In relation to the analytical framework the unions' policy for the project can be seen as developing from the co-operative to the adversarial and then towards the independent participative positions. The co-operative position of the first period arose from the unions' passive acceptance of the project and lack of definition or coherence to policy. In contrast the second period witnessed the adoption of the nine-point plan as a set of confrontational demands for union acceptance of the project. Whilst the third period extended union policy taking a more strategic perspective which equates to an independent participative position.

Union Organisation
34. The Land Registry unions are organised in well established branches geographically dispersed through mainland UK; each branch is organised around a single office with sufficient members to make a significant presence, and within the CPSA these branches all combine to form a single section. However, the total number of members in the CPSA Land Registry Section is about the same as the number of members in the single DVLC branch. It thus constitutes a small section within the CPSA. Throughout the duration of the project, decision-making and policy formation has
remained a departmental union responsibility rather than a local union responsibility. In the CPSA it is the senior section officials who have been the major actors instigating and developing policy. One of these officials is allocated specific responsibility for all technology issues in the department - from 1985 onwards this became his sole responsibility as the departmental unions specialist for monitoring the project.

35. In the first period of the project's development, from 1976 till 1982, the unions' policy was largely defined by the SCPS who led negotiations on the union side of Whitley Council meetings. A feature throughout the policy development was that the unions' position was always presented as united, although actually being undertaken by different unions at different stages of its development. For example, from the second period onwards, i.e. from 1982 onwards, the lead in negotiations passed from the SCPS to the CPSA. Furthermore, it was the CPSA's full-time section officer and section chair who devised the nine-point plan in response to the dis-satisfaction they had felt with the national new technology agreement. This period was indicative of a more confrontational union organisation within the department's deteriorating industrial relations.

36. It was the small group of senior elected CPSA section officials along with the CPSA section full-time officer who formed the Land Registry unions' policy-making body and it was this group that the Author joined in 1985 to facilitate the development of policy in the third period. The collectively devised strategy included: drafting the new technology agreements; establishing a two-tier bargaining structure which brought local negotiations at Plymouth under the control of the departmental unions; improving communication with the membership; and estab-
lishing an independent means of monitoring the project. The Author's role in the formulation of this strategy was to facilitate both discussion amongst the CPSA and other union officials by introducing new ideas from other bargaining situations and also to focus policy on a more strategic and longer term perspective.

37. The union organisation can be located in the analytical framework as developing consistently over the three periods of union policy. The centralisation of decision-making and lack of actual policy formation in the first period is indicative of the co-operative position. Whilst this centralisation of decision-making persisted throughout the second and third periods, the emphasis upon confrontation and engendering membership support for industrial action in the second period locates it in the adversarial position. The third period contained numerous features that allows it to be located in the independent participative position.

**Union Involvement**

38. Formal bargaining over the project occurred centrally through the Whitley system and was undertaken between departmental management and the departmental union representatives. The unions were excluded from the early decision-making of the project (when its configuration was determined), although they were informed of the project's developments. The limited consultation was in keeping with the traditional paternalism of the department's industrial relations; and whilst the unions may not have been over-eager to embrace the introduction of new technology, their lack of involvement amounted to a passive acceptance of the project. Union co-operation with the project extended to the discussions over proposed new work procedures undertaken in 1982 through the joint working party.
39. The joint working party failed to reach any satisfactory conclusions and demonstrated the disadvantaged position of the unions in having little clear vision of how work could be organised in the department to fulfil the interests of their members. Following this rather abortive exercise involvement became focused on negotiations over a new technology agreement. The tone of these negotiations was more confrontational than earlier discussions, indicated by the failure to agree particular employment guarantees which resulted in several breakdowns of negotiations. However – and throughout this period – the formal involvement at the national level was contrasted by the informal involvement of the members locally, particularly as the project developed towards a managerial strategy of user-involvement.

40. The local involvement of members at Plymouth was put onto a more formal basis when the departmental structure was extended to include a local negotiating committee. This coincided with a broadening of union involvement more generally, negotiating job issues such as grading levels, work procedures, job design, etc. The involvement of the CPSA with other unions was formalised through the operation of the Whitley system and this ensured a united position was always maintained by the unions, particularly in the latter half of the project's development. Throughout the project there were no alliances formed or contact made with outside interest groups.

41. The development of the unions' involvement can be located in the analytical framework with a consistency to both union policy and organisation. The first period equates to a co-operative position with the unions passive form of involvement illustrated by the joint working party. In the second period the involvement was adversarial with the
unions adopting a more confrontational position. Throughout these periods the involvement of local union members at Plymouth amounted to a form of co-operative involvement but only outside the formal bargaining procedures. This was redressed in the third period when the monitoring and two-tier bargaining was established.

Summary

42. The development of the unions' policy as illustrated in this case study has a consistency across all areas of union activity. In relation to the analytical framework, illustrated in diagram 13, this can be seen to develop from the co-operative to the adversarial and then to the independent participative position. From 1976 till 1982 a co-operative position was dominant, with a loosely defined union policy which appears to have accepted the technology on the expectations of potential benefits to members that had been promised by the Land Registry management. Whilst union representatives may have been sceptical about such promises, particularly as promises made about the extent and timing of consultation were regularly broken, the basis for this co-operative position was due to the lack of visible development of the project that did not even impinge upon the members work. This is characteristic of a reactive response from the unions.

43. The development from the co-operative to the adversarial position of the second period, from 1982 till 1985, occurred in the context of a deteriorating industrial relations climate within the department and a growing awareness and articulation of the potentially adverse consequences of introducing technology. The adoption of the policy to pursue a new technology agreement by establishing a set of demands for the acceptance of technology was a move away from a reactive position.
Diagram 13

LOCATION OF UNION ACTIVITY IN THE ANALYTICAL FRAMEWORK: THE LAND REGISTRY CASE STUDY

<table>
<thead>
<tr>
<th>UNION ACTIVITY</th>
<th>Policy</th>
<th>Organisation</th>
<th>Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participative</td>
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</tbody>
</table>
However, it was also a move towards a confrontational position rather than one seeking to mediate the introduction of technology in a more participative way.

44. The independent participative position, adopted from 1985 onwards attempted a more pro-active form of policy option, and also addressed itself to formalising the involvement of local members at Plymouth. This attempted to instigate changes in all areas of union activity to allow a more strategic development of policy and an overall strengthening of the unions' organisation. The initiative was oriented around the interests of the departmental union representatives rather than local union representatives. It was this group, and in particular the CPSA representatives, that maintained control over the unions' decision-making and policy formation. Thus the independent participative position was adopted as a strategy to help strengthen their position rather than it being directly applied to permit greater membership involvement in the project.

Comparative Summary of the Three Case Studies

45. The relationships of the unions' positions as shown by the case studies is illustrated in diagram 14. This demonstrates two distinctive features. Firstly, the difference between the policy pursued by the CPSA in the Bedford Prison case study and that pursued in the other two case studies. Secondly, the similarity in the development of union policy in both the DVLC and Land Registry case studies.

46. In comparison to the DVLC and Land Registry case studies, the Bedford Prison case study demonstrates a CPSA policy (along with the other non-uniform representative unions) which was not developed but remained
## Diagram 14

**COMPARISON OF THE THREE CASE STUDIES IN RELATION TO THE ANALYTICAL FRAMEWORK**

<table>
<thead>
<tr>
<th>Adversarial</th>
<th>Union Activity</th>
<th>Organisation</th>
<th>Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Policy</td>
<td></td>
<td></td>
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static and was hindered by the problems of organising members in the Prison Department. The CPSA policy, based on an adversarial position, contrasted with that of the POA who adopted a more co-operative approach. Furthermore, whilst the POA demonstrated a consistency of their position across all areas of union activity, the CPSA's position appeared inconsistent with an organisational and decision-making structure which relates more closely to the co-operative rather than adversarial position. The difference between the POA and CPSA (as part of HOTUS) is indicative of the divisive nature of industrial relations within the Home Office.

47. The CPSA's position in the Bedford Prison case study, unlike the CPSA's position in the other two, appeared to lack any development. Whilst the project was, from the management's point of view, unsuccessful in constructing a workable system for replication in other penal establishments, and because the project posed little immediate threat to the interests of CPSA members, the CPSA representatives were content to let the project flounder and saw little need to devise a particular strategy for the project. However, the CPSA's lack of initiative resulted in the project becoming a lost opportunity for them to gain greater insight into what new technology was to be introduced in the Home Office, how the management were deploying this technology and the forms of involvement and union strategy that could give the unions greater leverage over its introduction. In addition, the Bedford project may have been a lost opportunity to overcome the sectional differences between the POA and other Home Office unions.

48. In both the Land Registry and DVLC case studies the CPSA was confronted with the introduction of new technology in projects which would
result in widespread changes to the labour process of the majority of members. Whilst there were significant differences between the organisation and representation of the CPSA in both case studies in terms of membership numbers and levels of decision-making, they both display a similarity in the development of union policy. In relation to the analytical framework this progresses from the co-operative to the adversarial and, with the Author's intervention, to the option based on the independent participative position. This occurred at different times and stages of the two projects' development, although the similarity would appear to demonstrate significant common features of the development of union policy over technological change.

49. The initial co-operative position of the CPSA in both the case studies may be attributed to the procedural arrangements for collective bargaining being based on the Whitley system. Whilst this ensures that unions usually present a united position with other unions vis-a-vis the management, its limited operation is based on a consensus being maintained between the two sides. Consequently the style of discussion will always tend to promote a co-operative position, particularly as in the two case studies, union policy was neither coherent nor well developed and the unions had been specifically excluded from the strategic decision-making; the unions were only informed or consulted about such decisions after they had been unilaterally taken by management.

50. The acceptance of the technology in both the Land Registry and DVLC case studies (and to a lesser extent in the Bedford Prison case study) which underlaid the unions' co-operative position was due to the consistent emphasis made by the management that an objective of the projects was to improve the 'job satisfaction' felt by the workforce when operat-
ing the computer systems. The degree to which this intention was achieved - or rather not achieved - cannot be accurately established, because of inherent difficulties in measuring such a concept and an evaluation to determine this was outside the timescale of the research; but the inclusion of such an objective indicates the importance attached to gaining union and worker acceptance of the projects. However, the priority of the job satisfaction elements was subsumed by the economic considerations of the projects. This leads to the conclusion that promises made about the new systems providing an intrinsically more interesting work experience, no matter how well intentioned, were little more than managerial rhetoric used to sell the technology to technologically ignorant union representatives and workers who remained unaware of potential alternatives other than the system being proposed.

51. The initial co-operative position of the CPSA, alongside the other unions, has been attributed to their passive role in the Whitley Councils. However, as the unions gained a greater awareness of the potential implications of new technology and as they became more informed about the actual projects, they developed positions which were more adversarial. It is too simplistic to suggest that union policy changed overnight from a co-operative to an adversarial form, with subsequent consequences for the organisation and forms of involvement; what occurred was a slow development over a period of time, influenced by a variety of factors and culminating in one position dominating the other.

52. Why the unions' position became adversarial as policy developed can be attributed to the politics surrounding the unions' involvement in technology bargaining. The traditional role of the unions has been a reactive one, responding to the initiatives of management; the limi-
tions of the Whitley system may be seen as institutionalising this role within civil service industrial relations. In all the case studies the unions were excluded from the early and strategically important periods of the computer systems' design and development process. As a consequence they had no need for developing long-term policy nor the infrastructure to support such activity, although they did need to gain the organisational strength to oppose initiatives they did not like. In this scenario any development of policy will be in opposition to initiatives and thus confrontational. Given the understandable paranoia of the threat new technology poses to office workers, it is not surprising that the union position would have developed into an adversarial form invoking into action the well established union organisation and infrastructure to support such a position.

53. The adversarial position of the CPSA (and the other unions) in all the case studies was based on demands made for the acceptance of technology and was oriented around employment security and increased remuneration, i.e. they stressed the economistic issues. Demands were also made for job content issues. Whilst such issues are inherently more difficult to define than those relating to economistic issues they tend to be articulated unclearly and remain broad rhetorical statements. Moreover, the importance of job content demands was often detracted from by being perceived as a means for strengthening the unions' bargaining position in order to obtain economistic gains.

54. It was against this background that the third development in the CPSA policy took place. Influenced by the Author's intervention, the CPSA in the DVLC and Land Registry undertook an independent participative approach which, for a time, became the dominant union position. However,
in both cases this approach had a limited influence and was constrained by the situation in which it was developed. The union representatives adopted the approach to pursue traditional economistic issues and also to consolidate their positions in controlling the policy formation and decision-making in their respective union organisations. The adoption of this approach at a relatively late stage in the projects' development led to it being utilised for these objectives, rather than for ones which sought to alter radically the configuration of technology or to sustain greater democratisation over the introduction of technology. Moreover, the approach had to operate in respect of the politics of the CPSA's involvement, which placed considerable limitations on the extent of union involvement and also to the response to the requirements of the union representatives and their members at that particular time.

55. Among the more positive aspects of this approach was that it sought to redress some of the deficiencies in the CPSA's organisation that hindered its effectiveness in technology bargaining. This included: the lack of detailed policy formation; the narrowness of policy with little development of a strategic overview or long-term perspective; and instigation of an awareness to potential alternative technological scenarios. For CPSA (and some other unions') representatives the initiative was important for the useful contribution it made to strengthening their overall bargaining position vis-a-vis the management. Furthermore, the adoption of the independent participative position demonstrated an encouraging development of union policy; it went beyond options that narrowly defined the conclusion of new technology agreements just as a means for securing short-term employment guarantees, to one closer to the original ambitions for securing such agreements (see chapter 1, part 1, paragraph 12). At both the Land Registry and DVLC new forms of union
involvement for the evaluation and monitoring of computer projects were sustained. Moreover, these were acceptable because they maintained the integrity of union representatives for self-determination of their activity. This combined the organising of the union in areas undergoing technological change with the pursuit of greater intervention in the computer system's design and development process.

56. The independent participative approach seeks to permit effective union involvement in technological change by implicit recognition of the political relationship between unions and management. In the two pertinent case studies this approach was deployed around the narrowly defined political situation of relatively small groups of union representatives at a late stage in the computer system's design and development process. Nevertheless, although it was a limited and parochial application of this policy option, the case studies demonstrate the kind of reappraisal of union policy, union organisation and union involvement that is necessary if such a strategy is to be effectively pursued over technology bargaining. The re-assessment of union activity should be in terms of: a re-assessment of union policy; a re-assessment of union organisation, policy formulation and decision-making; and a re-assessment of the forms of bargaining, involvement with other unions and alliances with outside interest groups. These are all the subject of further discussion in the final chapter.
CHAPTER EIGHT

CONCLUSIONS
PART 1. TRADE UNIONS AND NEW TECHNOLOGY

1. The background to this study is the well documented recognition of the inherent inadequacies of union policy, organisation and involvement in coping with the introduction of new technology in the workplace. This has been discussed through previous research as cited in chapter 1 and is also a common recurrent theme in the literature concerned with the industrial relations surrounding new technology.\(^{(1)}\) The unions themselves have recognised these inadequacies which they have sought, since the early 1980s, to redress through the adoption of policies promoted in the influential TUC report 'Employment and Technology', and in particular the conclusion of new technology agreements. Whilst such agreements may be identified as the beginning of a longer term project that allows unions to come to terms with new technology, their lack of success is partially due to the constraints of the very inadequacies they are seeking to overcome.

2. The case studies demonstrate the problems that unions have in influencing technological change; central to which is the reactive position they are placed in by the political circumstances surrounding such change - a position they have traditionally accepted. The implications for unions of adopting this position can be illustrated with reference to diagram 15 which is a non-deterministic model of technological change charting the degree of choice over the selection and deployment of technology against the computer system's design and development process. The degree of choice relates to questions such as, who will use it? where will it be located? what configuration of technology will be deployed? how will it be used? and so on; the design process is a time dependent
variable charting the system's analysis, specification, design, development and implementation. It can be appreciated that as the system is developed towards implementation so the degree of choice diminishes.

3. From a traditional reactive position union influence is exerted at the latter stages of a computer system's development, usually when the membership is confronted by the physical presence of equipment, just before or even after implementation. It can be appreciated from diagram 15 that at this late stage there is little choice available as to what the technology will do and as to how it will do it. Whilst union involvement may have occurred well before this time (for example, at an earlier stage of design or even specification), the union's influence will tend to have been negligible. This is because the unions are excluded from the important decision-making stages, being consulted only after such decisions have been unilaterally taken by management; the area under the curve in diagram 15 is, and remains, hegemonic to management. Thus the unions respond to, rather than participate in, these decisions. As a consequence they lack experience in dealing and coming to terms with the degree of choice available at earlier stages of the system's development, i.e. participation in the relevant area under the curve (see diagram 15). In fact, the formation of union policy shows a lack of understanding of the whole area under the curve, and is better suited to making broad demands in response to proposals rather than the unions initiating their own proposals over something as strategic to the workplace as the introduction of new technology.
Diagram 15

NON-DETERMINISTIC MODEL OF TECHNOLOGICAL CHANGE

Degree of choice

analysis --- specification --- design --- development --- implementation

Computer System's design and development process
4. Confronted by technology at a stage when the degree of choice has been eroded and by technological trajectories that result from periods of decision-making where they have had little influence, the unions tend to perceive new technology as a pre-determined phenomena. The traditional reactive position gives rise to notions of technological development either as a neutral and natural force or as the outcome of some immutable economic law; in doing so it fails to appreciate the subtle complexity of social, economic, political as well as technological factors that through their interaction, influence the computer system's design and development process.

5. The limited degree of choice made available at the late stage of the computer system's development places the unions in the situation of either accepting the configuration of technology proposed or rejecting it outright. The former leaves them open to criticism over accepting change in a passive manner without contributing to the process of change itself, whilst the latter leaves them open to being labelled as 'Luddite', seeking to stop progress and being destructive reactionaries. Moreover, the lack of union policy formulation arising from the traditional reactive position places further constraints on the options the unions may choose to pursue. They have not paid attention to focusing union policy on the construction of an alternative vision for the use of technology which could have been sustained through their greater intervention in and influence over the earlier stages of the computer system's design and development process. This has led to union policies simply not being geared to articulating demands that are able to shape the technology, nor are they based on a detailed understanding of the technology and the organisational environment into which they are deployed.
6. Furthermore, the traditional reactive position of unions is supported by an organisational infrastructure which has developed, or to be more precise has been limited in its development, around this position. In particular are policy pronouncements based on broad over-generalised statements - the rhetoric of unions - calling the world to rights but often having little relevance or meaning to situations at the workplace level. The recurrence of the above criticisms concerning the lack of union policy formulation is directed not at its laudable ambitions, but to the translation of such policy in its application at the local level and its relevance to the individuals' work experience and, in a wider political sense, their social experience.

7. To overcome the deficiencies of the unions' traditional reactive position and so improve their effectiveness in dealing with new technology, numerous solutions have been proposed; these have been discussed in relation to previous research in chapter 1. They include solutions which have been addressed to overcoming existing organisational weakness as exposed by technology bargaining, such as the formation of combined shop-steward committees in areas of multi-union and multi-plant bargaining. Other solutions have pointed out the lack of resources and technical expertise that unions have at their disposal, particularly at the local level. However, whilst this specific deficiency has been readily identified in the previous research, there has been little consideration afforded to the kind of resources and expertise that would be effective and how they could be utilised. The CPSA sought to overcome their particular lack of expertise in this area by establishing the project from which this study arose.
8. A consistent theme running through remedies to improve the union's position has been the need for them to adopt a more pro-active approach. This can be illustrated as extending union influence into earlier and more strategic stages of the computer system's design and development process (see diagram 15). The policy of pursuing new technology agreements sought to achieve this by extending the procedural agenda into negotiating areas such as work procedures, job content, job design, etc. These agreements also sought to obtain substantive minimum guarantees for the union acceptance of technology. However, as the case studies demonstrated, within areas of the Civil Service such agreements became narrowly defined around securing limited employment guarantees.

9. The need for unions to adopt a pro-active approach can be seen as part of a wider initiative to permit a greater democratisation of the computer system's design and development process. This broader initiative may be described as a wider social project aimed at securing greater social control and direction of technology enabling a "wider range of social criteria to be used in assessing the desirability of new technology".\(^{(2)}\) In such a project unions are but one of many social institutions - albeit an important and potentially strategic one due to their proximity to the production process and experience in organising collective interests - which have a direct interest in extending social control over technology.

10. The application of expertise to the CPSA may be considered as a contribution to this wider social project as well as being a distinctive feature that distinguishes this study from previous research into technology bargaining and union policy. The study went beyond prescriptions of how unions might improve their effectiveness in dealing with new
technology, to developing a pro-active policy option for extending union involvement in technological change - this was the independent participative approach.

11. Implicit in the independent participative policy option are the intentions for seeking a greater democratisation of the system's design and development process. However, whilst these remain the ambitious objectives, the application of this policy option in two of the case studies was limited by the circumstances of the bargaining situation. This included not only the political constraints of the union-management relationship, but also structural constraints of the union's organisation and in particular the lack of union policy development.

12. It is clear from the evidence in the case studies that the application of expertise to unions, whilst enabling a marginal improvement to their bargaining position, is insufficient in itself to enable unions to fully come to terms with new technology and realise the aims of the wider social project. For this to be achieved more widespread changes to many areas of union activity are required. For if expertise is to be adequately deployed within the unions, it is a requirement that a structure and policy exist from which it can be effectively and efficiently utilised.
1. Recurrent throughout this study has been the observation that union policy is lacking in the more positive aspects of its development. This, it has been argued, is due to the dominance of a traditional reactive position with its inherent characteristic of not necessitating detailed policy formulation; in place of this all that is usually produced is a sketchy outline for the future deployment of technology. As a consequence, the unions not only lack a clear vision for the future development and deployment of technology, but also a meaningful involvement in the process of change. Their involvement is reactive, often acquiescing into passive co-operation and acceptance of the dominant managerially prescribed model of technological development. Policy in this scenario only becomes developed when the technology poses a direct threat to the existing interests of workers - interests which often manifest themselves as short-term sectional demands. The unions are, thus, better equipped to preserve such narrow interests rather than to develop them into broader interests with other unions and other workers.

2. In the case studies the lack of policy development and lack of a clearly articulated direction for a technology option that could fulfil the interests of union members constrained the operation of the independent participative approach. However, overcoming this restraint not only raises the question of what union policy should be, but also more fundamentally, what the interests of union members are.

3. It has been argued that union policy should have an internal coherence, by developing the rhetoric at union conference motions and relating national policy to the experience of the workplace at the local level.
Furthermore, the development of this policy should pose a counter-hegemonic position to the dominant managerial models of technological change which are usually based on a narrow economistic criteria with their inherent hierarchical forms of control and subjugation of workers.

4. The counter-hegemonic position is a politicisation of union policy. But this is not a politicisation based on the narrow terms of orthodox class politics (that tends to imbue political debate within unions), instead it is in a Gramscian sense. As Stuart Hall states in a discussion of the relevance of Gramsci to contemporary society:

One of the most important things Gramsci has done for us is to give us a profoundly expanded conception of what politics itself is. (3)

In this Gramscian sense politics is about creating a 'cultural transformation' of society and expanding the popular capacities of ordinary people, "the deepening of popular participation in national-cultural life". (4) A politicised policy has, therefore, to address itself to the wider interests, including the non-class based interests of a workforce not only in terms of their social as well as work activity, but also in terms of their relationships and interests with other groups - the consumer and user of the workers' productive capacity. And these interests need to be defined. As Stuart Hall points out:

Gramsci is one of the first modern Marxists to recognise that interests are not given but have to be politically and ideologically constructed. (5)

For the CPSA this involves a process of assessing and re-assessing their influence and activity within the state apparatus. As discussed in chapter 2, part 3, 'the state', although maintained for securing the long term conditions for capital accumulation and profitability - being described as "the guardian of a certain kind of bourgeois, patriarchal,
civilisation and culture"(6) - is an area that is perpetually open to contention.

5. The state as guardian and provider for the dispossessed has a central and important role in a civilised society. Public service needs to be humanitarian, without being patronising, and responsive to consumer demand; technology as a form of social investment has an obvious function in extending services to fulfil such aspirations, but there are areas of interests that require developing. The pluralism of public service department, quangos, commissions, etc., require assessing on the basis of what immediate potential change could be sustained, or even more fundamentally what kinds of questions need to be asked. This would re-direct public service institutions away from the vagaries of the free-market and self-interest philosophy towards constructing a more humanitarian society. The aspirations of such aims would include more democratic work structures instead of the overbearing hierarchical and bureaucratic structures as well as more flexible working patterns that accommodate, rather than impose upon, social and domestic responsibilities.

6. The development of policy needs to give special emphasis to the aspirations of groups and individuals outside the unions' immediate sphere of interest. This should develop along with decision-making and organisational structures sufficiently robust to permit the formation of alliances with groups that can represent such interests; this will enable a richer understanding of the issues being debated. For example, it is only from a thorough appreciation of the feminist critique of the dominant patriarchal society - a patriarchy that infests every sphere of political, social and cultural life - that a new and potentially more illuminating social perspective may be constructed. It is only on the
basis of forming such alliances and articulating policy which engenders an affinity with a wider range of social groups that union policy can in any sense be considered political and radical.

7. There is difficulty in relating the form of sophisticated union policy outlined above to its application in the contemporary industrial relations climate. It may be expected that such policy will largely be ignored by the employer no matter how carefully crafted or original in presentation. However, what has been outlined is an ideal, focusing direction for the development of union policy. It is radical in that it seeks to go beyond the confines of the existing agenda, addressing itself to raising issues which may be currently considered 'non-questions'. Moreover, in doing so it is attempting to formulate a new ideological basis for consideration of issues; what may be considered as developing a new understanding of 'common sense' which lies at the very heart of the counter-hegemonic position.

8. It is evident from the case studies that the unions are far from developing this position. Whilst the Author facilitated moves to redress this, which were partially successful, they did not result in the kind of strategic and longer-term vision originally hoped for. Perhaps this could not be expected to happen given that union representatives were heavily preoccupied with establishing more short term expediences and lacked contact with any outside interest or consumer group. However, in certain areas of CPSA representation such alliances have been developed, for instance between the DHSS Section of the CPSA along with other civil service unions and various social security pressure and consumer groups.
9. There are criticisms that can be levelled against the development of more sophisticated union policy within a contemporary situation that amounts to a political vacuum for such ideas. However, there are two immediate and positive advantages, which have been demonstrated in the case studies, for devoting time and energy to such activity. The first is the educational value of a policy which can pose realistic alternative scenarios and clearly illustrate that technological development is not a deterministic phenomena in either an economic or a technological sense. Moreover, articulating proposals as an alternative solution demonstrates a response which is neither passive nor reactionary and which is more likely to engender membership as well as public support for the unions' position. The second is the value of experience in being involved in the process of developing a strategic policy. For the longer term aspirations of a pro-active policy to be realised requires that union representatives, along with representatives from diverse interest groups, need to gain experience in new forms of decision-making and policy formation.

10. It has already been discussed how union organisation and decision-making is structured around the needs of the traditional reactive position and that for this to be overcome it is important that the provision of internal resources is improved, particularly when applied at the local level. Furthermore, it has been suggested that the practices used in management decision-making in the planning, and to an extent, the development of new systems could be usefully applied in formulating more sophisticated union policy; although this would need to be achieved with respect to operating in conjunction with well established democratic and collectivist union principles. There is a rich and varied literature pertaining to strategic and management decision-making. In recent years the study of 'management' has achieved a status of its own. Selective
elements of this study may have a relevance to the unions, although it is an area that may be rejected precisely because it is labelled management as opposed to union activity. Rejection for such a reason must be considered a short-sighted and retrogressive move.

11. In the CPSA decision-making operates through a well established structure of national annual conference (the supreme decision-making body) together with committees which operate between conferences. However, it has been pointed out that union national delegate conference:

Do not provide a suitable forum for detailed discussion of the complex problems raised by technological change; in practice they can only accept, reject or make minor amendments to simple and very general motions. (6)

Whilst accepting the validity of this criticism, it would be presumptuous to suggest that conference and committees should be replaced. At the very least they provide a semblance of democratic membership control, although they are decision-making bodies that could be improved and usefully supplemented. For example, a simple improvement the Author introduced to assist in presenting detailed arguments to CPSA committees was the use of teaching aids such a flip boards and illustrative rather than textural handouts. The increased use of teaching aids, although widely used in union education, is an area of technological development which could, rather ironically perhaps, be adopted to assist the formation of union policy in opposition to technological change. Teaching aids enable more articulate and refined forms of communication to occur, rather than the present circumstances where confidence in oratory skills is often more important in winning debate than the substance of an argument.
12. A supplementary activity to existing conference and committees could include forums for discussion and debate of specific issues undertaken in surroundings congenial to permitting open and informal debate. For the uninitiated, and for that matter the majority of the initiated, public speaking at national conferences to an audience in excess of 2000 people is a harrowing experience, creating conditions which stifle rather than open-up debate. While national conference may provide the broad direction of union policy, it cannot give detailed consideration to an issue. This is achieved through committees. However, committees are rarely issue specific and tend to be standing bodies working to a well defined frame of reference and soon appear to become entrenched in following an established agenda that resembles a 'shopping list' of issues. The metaphors that are commonly used to express policy formulation from such committees maintains this shopping analogy. For example, prescriptive pay demands are often referred to as a 'shopping basket' of demands, or, as in one recent instance where the CPSA's highly optimistic pay claim was referred to as a 'supermarket trolley!' The fixation with this form of prescriptive policy formulation neglects detailed consideration and analysis of problems in favour of establishing broad all encompassing statements. In addition, union committees operate in a structured and ritualistic fashion, creating forums which detract from the expression and articulation of abstract thoughts and new concepts, and instead favour the proclamation of well rehearsed and 'safe' positions.

13. It may be argued that any supplementary conference or committee would degenerate into creating just more 'talking shops' within the union, where much is said but little achieved. To safeguard against this there is the need for an overall coherence of policy and its coordination across the union, along with the establishment of some form of
control to ensure the supplementary forums fulfil their set objectives. This element of control though must be levelled over the construction of the forum and not in how the business is conducted.

14. Within the CPSA it has been suggested that there is a need for a series of 'technology charters' to be drawn up and maintained for every level of union representation, i.e. a national technology charter, departmental technology charters and branch technology charters. (7) This is an idea based on the experience from the DVLC case study. Its aim would be to provide a clear statement of union policy appropriate to the level at which technology was being negotiated or discussed. Furthermore, the charters would be developed and refined in accordance with the changing industrial relations circumstances seeking to enable an unambiguous awareness of the unions' independent position vis-a-vis technology. The development of these charters would be undertaken at all levels within the CPSA with an awareness across the union of what was being developed elsewhere. In addition, and fundamental to the success of such an initiative, must be a commitment across the CPSA from members and representatives to devote time and energy to debating the content of a charter and ensuring it is drawn up within agreed and specified time limits.

15. A tentative model of supplementary forums can be described which may assist to develop a more pro-active form of union policy. National conference and committees could both be supplemented by separate forums. These would not only have access to a diverse range of resources and expertise but also involve representatives from other unions and interest groups to contribute to discussion. The operation of each forum would be dependent upon the issue, extent of external involvement, etc. In
respect of formulating the CPSA's technology charter, a supplementary conference would need to address itself to the very broad area of technological change and seek to prioritise the issues that require further development, as well as establish the union's position in the broad policy areas. Such an 'issue-specific conference' could focus attention on the inauguration of such policy development in the CPSA. The supplementary committees would act more like 'seminar groups' in attempting to conclude the definitive union policy for a CPSA section or branch technology charter or for an issue such as job-design.

16. The shape of this model parallels the existing form of union decision-making. The difference between the existing and supplementary forums needs to be recognised to ensure against duplication of work. The supplementary forum acts as an advisory body without any executive decision-making capability; this ensures against a duplication of effort and leaves the new forum freer to discuss affairs. It is also oriented to a single issue and is not constrained to a pre-set agenda, although the outcome of the meeting may need to be established prior to its commencement of business, being defined in unspecified terms as concluding a definitive policy or range of policy options. The conduct of its business should also be different, based on ensuring that a congenial environment for open debate is constructed. In physical terms this could include the unprohibited use of teaching aids to improve communication along with a more relaxed and less hierarchical seating arrangement to that commonly associated with union conference and union committee meetings.

17. An additional advantage of the issue-specific supplementary forums over existing forums is the greater potential of the former for securing
internal union cohesion in place of the disunity displayed at conferences and committees by the divisive operation of competing internal factions. Whilst no union meeting will ever be free of such divisions, representatives confronted by a single common problem will tend to act in a more pragmatic and less ideological way in resolving that problem. There is, of course, the inherent problem that not all union representatives or members will agree with the ambitions of developing a counter-hegemonic position. But herein lies the challenge to union policy-making in developing ideas which are both radical in their repercussions and have popular appeal to the widespread interests of their members as well as engendering the sympathy and support of the general public.

18. Last but not least, consideration needs to be given to the form of union involvement that can permit application of the unions’ more sophisticated policy. As discussed in chapter 2, part 2, there are a range of potential participative structures that can extend union involvement. However, union involvement is the terrain where the fundamentally opposed interests of unions and management confront one another. Therefore, it is important to consider only forms of participation which implicitly recognise the politics of involvement as a normal and natural phenomena and do not seek to suppress conflict as an aberration to what is otherwise considered a smooth operating and efficient system. The major difference between co-operative participation and independent participation, as defined in this study, is their treatment of conflict. The former seeks to suppress conflict, whilst the latter identifies it as an integral element of the union-management relationship.

19. Involvement and participation has both costs and benefits for all those entering into this form of relationship. In the unequal union and
management relationship the bulk of these costs will be borne by the management. Given the option, management may well not seek union involvement, but through functional necessity this is often not a course open to them. In the deployment of new technology, particularly in office systems, emphasis has been placed on the importance of 'user involvement' to sustain a smooth implementation of technological change. This has been a recurrent theme in all the case studies. In terms of labour process theory this is evidence of the contradictory conditions for both conflict and co-operation that can be identified in the relationship between capital and labour. Whilst the interests of capital and labour are fundamentally opposed they maintain a mutual dependency. Both have an interest in preserving one another's long term existence; capital to ensure a stable supply of labour and labour to ensure stability of employment. Whilst the relationship is not equal and is favourably disposed to capital, it ensures the preservation of stability within the workplace.

20. The extent of and need for user involvement has become more apparent as computer systems have become more ambitious in the automation of office systems. The large number of potential applications that small powerful computers can be applied to has led to an overall decentralisation of computing with a greater emphasis on the 'end users' controlling things. Furthermore, office tasks are characteristic for their non-routine, non-standard and informal features, factors that office automation projects have singularly failed to recognise, with the result that such projects have failed to fulfil their high expectations and have been a source of frustration for all those affected. Consequently, the importance of the 'user' has been elevated with managerial strategies being
developed in recent years which place an importance on the user's involvement in the computer system's design and development process. (9)

21. Despite the attention being paid to the end user and the orientation of managerial strategies to sustain this form of user involvement, the unions have failed to recognise the opportunity this presents for legitimately extending union intervention in the computer system's design and development process. This is partly attributable to the problems discussed throughout this study which they have to overcome if they are going to sustain a pro-active position in this process. However, it would appear that the independent participative approach is well suited as the basis for developing or furthering union intervention in this area.

22. Within the Civil Service the extent of this managerial strategy is discernable in the structured methodologies advocated by the Central Computer and Telecommunications Agency (CCTA). Since 1983 it has been mandatory for all large scale computing projects in the Civil Service to use the 'Structured Systems Analysis and Design Methodologies' (SSADM) for design and development of a project, along with the 'Project Resource Organisation Management Planning Techniques' (PROMPT II) to plan, coordinate and control computer projects. Furthermore, for smaller projects the 'Quick Applications Methodology' (QAM) has been advocated for micro-computer based systems whilst more recently a methodology entitled COMPACT has been introduced for small office system applications. These structured methodologies provide a standardised approach and a set of common guidelines adopted across a range of projects and to an extent they attempt to institutionalise the computer system's design and development process. Moreover, they all stress the importance of user
involvement, although remaining ambiguous as to who exactly is the user, the line manager or the actual user of the equipment.

23. The use of these structured methodologies within the Civil Service could provide the CPSA and other civil service unions with the opportunity of extending their involvement in the computer system's design and development process by formalising their role within the methodology as the representative of the end user's interests. This could take the form of time being given for union representatives to be involved in this process and the determination of union policy (i.e. establishing the interests of the union members vis-a-vis the computer project). Moreover, to facilitate negotiation and discussion of the project a range of different union-management forums could be constructed around the issues under discussion.

24. The basis of such union involvement would be an independent participative approach that ensures union representatives do not simply become hostage to the managerially prescribed objectives for the project. To make this union strategy effective though, would require considerable investment in the unions' own resources. This would take the form of: developing policy for projects; determining the appropriate levels of intervention; and supporting the activity of union representatives involved in the projects. This form of involvement can be extended in two respects when considered from a wider perspective. Firstly, the extension of union involvement in all aspects of public service decision-making. Whilst the formulation of public policy is, and should remain, the domain of elected representatives, the detailed consideration of policy options are forms of decision-making conducted through an elaborate and secretive system of committees. The independent participative
model of involvement would provide a satisfactory means to permit union participation in such committees. Secondly, the deployment of technology and public service decision-making should be opened up to a wider range of interest groups permitting greater social participation.

25. The aforementioned effect of extending union involvement into the structured methodologies would fundamentally alter the computer system's design and development process. This is most clearly demonstrated in relation to the dominant co-operative model of involvement. According to this model, for user involvement to be sustained requires that all parties are in accord with the development process, and it fails to cope adequately with the introduction of conflict. In contrast, and to permit the form of union participation that has been advocated above (as well as involvement of wider social interest groups), a conflict-based model of involvement needs to be introduced. One that does not attempt to regard conflict as an aberration but a natural and normal phenomena. It may be suggested that this latter model is a closer fit with social reality than the former one.

26. Extending union involvement through formalisation of their role in the structured methodologies is analogous to extending union involvement through legislation. Precedents for this are to be found in many northern European countries and several commentators have suggested the need for suitable legislation within the context of industrial relations within the UK. (10) Whilst legislation, which it is assumed could be introduced in a climate less hostile to trade unionism, could go some way to extending union influence it would be quite wrong to see it, or other wider socio-political changes to the industrial relations climate, as the
solution that enables unions to cope with the introduction of new technology. Such legislation must be introduced along with more widespread changes to the way unions conduct their business and organise themselves if they are going to fulfil an historic role into the 21st century. As Stuart Hall concluded in his considerations of the contemporary crises facing the Left today:

Is it possible that the immense new material, cultural and technological capacities, which far outstrip Marx's wildest dreams, which are now actually in our hands, are going to be politically hegemonised for the reactionary modernisation of Thatcherism? Or can we seize on these means of history, of making new human subjects, and shove it in the direction of a new culture? (11)

This, he remarked, is the "choice before the Left" - it is also the crisis and the challenge before the unions today.
APPENDIX 1.

THE HOME OFFICE DEPARTMENTAL NEW TECHNOLOGY AGREEMENT

Aston University

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Appendix A

Mr A P Dilley
Secretary
Trade Union Side
HM Land Registry Whitley Council
Headquarters

Your reference
Official reference
One
21 March 1986

Dear Alan,

ROT Framework Agreement

Following the concluding round of consultations held last week, I now enclose copies of management's final revision of the ROT Framework Agreement. Observations on the main amendments made following the last round of consultations are set out in the Appendix to this letter.

I know that both sides have put a great deal of time, thought and energy into discussing and refining the Agreement. We feel that all the effort has been repaid with a document that is sensible and comprehensive. The most important factor, staff concern about their jobs, has been exhaustively covered during the discussions over the last year and the Agreement provides a clear guarantee which will remove such concern. Over and above this, computerisation offers improved grading for many clerical and typing jobs and the opportunity to develop new standards for the working environment, which will ensure that the work place is pleasant, comfortable and safe.

The document is the result of thorough and patient negotiation and I believe that from whatever quarter it is viewed, provides a sound platform on which to move forward. With a joint commitment to succeed and our recognition of the longer term implications of computerisation the department and its staff can look to the future with confidence.

I understand that the Trade Union Side are arranging to conduct consultation exercises in the near future. I very much hope that the DTUS will feel able to commend the Agreement to members of the constituent unions.

If, following the consultation meetings, the membership endorse the proposed Agreement we can make appropriate arrangements for the signing of the documents. I look forward to hearing from you in due course.

Yours sincerely

J MANTORPE
Chief Executive
Appendix B

Dear Alan,

ROT FRAMEWORK AGREEMENT

Since the Chief Executive forwarded the final draft of the ROT Framework Agreement on 21 March, the Official Side has been encouraged by the informal responses to the documents that have come from members of staff and the union representatives. However, we have also heard of one or two areas in which some amplification of the Official Side position might clear away misunderstanding or doubt, and this letter seeks to deal with the points that have come to our notice:

(1) The "no compulsory redundancy guarantee"

The point has been made by TUS representatives that the statement on redundancy might appear to sit a little oddly, or even be superfluous, when set against the statements about expected future complementing levels and the declared policy of retaining and re-employing staff at their current location, notwithstanding the changes that computerisation will bring. In responding to this comment, I should like to reafirm what we have said many times in negotiations; that the Official Side is very firmly of the view that there will be no need to enter into discussions about redundancies, compulsory or otherwise. The reason for including a "no compulsory redundancy guarantee" is primarily to provide a clear reassurance to staff who, understandably, tend to be fearful about their jobs at the very mention of new technology. The Official Side has never pretended other than that computerisation will bring economies and savings. Treasury project approval for Plymouth would not have been given without long term cost justification - but the underlying growth in our business and the clear prospect of completing the extension programme means that we can be confident that our prosperity will continue and that this will include steady growth in the size of the organisation.

We have used the term "compulsory redundancy" because we believe that is what staff fear above all else. This should not, however, be taken to mean that the Official Side feels there will be a need for voluntary redundancies. We have not closed the door to this possibility, because it is conceivable that in a very few individual cases voluntary redundancy might be the best solution from all points of view, but we foresee no requirement on any scale for that course of action.

We understand that the word "redundancy" is an emotive and unpalatable word for some but it is one that is readily understood and it is in common use for such agreements.

(2) The cost of spectacles

The Land Registry is still gaining experience in the use of eye-sight testing and reimbursement of the cost of occupational spectacles. Our information indicates that the cost limits contained in the Agreement are well in line with other agreements in the public service. A formal review would not be appropriate but we shall watch developments elsewhere in the public service in order to ensure that our staff have a fair deal.

(3) Working arrangements

The arrangements for a rest period in the data capture and data entry sections have been the subject of long discussions. We are satisfied that the rest periods provided in the Agreement, and the attention given to job design, ergonomics and the type of equipment, will avoid any risk of excessive operator fatigue. We, like yourselves, will be interested in any staff views on the most effective way of utilizing the 40 minutes per day that has been provided. It may very well be that the most suitable arrangements need to be geared to local circumstances and needs and we shall not be fundamentally opposed to the Plymouth staff, management and Trade Union representatives looking for the best utilization of the rest periods.

I should be grateful if you would distribute copies of this letter to the constituent unions.

Yours sincerely,

[Signature]

E G BEARDSALL
Principal Establishment Officer
REFERENCES

CHAPTER ONE


2. For example see:

3. For example see:


5. Ibid.

- 384 -
6. For example see:


7. Len Murray, Foreword to Employment and Technology, 1979, p.5.


10. A résumé of this checklist can be found in Greg Bamber, 'Microchips and Industrial Relations', Industrial Relations Journal, Vol.11, No.5. (Winter, 1980), pp.7-31, p.7.


14. Ibid.


18. TUC, p.7.


20. Manwaring, p.22.


22. Manwaring, p.22.


25. Webster and Robins, p.23.


30. Williams, p.417.


32. See Williams and Steward, 'Technology Agreements in Great Britain', p.71.

33. Manwaring, p.18.

34. See Williams and Steward, p.71.
35. Webster and Robins, p.23.
36. Williams and Steward, p.72.
37. Ibid.
41. Ibid, p.194.
43. Ibid.
44. Ibid.
46. Ibid, p.16.
47. Ibid, p.15.
48. Ibid.
49. Ibid.
50. Ibid, p.17.
51. Ibid.
52. Ibid, p.18.
53. Ibid.
54. Williams, p.473.
55. Ibid.


61. Ibid.


67. Ibid.


69. For example see:

70. Ehn and Sandberg, p.434.

71. Davies, p.70.

72. Ehn and Sandberg, p.434.


74. Davies, p.75.
75. Ibid.

76. Ibid.


78. Davies, p.77.


80. Ibid, 80.

81. Ibid, p.34.


84. Ibid.

85. Ibid.

86. Ibid.


88. Beirne and Ramsay.

89. Ibid.


91. Davies, p.34.

92. Ibid, p.104.

93. Ibid, p.96.

94. Ibid, p.97.

96. Hirschheim, p.158, quotes from A. Mowshowitz, The Conquest of Will: Information Processing in Human Affairs. (Reading: Addison-Wesley, 1976), p.70, that in the implementation of data-processing systems '20% are successful, 40% are marginal, and 40% are failures'.

97. Ibid, p.4.

98. Ibid, pp.5-6.


100. For a resumé of Burrell and Morgan's framework see Hirschheim, pp.296-300.


105. See Kyng and Mathiassen, pp.248-259.


108. Ibid.


110. Ibid.


114. Ibid.


117. Ibid, p.244.

118. Ibid.

119. Ibid.


122. Ibid, p.403.

123. See Manwaring and Wood.

124. Friedman, p.48.


126. See Manwaring and Wood.


129. Ibid.

130. Ibid.


132. See Davies, p.44.
REFERENCES

CHAPTER TWO


2. Ibid, p.81.


5. Ibid.


7. Ibid.

8. Hanson and Walles, p.125.

9. Ibid.

10. Ibid, p.128.


15. Ibid, p.78.

16. Ibid.

17. Ibid.


27. See MacRae and Pitt, p.102.

28. See David Thomas, p.90.


33. Education Department, C.P.S.A., 'Mid-Week Course Material', p.70.


35. Ibid, p.190.

36. Ibid.

37. Ibid.

38. Ibid, p.192.


40. Parris, p.193.

41. Ibid, p.194.


43. Education Department, C.P.S.A., 'Mid-Week Course Material', p.5.


47. Wigham, p.192.


51. Ibid, paragraph 5.

52. Ibid, paragraph 9.


55. See CPSA 'Official Record of Decisions Taken at Main Conference 1976, p.19.


57. Ibid, p.15.

58. Ibid.


60. CPSA, 'Official Record of Decisions Taken at Main Conference 1982', p.22.


63. Ibid.

64. CPSA, 'General Circular: New Technology. CSE/GEN/11/82'.

65. Ibid.


69. See CPSA, 'Official Record of Decisions Taken at Main Conference 1984', p.27.


75. Ibid, p.35.

76. Ibid.

77. Ibid, p.36.

78. See Hyman, p.17.

79. Ibid, p.27.


81. Braverman, pp.325-326.


85. See Ham and Hill, p.31.

86. See Ibid, pp.29-32.


88. Ibid.


95. Parris, p.192.

96. Ibid.


99. Ham and Hill, p.43.

100. Ibid.

102. Ibid, p.22.
103. Ibid, p.23.
106. Ibid.
107. See Hyman, p.17.
108. Ibid.
111. As quoted in Hyman, p.32.
112. Ibid.
113. Ibid.
115. See Hyman, pp.35-36.
116. Ibid.
120. Ibid.
121. Ibid.
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CHAPTER THREE

1. TUC, Employment and Technology, 1979, p.66.


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CHAPTER FOUR

1. The Home Office deals with the internal affairs of England and Wales which have not been assigned to other Government Departments. This includes: administration of justice, criminal law, the treatment of offenders including probation and prison service, the police, immigration and nationality, community relations, fire and civil defence, electoral arrangements, ceremonial and formal business to do with honours, scrutiny of local authority byelaws, granting of licences for scientific experiments on animals, cremations, burials and exhumations, firearms, dangerous drugs and poisons, licensing laws, gaming and lottery licences, charitable collection licence, theatre and cinema licence, shop licence, co-ordination of Government action to voluntary social services, Government policy on race relations and sex discrimination. Civil Service Handbook (1984), p.421.

2. The Prison Department is the responsibility of a Prison Board which is chaired by the Director General and whose membership includes the heads of Regimes and Services, Operational Policy, Personnel and Finance, Chief Inspector and Director of the Prison Medical Service (see diagram 4). The Prison Department also has access to various financial, legal, personal, administration, public relations, research and statistical services provided by the Home Office. The Home Office Prison Department covers England and Wales. Scotland and Northern Ireland are under the jurisdiction of the Scottish and Northern Ireland Offices.

3. Home Office Department, 'Staff Return Statistics : 31st March 1984'.


7. Fitzgerald and Sims, p.31.


9. Ibid.

10. Training prisons are further categorised into 'open' and 'closed'. Closed training prisons include seven high security prisons for dispersal of special category offenders, such as terrorists, multi-murderers, etc.

12. BBC Radio 4, 'The Prisoners: The Local Prison', 22nd December 1984, as cited in Fitzgerald and Sims, p.34.


15. This includes: the gathering of intelligence information on prisoners; evaluating incoming prisoners and classifying them to suitable prisons; allocation of prisoners to cells; certain welfare duties; etc.

16. Prison Department workers have compared this as an activity akin to security guards at a national museum where their presence usually suffices to deter visitors from touching exhibits.

17. For example, the average wage of workers in the DHSS, all grades included, approximated to £7,800 in 1984, whilst comparative figures for the Prison Department work out to some £15,000. (Based on Civil Service Supply Estimate figures for 1984/85). In addition, Prison Officers usually have their own social club and are considered, by Prison Department workers, to socialise more with each other than other work groups.

18. The Home Office Section of the CPSA has an elected Section Executive Committee (SEC) and 12 branches; three in the Home Office - Queen Anne's Gate, H.Q. London and Croydon; four in the Prison Department - South West, Midlands, South-East and North; and five in Passport Offices - London, Liverpool, Peterborough, Newport and Glasgow.

19. The elected branch honorary officers are: Chairperson; Vice-Chairperson; Secretary; Treasurer; and Organiser. The Branch Executive Committee consists of these honorary officers plus eight others.

20. For example, the Midlands Branch Secretary received 40% facility time for his union duties. The other local officials received substantially less. Interview with CPSA Home Office Section, Prison Department, Midlands Branch Secretary, 13th January 1984.

21. The powerful position of the POA was demonstrated in 1986 when considerable damage occurred in prison riots following a single night's industrial action by prison officers.

22. HOTUS represents mainly the CPSA, SCPS (both administrative and governor grades), IPCS and CSU.

23. For example, the POA although allocated seats on various HOTUS sub-committees rarely take them up. The only forum for con-
stant contact is at the Council of Civil Service Unions (CCSU) although no HOTUS representatives attended CCSU meetings. These are attended by more senior national union officials.

24. In general, gains are only achieved when the POA have an interest at stake. In cases where the POA have no interest, little can be gained by the isolated workers who usually receive no direct support from the POA. This dependence is demonstrated in the ongoing discussions on computerisation of Prison Officers Pay. The CPSA have opposed this because it involves job losses for pay clerks. This opposition has proved ineffective because the POA have accepted the proposals. In contrast, there was a jointly supported campaign over opposition on proposals to close 40 prison workshops between the POA and other unions. The POA are opposing closure because they recognise the potential problems this would entail for their members. The relationship between the POA and other unions at the local level is contingent upon a range of factors, one being the personal relationship between the trade union activists. A clash of personalities between union representatives can often jeopardise the working contact and co-operation between different groups of workers.

25. Informally many prison officers consider that all workers in a prison should be in a uniform and be part of the same grade structure. Interviews with Prison Department Workers, Bedford Prison, 31st May 1984.


27. Ibid.

28. This area of the Home Office organisation has a dynamic quality undergoing frequent changes and alterations. However, when the research was undertaken a delegated authority for expenditure on computer technology operated. The head of Establishments, Finance and Manpower Department (see diagram 4) - a Deputy Under-Secretary grade and the higher line manager for the ADP unit (Estabs 5 division) had Treasury authority for expenditure of up to £1.5 million. This is the maximum amount permitted by the Treasury and reflects the confidence there is in the Home Office ADP specialists and practitioners.

29. The hierarchical structure of the civil service tends to promote the concept of 'user involvement' as being the line manager's responsibility for an area of work rather than the responsibility of the people actually doing the work, i.e. clerical workers.

30. Administrative and secretarial support for the MSTC was provided by P6 of the Prison Department (see diagram 4). The MSTC consists of the Head of each Prison Department Directorate at the assistant under secretary level (see diagram 4), a representative of the prison governors, a representative from the Prison Department medical services, a representative of prison administrative staff, representative from the Home Office Research and Planning Unit (see diagram 2), the CCTA, repre-
sentative from the Home Office Statistics Department (see diagram 3) plus the heads of Prison Departments with a direct interest in a particular project being assessed/discussed.


32. The Bedford Prison Computer Project Committee was chaired by the head of P5 Division, with representatives from P3, P6 and P7 divisions of the Prison Department (see diagram 4), the Midland Regional Office, the Governor of Bedford Prison, Administrative Head of Bedford Prison, the CCTA and the Research and Planning Unit, Estabs 1 and S2 Division of the Home Office (see diagram 3).


34. The Hardware was based on a 'DEC LSI 11/23' micro-computer and the software was a 'CACI ORACLE' relational database package.


37. This assurance was given at a presentation of the project to union officials on the 5th May 1983.

38. The strategy for the project was that following the successful implementation of the Bedford Project, it was proposed to extend the system to 'an additional fifty Establishments by 1986/87 ....... and twenty-five systems in each successive year until 1990, so providing a national computer network on-line to computers situated in Regional Offices and HQ'. M.S.A. Prowse, P5 Division Home Office Prison Department, to N. Frater, Secretary, Home Office Trade Union Side, 19th January 1983. CPSA, Home Office Section Files, London.

39. This committee is chaired by an Elected National Officer responsible for technology with two other NEC Members and the General Secretary of the POA. The inclusion of the General Secretary to such a Committee is indicative of the importance attached to the introduction of technology by the POA.

40. Barby, Northamptonshire, interview with POA National Executive Committee Member and Member of POA NEC Technology sub-committee, 31st May 1985.

41. In September 1983, it was announced that the Department was to increase its staffing complement by 5,500 people in the next four years, 5,000 of whom would be POA grades. In contrast, the expansion for HOTUS members, which amounted to only 125 staff, was largely off-set by a corresponding natural wastage of staff. Branch Circular from CPSA Home Office Section, ref: HO/SEC/37/83 dated 5/11/83.


44. Letter from M. Prouse to N. Frater, 19th January 1983.

45. Ibid.

46. Ibid.


49. When the equipment was procured the CCTA restricted the purchase of all micro-computers used in central government departments to a list of twelve suppliers. This list no longer exists, being scrapped with a re-organisation and re-definition of the CCTA in 1984.

50. The Bedford Project was an on-line interactive system linking a number of VDU terminals and printers to an access and update in a central information store. In such a system, a large demand is made upon the CPU for managing the flow of information and requests, etc., from the different terminals. The CPU at Bedford was easily overloaded, with the result that users could often have to wait in excess of 60 seconds for a response from the computer—a response rate which users found to create considerable stress and frustration.


52. See Hirschheim, p.4.

53. In the development of the Bedford Project, and similar to most office automation exercises, the users did not have a clear idea of what is actually capable from a computerised system, but instead had vague notions of what they wanted based on their experiences from operating the existing procedures and practices derived from the existing manual system. When experience had been gained from the computer system a clearer understanding emerged of its capability and frequently new unforeseen uses of the computerised system were perceived. In effect the users requirements changed with experience.


55. Ibid, para. 1.8.
56. Ibid, para 1.9. For example it was noted on a visit to Bedford Prison as part of the Trade Union delegation:

In the OC & A Office, the replacement of the cardex allocation demonstrated problems. At present, the cardex allocation book is used for allocating prisoners to a particular prison. When vacancies arise at the prison, the prisoners on the list are transferred. In practice, it is customary to ensure that all vacancies at other prisons are filled, otherwise Bedford's argument of being overcrowded would lose validity. Therefore, the Prison Officers always 'top up' vacancies which are not allocated to that particular prison but are known to be 'suitable'. The basis for these decisions are taken from a wealth of experience and high degree of intuition on the part of the Prison Office, neither of these qualities (appear to) have been taken into account in the design of the computer system. The practice of 'topping up' vacancies was just one of many local practices (known within prisons as 'Spanish practices') which are non-standard, usually informal and sometimes against regulations but are the methods put into practice at a particular establishment. The adherence by the Prison Officers to 'Spanish Practices' and other non-standard methods poses a problem for system designers making the task of user specification an uncertain activity.


57. The Terms of Reference for this committee were:

1. to monitor running of the system (including parallel running) and to report to the Project Committee on operational problems and action taken;

2. to review system change requests, approve changes and accord priorities; and

3. to provide a situation report for the Governor.

Prison Department (June 1984), para.3.4.

The committee was chaired by a representative of the Prison Department's P6 Division (see diagram 4) with membership composed of: the Chief Prison Officer at Bedford; senior officers from each prison area using the computer system; the Project Manager; and the designated Systems Manager.

58. Ibid, para. 3.7.

59. Ibid, para. 4.5.

60. Ibid, para. 1.4.

61. A growing lack of confidence in the project resulted in the ADP specialists increasingly having to justify the benefits and advantages of the new system to the Prison Department Management. Evaluation of the project at that time may be perceived
as being undertaken to placate the Prison Department management and prison officers. The validity of the evaluation is itself questionable. For example, the evaluation report points out:

because additional prison officers were provided on a full time basis during this phase, the adaption of the uniformed staff to the system and its integration into their normal working pattern has not been fully tested.

Ibid, para. 4.2.

62. The evaluation report states of the project:

(i) it has identified that it is practicable to record inmate information, including receptions and discharges in a prison establishment on a computer system;

(ii) the system is able to monitor inmate progress through an establishment during the period in custody.

(iii) a computer system within an establishment can provide information retrieval facilities, offer information for management purposes at a local level and provide statistical and other information required centrally;

(iv) the experiment has provided a sound basis for developing computer systems for other local prisons and for creating links with regional offices and headquarters.

Ibid, para. 1.5.

63. Only in the 'Security Area' "was it possible to operate both the manual and computer systems without additional staffing resources", Ibid, para. 1.7.

64. The report states that staff savings could not be found "in other uniform operated areas." The implication being that staff savings could have been found in the clerically operated discipline office had the pilot worked in that location.

Ibid.

65. Ibid, para. 8.1.

66. Ibid, para. 1.10.

67. Ibid, para. 7.24.

68. Home Office Departmental Whitley Council Agreement on New Technology (1985). CPSA Home Office section officials considered that the delay in ratification had been deliberate by Home Office Management in order to strengthen their negotiating position. Home Office management rejected this complaint.

69. A report from the CPSA Home Office section to the CPSA National Computer Advisory Committee (25th April 1985) comments "the
agreement on New Technology to all intents and purposes is a hollow one."


71. Barby, Northamptonshire, Interview with POA National Executive Committee Member and Member of POA.

72. For example, access to a reception list was required by 7.00 a.m. by the Centre Staff whilst the discipline office which controlled the main printer for producing the list did not start until 8.30 a.m. and then only on weekdays. In addition, there had been actual instances when, due to events and circumstances in the Prison, the Chief Officer required full details of all drug users contained in Bedford. Under a manual system this information would not be easily accessible. In the computerised system this information is accessible, although because the computer was not on 24 hour operation, this information could only be accessed during the normal working day. This caused considerable frustration for the prison officers who found themselves one night requiring this information, but not being able to obtain it because it could not be readily accessed 'out of hours'.


REFERENCES

CHAPTER FIVE

1. The Department of Transport is responsible for land, sea and air transport including sponsorship of the nationalised airline, rail and bus industries; airports; domestic and international civil aviation; shipping and the ports industry; navigational lights, pilotage, HM Coast Guard and Marine Pollution; motorways and trunk roads; oversight of road transport including vehicle standards, registration and licensing, driver testing and licensing, bus and road freight licensing, road safety and oversight of local authorities' transport planning including payment of transport supplementary grant. Civil Service Yearbook, 1984.

The DoT was created in the early 1970s as part of the reorganisation of the Civil Service following the publication of the 'Fulton Report.' The DoT had formerly been the Ministry of Transport and has a long historical association with the Department of the Environment (DoE) and the Property Services Agency (PSA) and their respective forerunners, the Ministry of Land and Natural Resources and the Ministry of Public Buildings and Works. These links are still reflected in the structure of the various departmental Whitley Councils and in the provinces many regional DoT offices share accommodation with DoE and PSA regional offices.

2. Driver Licensing: every driver of a motorised and licensed vehicle in the UK must hold a licence to ensure that licensed vehicles are only driven by competent and medically fit people. Vehicle Licensing: every motorised vehicle in the UK has its own identifiable and unique registration mark. Vehicle Excise Duty: every motorised and licensed vehicle using the public highways must pay a tax which is paid directly to the Exchequer. Department of Transport, Driver and Vehicle Licensing Centre, Swansea: A Brief Guide, Revised (July 1983).

3. In addition, there are several offices in London which deal with enforcement work for the London area. Supply Estimates: Class IV, Vote 4, 1984-85, p.23.

4. DVLD, 'Staff in Post, 31st December 1984.'


6. The registration and licensing of vehicles and drivers, including the collection of duty had formerly been the responsibility of 183 local authorities in England, Wales and Scotland. By the early 1960s this system was neither functioning effectively nor efficiently. In particular it was proving less than adequate for the demands the Police were making of the system in connection with traffic offences. The major problem was identified as the movement of millions of records between local taxation offices each year. This made the tracing of
driver and vehicle information difficult and allowed disqualified drivers to apply to another local authority for a new driver's licence with relative impunity. In addition, there was a forecast traffic growth indicating a doubling of vehicles within 10 years. The existing system then could not cope with such a projected growth rate.

The Working Party recommended that "an entirely new organisation should be set up to take over from the existing system and that this organisation would have a central office of considerable size, with a large ADP system."


7. Department of Transport, Driver and Vehicle Licensing Centre, undated publication.

8. Dispersal policy was formally introduced in 1962 as part of a package of measures designed to reduce congestion in London. By the mid-1960s it had acquired a more regional dimension, and the policy continued to run throughout the 1960s and 1970s although with varying intensity, until it was cancelled in July 1979. Victoria Winkler, 'Tetiarisation and Feminisation at the Periphery: The Case of Wales' in H. Newby and others, editors, Restructuring Capital: Recession and Reorganisation in Industrial Society. (London: Macmillan, forthcoming).

9. Ibid.


12. In 1975, the House of Commons' Public Accounts Committee was informed that the centralised system would cost twice that originally planned. In 1968 the cost was estimated at £168m, with 4,000 staff. Four years later this had been revised to £350m with 8,000 staff. 'Stalling the Critics by Driving out the Errors'. Computing, 21st October 1982, p.22.


15. Senior Management consists of senior principal and above grades. In the DVLD there are 5 Senior Principals, 5 Medical Officers, 1 Senior Medical Officer, 3 Assistant Secretaries and a Director. DVLD, 'Staff in Post, 31st December 1984.'

17. The 'flowline system' tasks proceed as follows:

1. Post receipt.
2. Post opening.
3. Examination (with editing and coding).
5. Batching.
6. Microfilming (with film process and verifying).
7. Data conversion (with PCK machines identifying keying errors).
11. Main file error correction.
12. Output.
13. Correction of returned documents.


18. For example, the first five tasks (see above) were combined to form one clerical duty. The integration of tasks was first undertaken as a trial in the Clerical Drivers (CD) division and later evolved into a methodology for application in other areas of the DVLC with a permanent 'Job Satisfaction Team' being established at the DVLC. 'Job Satisfaction Team', Driver and Vehicle Licensing Centre - Swansea', Management and Personnel Office and Central Office of Information 1984.


20. DVLD, 'Staff in Post'. This proportion compares with a national average of all non-industrial civil servants, 20% of whom are CA grades and 35% CO. HM Treasury 'Civil Service Statistics -1984', July 1984, p.5.

21. The Department of the Environment, 'Review of Driver and Vehicle Licensing Directorate', p.4, points out the need for a higher than expected quantity of case work arising from the number of errors going through the examination stage undetected and not discovered until after processing by the computer.

22. The productivity allowance is given to DP grades on fast keying if they reach and maintain a nominal keying speed of 16,000 key depressions per hour (KDH) for numeric work and 11,000 KDH for numeric/alpha work.


24. DVLC, Swansea. Interviews with DVLD senior and line management, 24th June and 14th February 1985.
25. These are: Civil & Public Services Association (CPSA); Society of Civil & Public Services (SCPS), Institute of Professional Civil Servants (IPCS); and Civil Service Union (CSU).


27. The BEC of the CPSA DVLC branch has fourteen elected representatives and seven honorary officials. These are: Chair, Vice-Chair; Secretary; 2 Assistant Secretaries; Organiser; and Treasurer.


29. The Whitley Council Trade Union Side has full facility time provided to three officials. These are: Chair, Secretary and Assistant Secretary.

30. The DoE/DoT Section has a total membership of 8,902 CPSA 'DoE/DoT Section Annual Report', 1984, p.9. In order to ensure the DVLC branch does not dominate the Section Executive Committee (SEC), the constitution limits the number of representatives from the DVLC branch.


32. Ibid, pp.149-161.

33. DVLC, Swansea. Interview with CPSA DVLC branch officials, June 1984.


38. For example, at a Local Whitley Council held on the 24th March 1977, the unions called for the project to have "on line working to improve access time" and on the 30th June 1977 the unions expressed disappointment that the project would not be considering the taking of new work at the DVLC in order to expand its function and provide greater employment opportunity.

39. The framework proposed a set of 'project modules' each concerned with a separate aspect of the whole project. DVLC, Swansea, Minutes of Local Whitley Council, 16th March 1978.
40. The branch heads at DVLC considered it necessary to stay with a centralised system on the basis that it would be wasteful and expensive to replace, although the replacement system should demonstrate a marked increase in the performance and efficiency of the DVLC. Line managers wanted to see the creation of 'whole jobs' with the capability of correcting errors when they were discovered and not having to return the mistake to the beginning of the system. DVLC, Swansea, Interviews with DVLC line management, 24th January 1984, and CPSA DVLC branch officials, June 1984.

41. Ibid.

42. The five alternative systems proposed were:

   1. A direct continuation of the existing system retaining flowline input procedures and batch processing.

   2. Maintaining flowline input procedures but with direct access to main files to allow sequential processing, i.e. flowline input and batch processing would be linked together.

   3. A transaction processing system enabling local input validation and production on a centrally maintained main file.

   4. Distributing DVLC into a number of self-contained regional processing centres.

   5. A replacement system based on clerically maintained files (in place of computer files).


43. For example, the 'development modules' consisted of proposals for the use of: optical character readers; laser printers; on-line enquiry of transaction holding files; etc.

44. Information was collected on details of: the requirements satisfied; advantages; disadvantages; expected performance; equipment costs; ADP staff resources and costs required for acquisition and implementation; implementation time-scale; savings, or otherwise, over existing systems. DVLD, 'Preliminary Study Report', p.18.

45. The combination of options were:

   a. Basic system 1. See reference 42.

   b. System 1 with some optional peripherals.

   c. System 1 enhanced with the addition of an Integrated Input Procedure (IIP) and on-line enquiry of transaction holding files.

   d. Basic system 2. See reference 42.
e. System 2, enhanced on mainframes with IIP and on-line enquiry of transaction holding files and main files.
f. System 2, enhanced on microcomputers.
g. Basic system 3. See reference 42.
h. Basic system 4. See reference 42.


46. Selection of option c, the system with a direct access to the main files held on a new mainframe via microcomputers and integration of the existing flowline work procedures in both CV and CD divisions, was based on the following criteria:

- Turnaround performance
- Enquiry facilities provided.
- Ability to monitor and control transaction progress.
- Implementation timescale.
- Potential for evolutionary development.
- ADP staff resources required.
- Cost.
- Need for the combination of modules.
- Risk element involved.

Ibid.


48. The terms of reference for the Joint Working Party were:

1. To provide consultation on DVLC equipment replacement requirements;

2. To seek timely agreement to the replacement plans defined in the Full Study; or, failing that, to establish these issues on which agreement is not forthcoming.

3. To report jointly through minutes of meeting of the Joint Working Party to both sides of the Departmental Whitley Council;

4. To set up subordinate groups as necessary.

DVLD, Swansea, 'Departmental Whitley Council: Joint Working Party on DVLC Equipment Replacement: Minutes of First Meeting held on 17th December 1979', Appendix II.

The working party was jointly chaired by the management head of the computer replacement project and chair of the union side of the Whitley Council. Composition of the working party included higher line managers and heads of divisions within the DVLD and union representatives from the DVLC Branch Executive Committees of the CPSA, SCPS, and CSU. This included the branch honorary officials and the respective Section full-time officers from the unions' HQs in London.

49. Ibid., Appendix I, p.2.

51. The main objectives of the 'Full Study Report' were:

1. To look at the recommended system from the Preliminary Study Report and test by examination and in greater detail whether the ideas hold true.

2. To produce, amongst other things, an operational requirement which will be the basis of the tender documents that lead to the eventual acquisition of equipment.


53. The philosophy for the replacement computer was to completely replace the existing input processes and provide a new on-line enquiry service. This would require the design of new procedures, identification of user requirements, re-training of staff and the re-organisation of branches. The main processing and output, on the other hand, was to be a direct conversion of the computer processes used in the old system.

Presentation on Replacement Systems by DVLD Management, Swansea, 11th February 1983.

54. The 'Project Management Group' consisted of Senior Management and Heads of Divisions from the DVLD and representatives from the Central Computer and Telecommunications Agency (CCTA). The 'Project Team' were ADP specialists employed at the DVLC. Ibid.

55. DVLC, Swansea, Interviews with SCPS and CPSA members and branch officials, June-August 1984.


57. In the later half of 1980 the trade unions received further information of the proposed new input system (IIP) from a management demonstration of the terminals, and the proposed office furniture. In November 1980 representatives of the trade unions had a formal meeting with the eventual equipment suppliers (IBM) to discuss the type of VDU equipment which would be used in the new system. The trade unions' major concern was with the 'ergonomic quality' of the equipment. DVLC, Swansea, interviews with CPSA Branch Officials, June 1984.

58. Information concerning proposals for computerisation is often presented as the result of the technology, i.e. determined by the technology. This is misleading, as the result of the technology is itself dependent upon the decisions taken con-
cerning the choice of technology, the design of the system and jobs, etc. In practice there is not one single technology, but a range of possible choices each with potentially differing social consequences. Therefore, instead of the unions asking for information concerning the implications, which in a project as complicated as this nobody can accurately provide, the request should be for the objectives of staffing and grading. When the objectives are agreed then the technology can be designed to meet them. When the trade unions assumed they were requesting information on staffing and grading they were in fact requesting management's objectives for the project and wishing to challenge management's policy for the project and the choice of technology which could achieve those objectives.

59. Despite the number of local branch officials at the DVLC, the quantity of union business largely dictated the adoption of a reactive strategy, i.e. synonymous with a fire-fighting role -dealing with the hottest part of the fire first. Little opportunity was available for consideration of longer term policy; with the restrictions imposed by the local management on what was legitimate to consult and negotiate with the unions (for example, an 'alternative corporate plan' for the DVLC or strategic plan for the use of technology at DWLCO), local officials were discouraged from exerting the time and energy required to formulate detailed policy documents. In addition, union committees are decision-making forums constructed around the acceptance or rejection of 'motions.' The simpler and less ambiguous the motion, the more suitable they are for this forum. Documentation provided from the project by local management was not appropriate for this structure and perhaps never could be. The sort of careful and considered analysis necessary, and assessment of these documents with the proposition of alternatives based on a detailed long-term union policy, simply did not fit the existing union structure.


62. In the 'Replacement Systems : Full Study : Staffing Proposals' paper presented to DVLC unions on the 10th July 1980, the local management's preference for the clerical grade is apparent on page 4, paragraph 14, which states:

"There are currently 354 C0s and 1137 CAs engaged on the (input) work, and 39 SDPs and 510 DPs. This balance, and the fact that the expected keying contact of the continued task is well below 50% (in the range 20-30%) and the shift of emphasis from fast keying, lead to the conclusions that the IIP posts should be clerical rather than data processor".

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The 'Minutes of the Fifth Meeting of the Joint Working Party, held on 29th July 1980' record that the unions 'were not able to state a preference for a particular grading structure, national considerations being relevant here, they were concerned that rewards or benefits should accrue to the staff who worked on the new equipment (p.3, paragraph 92) complying either the formation of a new IIP grade or DP/SDP grades'.


68. DVLC, Swansea, Interviews with CPSA DVLC branch officials, June 1984.

69. For example, the Finance and Manpower Branch considered that a 2% growth rate for DVLC business, an assumption taken as a basis for the costing basis, was too low for the period after 1983-84. DVLD, Swansea, 'Minutes of Sixth Joint Working Party : 9th October 1980', p.3, paragraph 122.

70. DVLC Management wanted the project's tendering to be open to competition in order to obtain the best equipment available on the market. Ministers, on the other hand, ever aware of the need to support and promote the UK computing industry, wanted the project to go single tendering, i.e. to ICL. The continuing demands of the DVLC management supported by the Departmental Management, and with the UK becoming a signatory of the EEC GATT regulations (opening up all Government computing contracts to 'open competition'), all proved too much for the Ministers' demands and resulted in the project's contract becoming an 'open tender'. This dispute effectively delayed all development on the project for most of 1981 and contributed significantly to slippage of the project's timetable. DVLC, Swansea, Interview with DVLD senior management, 14th February 1984.

It was interesting to note the role of the eventual equipment supplier (IBM) in the dispute over tendering procedures. IBM had established a sales team specifically for Central Government in 1979, some two years before the UK became a signatory to the EEC GATT regulations; from its inception the IBM sales staff had established contact with all Government Departments undertaking major computing projects, including DVLC manage-
ment. Awareness of what IBM could provide for the project, in comparison to ICL's equipment, was considered by IBM representatives to have been influential in DVLC's Management drive to push for 'open competition'. IBM, Chiswick, Interview with representatives from IBM's central government sales team, 24th May 1984.

71. At the last Joint Working Party, the management chair congratulated both sides on the conduct of business, declaring that the "working party had demonstrated that the (unions) could be progressive." DVLC, Swansea, 'Minutes of Seventh Joint Working Party : 3rd December 1980', p.3, paragraph 148.

72. The unions perceived the need for further discussion over subjects which were of concern to them and included: staffing numbers and grading; work organisation; training requirements; ergonomics; health and safety; and that no compulsory redundancies should result from the replacement system.' Ibid., p.2, paragraph 142.

73. DVLC, Swansea, 'Minutes of an Informal Meeting held on 29th September 1981', p.1, paragraph 1. In reference to a letter sent from the union chair to the management chair of the Whitley Council, dated 21st August 1981.

74. Ibid, p.3, paragraph 11.

75. The unions warned "that without a national agreement it might not be possible for the (unions) to give their agreement to use the equipment when it was delivered even if agreement had been reached on local issues at DVLC."

Whilst the management replied: "If it appeared that agreement with the unions might not be forthcoming, then [management] would have to re-assess the risks of implementation of the replacement system and consider alternative courses of action. These include deferring replacement or replacing the present system with similar equipment which would, at best, continue an out of date system. Going on to warn that: "Deferer might not lead to replacement as it was envisaged now, and in either case the planning team representing around one third of ADP staff at DVLC would not be required in their present role."


The threats from management were not just empty rhetoric in reply to the unions' murmurs of industrial action. Union approval of the 'Full Study Report' and consent to co-operate with the project were important factors in management's case for Treasury approval of the considerable expenditure to be incurred for the project. Although management exaggerated the situation for propaganda purposes to present scenarios as either: an expanding DVLC as the main computing centre in the DoT, or, in a diminishing role without computers. For example, when the national New Technology Agreement was first accepted in March 1982, then rejected in May 1982 by the trade
union national conferences, the DVLC unions informed management that they could be expected to take action to oppose the introduction of new technology. To which management replied:

"Anything which threatens DVLC's ability to develop its use of computers threatens DVLC itself".


78. Honeywell followed the existing equipment supplier ICL in declining to bid a formal tender due to what they perceived as restrictive time scales laid down by the CCTA. Guidelines issued by the CCTA insisted that the project should be 'risk free' and capable of moving to a fully on-line system, for future development. Honeywell considered that "the large conversion task made it uncertain that the project could be carried through in the laid down time scale entirely free of risk." Paul Walton, 'DVLC Upgrade at risk from schedule'. Computing, 27th January 1983, p.3.

Having provided the mainframe computers, which consisted of two IBM 3083 mainframe computers and twenty-four IBM 8100 mini-computers to act as cluster controls to link the 1500 VDU terminals to the mainframe computers, IBM was in an advantageous position to secure contracts for the remaining tenders. In particular for the 1500 VDU terminals over which competitors complained that they had become excluded because IBM was the only manufacturer of a terminal that could link directly to an IBM 8100 computer. 'IBM Snookers Rivals in Swansea Play-off', Computer News, 10th May 1984, p.1.

79. DVLC, Swansea, 'Departmental Whitley Council : JWP : Minutes of Meeting held 29th November 1983', Appendix III.

80. The old ICL system was run on 'DME' and 'George II' operating systems whilst the new IBM machine used an 'MVS' operating system for the mainframe and 'CICS' operating system for the communication links to the cluster controllers and VDU terminals.

81. DVLC, Swansea, Interview with senior management, 14th February 1985.

82. The consultants' role was to "furnish such guidance and advice as are [sic] necessary to ensure the successful implementation of the replacement project ... to provide an on-going, independent assessment of the strategy, the progress of its implementation, the future programme, quality of design, programme and design options, etc." Atkins Planning, 'Driver and Vehicle

The consultant's first task was a two-month initial review of the project with the production of a report assessing the replacement plan and the proposed arrangements for project management and Control. The report was presented in July 1983 and was, overall, favourably disposed towards the conduct and progress of the project. Its main recommendations were for tightening up of the project control rather than for wholesale changes. In particular, it called for: a re-definition of the project's objectives; identification of responsibility for who, what and which resources; clarification of the reporting procedure and introduction of appropriate quality assurance procedures; and extending the sub-project boards to cover all areas with changes and greater use of matrix management. Ibid., pp.4-13.

83. The terms of reference for the Local Joint Working Party were:

1. To provide timely consultation and agreement in principle on DVLC computer replacement requirements in respect of those matters of concern to the local joint working party and in particular, organisation of work, training programmes and accommodation requirements, including health, safety and ergonomic factors, but excluding issues affecting staff grading, numbers and redundancy where these are the subjects of departmental and/or national negotiations.

2. To seek agreement where possible, on such local questions according to an agreed timetable. DVLC, Swansea, 'Departmental Whitley Council: Local Joint Working Party on DVLC Equipment Replacement: Minutes of First Meeting held on 3rd June 1982', Annex 1.

By the end of 1982, the Local Joint Working Party "had met seven times since its formation in June 1982, discussed thirteen user requirement reports in detail and two in outline. The unions had eight more reports for study and a further four reports would be issued for discussion." DVLC, Swansea, 'Departmental Whitley Council: JWP: Minutes of meeting held 5th January 1983', p.3, paragraph 16.

The local working party meetings were similar to the earlier working party meetings held during 1980 and the unions suffered from the same limitations. Discussion concentrated on documents from the management placing the unions into a reactive position which, with no clear or articulated union policy, was characteristic of the union strategy, and amounted to passive co-operation with the project.

84. The previous policy of the unions was that they "would not expect to be able to reach final agreement on grading and staff numbers which they would wish to reconsider when they had experience of the work in practice". DVLC, Swansea, 'Departmental Whitley Council: Joint Working Party: Minutes of Meeting held on 2nd April 1982', p.2, paragraph 8.
85. The grading guidance was issued by the Treasury Department's Staff Inspection and Evaluation Division. Despite protests by the unions nationally the Treasury and the Cabinet Office's Manpower and Personnel Office refused to discuss the issue. The unions' response was not to recognise the new guidance and instead base all negotiations on grading criteria issued in 1959. CPSA, H.Q., London, Interview with national CPSA officials, September 1983.

86. The personal opinion of the DVLD management was that the new IIP job fitted neither of the existing grade structures. However, had they the authority they would have made the IIP job a DP grade. DVLC, Swansea, recorded details of 'Departmental Whitley Council: Meeting held with CPSA Representatives', 10th November 1983.


88. Ibid.

89. DVLC, Swansea, 'IIP Pilot Monitoring Plan', n.d., chapter 1, paragraph 3.


91. The issue was resolved by having a mixture of 28 clerical grades and 12 DP grades which reflected the proportions of each grade at the DVLC. To acquaint DP grades with the clerical system DP grade workers were transferred to clerical work prior to moving into the 'user acceptance trials.'

92. In the CPSA's 'Negotiations Bulletin, No.6, 9th April 1984', it states:

"Unless Department of Transport Management can persuade the Treasury that the claim is justified and that agreement will guarantee a smooth transition, it will be up to us to demonstrate to the Treasury how we feel."

93. The IIP teams were formed with sixteen lower grades, i.e. CA or DP, to four higher grades, i.e. CO or SDP, each supervised by one EO grade, i.e. first line management grade. The experimental teams had a mixture of ten lower to ten higher grades, supervised by one EO grade. DVLC, Swansea, 'Departmental Whitley Council: Joint Working Party: Minutes of Meeting held on 13th April 1984', p.2, paragraphs 9-12.

94. Until this time the management refused anything but the minimal 1 month Shift Disturbance Allowance compensation. In response to the CPSA's claim of two years, management offered 3 months. At a subsequent meeting management improved their offer to 4 months but by then events at the DHSS Newcastle Central Office had become critical, resulting in strike action. It was
agreed to await the outcome of the DHSS strike at Newcastle with its ramifications for changes nationally before resuming negotiations. DVLC, Swansea, "Special Meeting on DVLC Equipment Replacement: Minutes of Meeting held on 27th April 1984", p.2, paragraph 8.

95. London, 'Minutes of the Meeting of the Department of the Environment and Transport Central Whitley Council to Discuss Grading Dispute in Respect of Equipment Replacement at DVLC held on 29th March 1984', p.4, paragraph 10.

96. DVLC, Swansea, Interviews with CPSA DVLC branch officials, June 1984.

97. The following motion was put before the CPSA members at the DVLC:

"that the progress made by the negotiators was all that could be achieved by negotiation and that the package as a whole should be recommended to the members for acceptance".


98. IMITAX Consultancy, Wimbledon, London, Interview with Keith Robertson, consultant to Job Satisfaction Team at DVLC, 24th May 1984.


100. The aim of the Pilot Trial was to "test how well the integrated job works in comparison with both the objectives set out for the Integrated Input Procedures in the 'Full Study Report' and with the present system and its separation of duties". Ibid, chapter 1, paragraph 4.


102. The 'IIP Pilot Monitoring Plan' states in chapter 5, paragraph 7, that the unions would be interested in many of the detailed areas throughout the IIP trial, particularly the staffing/grading issue, ergonomics and accommodation" and that the unions "most significant area of interest will be the trial results particularly as they reveal information on grading in the IIP teams".

It was also assumed that the existing procedural arrangements, i.e. consultation through the local and departmental working parties would suffice "as the forums for channelling and discussing information arising from the trial".

104. At the end of 1983 the project consultants had recommended to the project board that a review "of how human issues were being handled in the replacement system" be undertaken. Ibid, paragraph 15.

The DVLC JST Steering Group decided "it would be beneficial if the two independent aims could be merged into a single study". Ibid, paragraph 16. This resulted in the 'People and IIP' report. The JST interviewed all staff in the user acceptance trials, a selection of staff who would be transferring onto the IIP system, managers and planners and trade union officials. The report was a 'snapshot' of workers and management feelings and perceptions on how they had been involved in the new system and how they felt about it. The overall conclusion of the report was:

"one of optimism for the future, which will only be justified, however, if the expectations which have been raised are met and the people in IIP continue to be seen as critically important to the success of the project".

Ibid, paragraph 4.

105. The report noted that "The degree and quality of consultation has been immeasurably higher than that of twelve years ago". Ibid, paragraph 3.2. It went on to say that "Although strenuous efforts had been made by management, unions and planners to communicate effectively with the body of DVLC staff, more work needs to be done here". Ibid, paragraph 3.4.

Specifically on the unions the report notes that "they should have done more informal talking to their members and tried harder to get a true picture of people's feelings and concerns about IIP. By concentrating on national discussions of some issues they had been unable to take adequate account of the more immediate and personal concerns of members about these issues." Ibid, paragraph 34.

106. The local CPSA branch officials perception of the work undertaken by the JST reflected their own political identity, illustrating the complexity of political opinion among the union officials. For example, officials associated with far left and moderate factions held little regard for JST, the former because they saw it as an attempt to bolster a decaying capitalist system, the latter because it undermined the role of a union and members might see it as a reason for not belonging to a union. Broad left officials, excluding the far left, were in general sceptical of the JST observing it as an attempt to weaken membership vigilance over the problems raised by the introduction of technology with members being conned into accepting change without proper consultation. There were very few officials who welcomed it as a good thing. IMITAX Consultancy, Wimbledon, London, Interview with Keith Robertson, consultant to Job Satisfaction Teat at DVLC, 24th May 1984.
107. The minutes of a joint meeting of the CPSA DVLC BEC and DoE/DoT SEC held at the DVLC, Swansea, 28th July 1985, following the JST presentation, records:

"the trade union side should suggest to management that job satisfaction could be involved in the IIP area provided an equal number of union members could be seconded onto the JST and become an integral part of that team".

108. Ibid.


111. The CPSA were requested by the DVLD management for information on "what monitoring ideas you have ... [adding] that it is necessary for us [DVLD management] to be brought more into your confidence on exactly what the trade unions will be seeking to reveal from the monitoring process ... there were some very real difficulties in what you propose ... until we are clear about the whole union side monitoring intention, it is not appropriate for me to respond in detail to the specific proposal for four additional people [on facility time]". Ibid.

112. Ibid.

113. For example, this lack of coherence of the SCPS policies is demonstrated in their policy for the role of the JST in the IIP trial. At the local level (DVLC) the SCPS were concerned that the CPSA proposal would not endanger an existing vacancy for the JST which was to be filled by a SCPS grade. In particular they were concerned that the CPSA proposals might be played off against this vacancy, i.e. 2 CPSA grades in place of one full-time JST position. The national SCPS policy for JST was against the JST and had that been strictly applied would have resulted in the end of JST posts altogether.

114. For example, the CPSA DVLC Branch Chair's objectives for the project, reflecting the majority of the BEC, were: firstly, the correct grading and remuneration for the job; secondly, to ensure all the Health and Safety aspects were correct for the job; thirdly, to ensure that there would be no monitoring or work measurement performed which would make the new IIP job like the old DP fast keying job; fourthly, to ensure maximum satisfaction was forthcoming from the IIP job in order to reduce all the dull and boring aspects of the job. DVLC, Swansea, interview with Maurice Wilson, CPSA DVLC Branch Chair, 16th August 1984.

115. DVLC, Swansea, interviews with workers on the IIP pilot trial and CPSA and SCPS union representatives, July-August 1984.
116. Initiatives for constructing alternative technological scenarios, for example Hilary Wainwright and Dave Elliott, The Lucas Plan: A new Trade Unionism in the Making? (London: Allison and Busby, 1982), were largely disregarded by CPSA representatives as interesting ideas but utopian dreams with no relevance to the DVLC because of the nature of the clerical production process. Ibid.

117. The union proposal for monitoring the IIP pilot trial was presented in a similar format to the management's proposal and was a professional looking document. It was established as a means of improving union communication, permitting members in the trial an easily accessible means of raising issues with a union representative and permitting union negotiators to be kept fully informed of the on-going developments in IIP. It was not a means of organizing opposition to the pilot trial or the replacement project, although with a prominent union presence the CPSA were seeking to improve union awareness and organisation in IIP.

118. In a letter from Graham Whatley, DVLD Replacement Computer Division, to Terence Ainsworth, CPSA DoE/DoT Section Assistant Secretary, 28th September 1984, it states that the proposals for CPSA independent monitoring of the IIP pilot trial was "a very positive and constructive document of the trade union monitoring and it should provide the CPSA with a sound foundation on which to base its assessments and judgements on the pilot... Now that we have seen your detailed proposals, there appear to be particular issues where CPSA's and Management's monitoring needs are complementary and where it might well be worth an investment in our time to find ways of co-operating in these areas of overlapping need... we shall endeavour to do what we can to ensure that your needs are met in this respect!"


120. On the 13th September 1984, a full meeting between CPSA branch officers and the members in IIP was held to report on the CPSA proposals for monitoring. These were unanimously accepted by the members. Afterwards an informal meeting was held between the CPSA and Senior Management specifically to discuss the monitoring proposals. Management explained that in principle they could partly meet the union's demands by allocating the two nominated people with 50% facility time. Management had a problem in providing full facility time to the two nominees because of pressure from Whitehall to reduce all facility time. This and other proposals, such as having one nominee on 100% or expanding the use of outside consultants, was not satisfactory to the unions.
121. In place of providing additional facility time, which the Treasury controlled centrally and this would have necessitated their permission, the DVLC management made the CPSA Monitoring Team part of the IIP pilot trial complement on a 'supernumerary basis'.

122. The two members of the CPSA IIP monitoring team came from different clerical divisions, i.e. CD and CV, and subsequently attended different courses. At the completion of their respective courses each nominee consulted with other CPSA members attending the same course to consider collectively and assess the course. Results from these deliberations were written up into reports and presented at the monthly CPSA BEC meetings.

123. Accommodation at the DVLC site is largely based on open plan offices. There are two main buildings concerned with input and output respectively. The input block is a 16-floor square shaped building with each floor large enough to accommodate approximately 200 people. The IIP pilot trial occupied the entire 4th floor of the input block.

124. Initially formal contact between the monitoring team and members in IIP was through a series of small group meetings. With the team members having worked at the DVLC for a number of years and through their union activity both already knew many of the workers in the pilot trial. The initial introduction generated substantial interest among members in IIP, particularly for the female team member from women with personal concerns and worries not necessarily connected with the pilot trial. Some issues and concerns could be resolved simply by the team providing a sympathetic and reassuring response; for example personal problems, concern over the state of negotiations, new developments in IIP, etc. In other cases direct action was taken by the monitoring team on behalf of members, for example, provision of an adequate number of wastepaper bins, adequate and clean wash-room facilities, non-functioning air conditioning, etc. And in referring issues for resolution to the suitable authority, for example: supply of office furniture to the supplier, HMSO; provision of rest areas and rest breaks to the union branch representatives; etc. Many of the issues could, and should, have been resolved by a more sensitive and vigilant line management. However, in their absence the monitoring team were able to step in and achieve results in issues that were an unnecessary irritant and source of frustration to members in the pilot trial. In addition, the construction of the matrix management organisation made it difficult to identify individual management responsibilities. The monitoring team were able to work through this maze identifying where particular issues could be resolved. Through fulfilling their personal role the team built up considerable goodwill and support for the CPSA in the IIP pilot trial.


125. DVLC, Swansea, Interview with IIP monitoring team members, February 1986.
126. The weekly supervisory meetings of the monitoring team with senior branch officials did provide a means of debating issues raised by the monitoring team, although the already over extended branch officials could not provide the time or energy to do justice to their supervisory role. In addition, the initiative was novel and a departure from a more traditional union strategy and there was no local experience of such a strategy. Whilst the weekly meetings kept branch officials aware of developments in the IIP pilot trial and the membership feeling in the area, it was apparent that an overall lack of policy over the project, and IIP in particular, or vision for the outcome of the trial resulted in a lack of direction for the work of the monitoring team. DVLC, Swansea, Interview with CPSA IIP pilot team monitoring team and CPSA senior branch officials, February 1986.

127. The role of the monitoring team was to undertake activities on behalf of and directed principally by the BEC. Reports from the team in the form of written documents and verbal opinions were to be discussed and actioned by the BEC. In practice though this relationship frequently broke down. The BEC adopted an attitude towards the IIP pilot trial in the words of one of the monitoring team as though "they had washed their hands of it." At the BEC's monthly meetings the IIP reports came low down on the agenda for debate and little time was allocated to give justice to the information being supplied by the monitoring team. The attitude of the BEC was to consider the problems of the IIP as being largely solved through the work of the monitoring team whilst in practice the monitoring team raised more issues than it solved. Far from solving the IIP problems the monitoring team were creating more work and not less. Ibid.


129. Ibid.

130. Coventry Workshop is a resource centre for local trade union and community groups, providing a range of information, research, communications, education, etc., facilities. Coventry Workshop, 38 Binley Road, Coventry, CV3 1SA.

131. The CPSA had representation on two replacement project sub-committees (an Ergonomics Planning Group and User Liaison Group) although attendance at these meetings was considered beneficial, largely for the collection of information rather than extending union influence. DVLC, Swansea, Interviews with monitoring team, March 1985.

132. The aim of this review was "to critically examine the essential human issues raised by the introduction of integrated input procedures within DVLC; to reach conclusions on how effectively these are being addressed within the pilot year to date; and to make recommendations for further action or study to the project board." 'DVLC : The IIP Pilot Year : Human Issues : A Report to the Project Board', n.d., p.1.
133. In respect of the lack of experimentation in the IIP pilot trial the 'Human Issues' review considered it "all the more disturbing when we believe that IIP is in grave danger of not utilising anything like to the full extent the capacities and flexibility which people have so willingly brought to it." Ibid, p.15.


137. DVLC, Swansea, Interviews with CPSA DVLC branch officials, November 1986.

138. One of the more visible aspects of the team's influence on negotiations was the issue for the provision of rest areas and rest breaks in the IIP system. In the old system DP grades had two breaks a day for consuming beverages and designated rest areas to allow workers to take their breaks away from their workplace. Clerical grades, on the other hand, had an informal arrangement whereby beverages could be consumed at their desk at any time of the day, although no designated time for rest breaks was given there were no rest rooms. The issue had been first raised formally by unions at a local working party on the 10th August 1984, in relation to the ergonomics considerations of IIP. In the opinion of the unions, the provision of rest breaks was necessary because IIP was essentially a machine area and it would ensure workers would not spend long periods of time working on a VDU. Further, the provision of rest areas would encourage workers to take allocated rest breaks and thereby go some way to improving the overall job design of IIP work which the unions felt would be more synonymous the old fast keying job rather than the old clerical job. In support of their case the unions cited guidance issued jointly by the Central Communications and Telecommunications Agency (CCTA) and Council of Civil Service Unions (CCSU) which states:

"Where the work flow cannot be organised to provide such natural breaks (i.e. where intensive use is made of the VDU over long periods of time), rest pauses, preferably away from the VDU, should be considered." HM Treasury CCTA and CCSU, The Human Factors Associated with the Use of Cathode Ray Visual Display Units, September 1983, pp.8-9.

In reply the management did not consider IIP was the type of environment warranting rest breaks or rest areas, and demonstrated the ambiguity of the joint guidance by citing the same guidance in support of their view.
Between August and October 1984, development over this issue was suspended whilst the unions awaited a report from management which would present the detailed arguments why rest breaks or rest areas were not necessary in IIP. However, in October the monitoring team took responsibility for the issue and began a series of enquiries with members in IIP on their feelings over the provision of rest breaks and rest areas. From these discussions a report was compiled with proposals for establishing an experimental trial of rest breaks and rest areas. Although feelings in IIP for the provision of this facility was mixed, i.e. approximately half were for it and half against, sufficient evidence of 'machine pacing' was found to justify a need for limiting the time that people were operating a VDU. For example, as the monitoring team's report to the Branch Executive Committee dated 5th November 1984 states:

"an individual keying for a length of time tends to 'forget' about everything else and allows the machine to dictate their activity".

The proposal for an experiment would, it was anticipated, allay fears from workers who were concerned that the consumption of refreshments could be restricted if set breaks were introduced. The management, whilst not hostile to an experiment, argued against its immediate adoption on the grounds that too many other changes were going on in IIP to judge it as a fair assessment. The unions saw this as an obstructive move because, they argued, with the passage of time workers would simply accept the existing working conditions and accommodation for rest areas would become difficult to find without being an integral component of the workplace design. In support of their demand, the unions were able to report that line management in IIP considered rest breaks and rest areas a necessary component of the new system. The management considered that "this information was disturbing." 'Minutes of Local Joint Working Party', 22nd November 1984, paragraph 5.

In the following months a series of meetings were held between the two sides over this issue. The management eventually made proposals for a trial in April 1985. However, the unions considered the conditions so stringent as to be unacceptable. A move which the unions considered to be stalling actions in order to sabotage the trials. Eventually the issue became a casualty of the breakdown in industrial relations in July 1985 and thus militated the possibility of an experiment being established. The issue demonstrated the influence of the monitoring team, but it also demonstrates the superior advantage of management in 'technology bargaining' to undermine initiatives from the unions.
139. The CPSA DoE/DoT Section Secretary, Terence Ainsworth, commented in an interview in January 1986, that during the first half of 1985 the senior management of the DVLC would ring him up several times a week for his opinion over a proposed development. After the breakdown in negotiations in July 1985, and then its resumption in September 1985, they never bothered to contact him.

140. DVLC, Swansea, Interview with CPSA IIP pilot trial monitoring team, March 1985.

141. DVLC, Swansea, Interviews with Input Systems branch and senior management representatives, 24th January and 14th February 1985.

142. The monitoring team detected a noticeable change in the line management's attitude towards the initiative. "At the beginning they were as nice as pie, falling over themselves to help us - due to pressure from on high," i.e. because the monitoring proposals were legitimised by the DVLD senior management. However, as the pilot trial progresses this attitude changed so that by March 1985 the line management were largely ignoring the monitoring team. DVLC, Swansea, Interview with IIP pilot trial monitoring team, 6th March 1985.

143. Ibid.

144. Ibid.

145. As the 'Minutes of a Special Joint Working Party held on the 4th February 1985' at the DVLC, Swansea, record in paragraph 3:

"The trade union side recognised that the circumstances of the Newcastle and Swansea situations were different but their staff at DVLC had continued to work normally throughout the dispute indeed without their co-operation and goodwill the replacement project would not have advanced so successfully, if at all".

146. Management gave four reasons for the substantial increase in their offer. First, they had more detailed knowledge of the situation since the previous offer and could thus plan more precisely. Second, the rate of implementation of the new system was much faster than expected. Third, recognition of the co-operation from all computer operations staff in implementing change. Fourth, persistent and legitimate representation from the trade unions. In addition, management stressed how they had endeavoured and obtained special dispensation from the Treasury to waive nationally agreed rules governing the payment of shift disturbance allowance.

Letter from Graham Whatley, DVLD Replacement Computer Division, to Terence Ainsworth, CPSA DoE/DoT Section Secretary, 6th March 1983. CPSA. DoE/DoT Section files, Balham, London.
147. At a special meeting held on 13th March 1985, the unions, whilst recognising that the management offer was a substantial improvement to the three months shift disturbance allowance originally offered, it did not go far enough and added that the unions "anticipated difficulty in persuading their members to accept it." DVLC, Swansea, 'Departmental Whitley Council: Joint Working Party on DVLC Equipment Replacement: Minutes of a Special Meeting held on 13th March 1985', paragraph 9.

The management reaction was to threaten the trade unions by pointing out that the offer had been given within the frame of local negotiations and if it was not accepted the offer would be "withdrawn and negotiations with department centrally would start." Ibid. The unions pointed out that they were not in a position to accept or reject the offer, but had to present the offer to the shift-worker members, which they did the same day.

The offer was not accepted by the shift workers and the trade union negotiators were instructed to get an improved offer. Subsequently, another special meeting was held the following day on the 14th March 1985. At this meeting the trade unions pointed out why the membership had rejected the offer because of: the permanent reduction in take home pay; the denial of career opportunities within the computing area; and the faster run down in the area than expected, which was, paradoxically, due to the faster implementation of the new system and one of the reasons cited by management for improving their offer. In addition, the expectation of the shift workers had been raised by rumours of a two year offer being available from management. The trade unions then notified management that if certain improvements to the existing offer were forthcoming, then they could feel able to urge acceptance of the improved offer. These demanded improvements basically consisted of raising the offer to 12 months, an option to receive the money as a single lump sum payment and that the rates should be based on the then yet unresolved 1985 pay offer. In reply management agreed to consider the revised claim and notify the trade unions of their decision.

DVLC, Swansea, 'Note of a Special Trade Union Side Meeting with the Director to Discuss Compensation for Loss of Shift Disturbance Allowance held on 14th March 1985.'

The management reply was largely to accept the union decision which was accepted by the DVLC Branch Executive Committee (BEC) and unanimously by the shift workers.

148. The comparative rates of pay for the grades on the maximum of the incremental scale as from the 1st April 1985 was:

CA - £5,054 p.a.  DP - £5,688 p.a. + £398 p.a. proficiency allowance
CO - £6,293 p.a.  SDP - £6,907 p.a.

149. DVLC, Swansea, 'Departmental Whitley Council: Joint Working Party on DVLC Equipment Replacement: Minutes of the Meeting held on 7th May 1985', Appendix 1, 'Progress Report.'

150. The CPSA National Disputes Committee is a sub-committee of the National Executive Committee which assesses requests from branches and sections to support industrial action. In this instance, the DVLC branch received financial backing from the CPSA nationally to pay all members taking strike action over the IIP grade issues 50% of their normal salary.

151. DVLC, Swansea, Interviews with CPSA IIP pilot trial monitoring team, January 1986.

152. Increasing awareness of the DVLC claim was leading other sections and branches within the CPSA to consider their own grading claims where these were changing job boundaries arising from the introduction of new technology. For example, at the Department of National Savings Bank in Durham, North-East England, the branch had put in a claim for all CO grades working on a new system for National Savings Bonds which involved workers using VDU terminals to receive £5 extra per week.

153. Letter from D. J. Burr, Director General DoE/DoT, to Alistair Graham, CPSA General Secretary, 26th June 1986, paragraph 8. CPSA DVLC Branch files, Swansea.

154. DVLC, Swansea, 'Note of a Special Meeting with the CPSA held on 3rd July (1985) to discuss IIP Pay and Grading', paragraph 2(a).

155. There were two ballots. One was of all members involved in the IIP pilot trial and asked for the views of members on the proposed interim offer. The vote was 94 for rejecting the offer and 11 for accepting the offer. The other ballot was in the feeder areas for IIP and asked whether members were for or against management pushing ahead with implementation, 501 were against implementation, whilst 25 were for it. CPSA, DVLC, Branch Circular to All Members, 17th July 1985.

156. DVLD management issued a circular which openly threatened the CPSA members. It stated:

"The offered 'on account' payment does not apply to redeployed Data Processing staff who would otherwise be redundant ..... They will continue to have the opportunity to take clerical grading on entering IIP work. If they decide to remain as Senior Data Processors or Data Processors, they may have to re-assign to work appropriate to those grades at any time."

'DVLC Computer Project News No.4', 1st July 1985, paragraph 7.

157. Letter from Alistair Graham, CPSA General Secretary, to L. Williams, CPSA DVLC Branch Secretary, 10th July 1985, CPSA DVLC Branch files, Swansea.
158. DVLC, Swansea, Interviews with CPSA DVLC members and branch officials, March 1986.


162. For example, in 1987 moves towards de-centralising the DVLC system emerged in proposals for the current computer replacement project. See John McCrone, 'IBM in Driving Seat as DVLC Clocks up Costs', Computing, 5th March 1987, p.1.

163. Ibid.

164. For a detailed discussion of this matter see reference 138 above.

165. DVLC, Swansea, Interviews with CPSA DVLC branch representatives, October 1984.


167. Ibid, p.28.
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CHAPTER SIX

1. Tony Colwell, CPSA Land Registry Section Assistant Secretary, 'Report to CPSA Land Registry Section Executive Committee on Computer Project', July 1982, p.1.


5. Ibid.


7. Tony Colwell, CPSA Land Registry Section Assistant Secretary, 'Staffing Levels: Plymouth DLR, Report to CPSA Land Registry Section Executive Committee', n.d.

8. For example, in January 1980, the number of cases examined by external examiners or 'outside counsel' for that month was over 16,000. Since that time this has steadily declined to just over 4,000 cases in January 1985. Trade Union Side Land Registry Departmental Whitley Council, 'Volume of Cases Examined by outside Counsel: 1979-85', 12th March 1985.

9. In November 1982, management published two reports from a staff inspection of Nottingham DLR. Conclusions reached at Nottingham by staff inspectors had universal application throughout the department. The reports recommended the downgrading of CO and EO work with COs doing some traditional EO work and EO grades checking only 10% of CO work instead of 100% as was the current practice. The Land Registry management issued an 'office notice' stating the intent to save 200 jobs as a result of the implementation of the recommendations in the report. The trade unions rejected management's offer of talks about implementation. The management therefore proceeded to issue non-agreed 'Practice Instructions' to implement the changes. The CPSA and SCPS held mass meetings where a majority voted for opposition to management's actions. The practice instructions were boycotted by a majority of staff with management threatening staff with suspension. Following more mass meetings it was decided to take industrial action. In the week beginning 7th November 1983, 450 staff were suspended. In response the unions started strike action. The strategy of the CPSA and SCPS was for selective strike action with strikers receiving 50% of normal pay. The strike secured talks which took place over 5 days ending on Friday.
2nd December 1983 when an offer was made and recommended by a combined CPSA and SCPS Executive Committee Meeting on 5th December. Following more mass meetings the offer was accepted by the membership on a vote of 1,798 for the offer and 335 against. As a result the members returned to work on 12th December. For CPSA the offer resulted in the complete withdrawal of management's plan to downgrade work to CO level.


10. The Section Executive Committee consists of Chair, Vice-Chair, Assistant Secretary, Treasurer, Organiser and nine elected members.

11. HM Land Registry, Training and Education Division, 'Computer Appreciation', section 4, paragraph II.


13. HM Land Registry, Training and Education Division, 'Computer Appreciation', section 4, paragraph II.


15. HM Land Registry, Training and Education Division, 'Computer Appreciation', section 4, paragraph II.


17. Ibid.


20. Ibid.


23. Ibid.


25. Ibid.

27. In a DLR there are hundreds of case-bags containing all the documents and details of a register being actioned and moving through the different sections of the DLR. Requests for information from these case-bags is a common occurrence owing to time taken to process applications and it is, therefore, important to have some indication of the whereabouts of these case-bags. In a manual system, this involves searching the whole office for a particular case-bag. Experienced messengers, whose job it is to undertake this search, become very adept at remembering where particular case-bags are located from former searches. Under the computer system each case-bag is fitted with a bar-code label or magnetic identification tag which is input at the day list stage and read off each time the case-bag enters or leaves a particular section. When a request for a case-bag location is received the particular section it can, in theory, be identified, thereby helping to speed up the search process. Interviews with various Land Registry staff, Plymouth, 24th April 1983.

28. Ibid.


30. This is an unusual arrangement for IBM who are usually more involved in projects of this size to ensure a smooth and satisfactory completion of the project. Conversations with Land Registry Computer Services Division personnel, Plymouth, September 1984.

31. Interview with R. Chere, Area Manager for Gloucester District Land Registry, 26th March 1984.


33. Interview with John Shorney, Project Implementation Officer, 24th September 1984.

34. Interview with Andrew Dowds, SCPS representative and HEO in Computer Services Division, 5th September 1984.

35. Ibid.


37. Ibid.

38. The terms of reference for the Joint Working Party were:

1. Examine the work procedures for computerisation with special reference to Appendices 7-10 of the 1980 Full Study Report.

2. Consider the staffing implications arising from the proposed computer system and identify any particular difficulties.
3. Attempt to work out possible solutions to such difficulties (without committing either side).

4. Consider the arrangements for practical experimentation and subsequent implementation of the new system.

5. Report to the Joint General Purposes Committee Subcommittee (on Computerisation) by 1st January 1982.


40. Ibid, p.2, paragraph 2.6(a).

41. Ibid, p.4, paragraph 3.4.

42. Ibid, p.4, paragraph 3.3.

43. Ibid, p.4, paragraph 3.5.

44. Ibid, p.4, paragraph 3.6.


46. A consultants' review of the project commented:

"The REDTEXT experiment has provided an excellent means of demonstrating and testing many aspects of the functionality of this system, but cannot be considered to provide a complete picture."

'Initial Review Report on Registration of Title Computerisation Project', 1984, p.41.

The staff working on Redtext did not consider it represented what the final system would be like. In their opinion they could not judge whether the proposed changes, epitomised in the experimental systems, provided better or worse working conditions because the experiments were only partial in their applications. Conversations with CPSA Land Registry members, Plymouth DLR, September 1985.


48. Ibid.
49. The unions' Eight Point Plan was:

1. There shall be no loss of posts resulting from the introduction of computerisation. Any surplus manpower shall be used to extend compulsory registration of title to land and to extend the role of the Land Registry and its service to the public.

2. All examination of title work shall be carried out within the Department by Land Registry staff.

3. The Official Side and the Departmental Trade Union Side will review and agree the appropriate grading and allowance structure of posts affected by computerisation.

4. During the conversion period from a manual to a computerised system, no direct entrant Executive Officers will be taken into the Department. Internal promotion opportunities will be maintained for Land Registry staff in accordance with the General Agreement on Promotion Procedure or other agreements as may be reached from time to time between the Official Side and the DTUS.

5. All ADP vacancies will continue to be open to all Land Registry staff with training and re-training as required.

6. Computerisation will not be used as a means of changing existing procedures or introducing new procedures which could be equally applicable to the manual system. This is without prejudice to changes that can be identified by both sides as inherent to the computerised system.

7. All proposals for changes in working arrangements or new or revised procedures will be agreed with the Departmental Trade Union Side before their introduction.

8. Full information and consultation on all future computerisation developments, implementation and time scale will be held with the unions at Departmental level before any discussion is initiated at local level.


51. E. F. Martin, HM Land Registry Principal Establishments Officer, to A. P. Dilley, Union Side Chair, 22nd December 1982, CPSA Land Registry Section files, Balham, London.


53. Ibid.

54. HM Land Registry, Departmental Whitley Council, Trade Union Side, 'Minutes of meeting held 3rd May 1983.'
55. E. F. Martin, HM Land Registry Principal Establishments Officer, to P. M. Johnson, Departmental Trade Union Side Secretary, 17th May 1983, CPSA Land Registry Section files, Balham, London.

56. P. M. Johnson, Departmental Trade Union Side Secretary, to J. O. Sheldon, HM Land Registry Assistant Establishment Officer, 10th May 1983, CPSA Land Registry Section files, Balham, London.


58. The terms of reference for the review were:

1. To review the project for the introduction of the computerisation of the Registration of Title System in the Plymouth District Land Registry; and arrangements for control of the project, commenting in particular on:

   (a) the feasibility of the project timetable in the light of staffing and other constraints;
   (b) the project definition;
   (c) technical work already completed;
   (d) project control structure and procedures (recognising that PROMPT is the standard methodology promoted by the CCTA)

2. To review plans for the management and control of the implementation of the system in the remaining District Land Registries.

3. To report findings, and to make recommendations for remedial action (where this is considered necessary) to the Chief Land Registrar.

Ibid.


60. Ibid.

61. The Project Resource Organisation Management and Planning Techniques (PROMPT) is a project control methodology and CCTA mandatory standard for all major central government computing projects. "It separates the management components of running the project (organisation, planning and control) from the technical components of the work itself (activities and end-products) and deals with each on a step by step basis". It is used in conjunction with 'Structured Design Methodology' (SDM) and 'Structured Systems Analysis and Design Methodology' (SSADM). They are all formalised approaches to the development of computer systems providing a structured and that is sometimes referred to as a 'cook book' approach. 'CCTA Management Guides for I.T', reference: 3/84, MTDS, Page 2.
The review identified the following problems:

1. No clear understanding of roles, objectives and responsibilities.
2. No identifiable project management.
3. No defined process of managing resources.
4. Planning of individual stages inconsistent and not co-ordinated.
5. Progress monitoring not functioning.
7. Not all potential problems clearly identified.

The decision for expanding compulsory registration was undoubtedly influenced by the project. The use of new technology could increase the productivity of the Department without the employment of new staff. It had been calculated in a Re-costing Report that without the technology and using the existing manual system by 1997/98 9653.5 staff would be required to meet the expected workload. The comparable figure under the computerised system was 7888 staff which is approximately a 22% increase in productivity per person. Management had consistently stressed that compulsory registration under the manual system would not have been acceptable to the Treasury.

The differences between the DVLC and Land Registry case studies may be counterbalanced by their similarities. For example, the size of the CPSA Land Registry section membership was about the same as the DVLC branch; both computer systems used IBM hardware and the same consultants to review the projects; both projects would involve the majority of workers in a single establishment and grading was a prominent issue for negotiation.

These dual reporting procedures were based on the following qualifications:

1. The Local Computer Negotiating Committee would be a separate meeting to the usual Local Whitley Council meeting.
2. Draft minutes of the Local Computer Negotiating Committee would be available to the Departmental Computer Negotiating Committee.
3. The Chair and Vice-Chair of the Local Computer Negotiating Committee would be present at Departmental Computer Negotiating Committee meetings.

4. The discussion of subjects at the Local Computer Negotiating Committee would be concerned with local matters under its own terms of reference.

5. Departmental Trade Union Side representatives could attend Local Computer Negotiating Committee meetings as and when necessary.

6. Provision of appropriate monitoring facilities for local union representations.


68. Ibid.

69. Tony Colwell, CPSA Land Registry Section Assistant Secretary, 'Departmental Trade Union Side Monitoring of the Registration of Title Project', June 1985.

70. Ibid, paragraph 1.3.

71. Ibid, paragraph 1.7.


76. HM Land Registry, 'Minutes of Departmental Computer Negotiations Committee, 10th September 1985', paragraph 2.1.1.


80. Ibid.


83. Ibid.

84. Ibid.

85. Ibid.

86. HM Land Registry, Plymouth DLR, 'Minutes of Local Computer Negotiations Committee, 13th November 1985,' p.2.

87. Ibid.


89. HM Land Registry, 'Minutes of Departmental Computerisation Negotiating Committee, 7th November 1985', paragraph 3.

90. E. F. Martin, HM Land Registry Principal Establishments Officer, to A. P. Dilley, Departmental Trade Union Side Secretary, 17th February 1986, paragraph 2.

91. Ibid, paragraphs 4 and 5.
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CHAPTER EIGHT


5. Ibid, p.20.


