



<http://www.diva-portal.org>

Postprint

This is the accepted version of a paper published in *Work, Employment and Society*. This paper has been peer-reviewed but does not include the final publisher proof-corrections or journal pagination.

Citation for the original published paper (version of record):

MacKenzie, R. (2000)

Subcontracting and the re-regulation of the employment relationship: A case study from the telecommunications industry

Work, Employment and Society, 14(4): 707-726

<https://doi.org/10.1177/09500170022118699>

Access to the published version may require subscription.

N.B. When citing this work, cite the original published paper.

Permanent link to this version:

<http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-66598>

Subcontracting and the Re-regulation of the Employment Relationship: A Case Study from the Telecommunications Industry

Robert MacKenzie

Robert MacKenzie is a Lecturer within the Industrial and Labour Studies division of Leeds University Business School.

This is a case study of the use of subcontracting within BT plc the UK's largest telecommunications firm. The 1990s have witnessed significant quantitative and qualitative changes in the utilisation and management of subcontracting within BT. The deregulation, or rather the shift in regulation, of the employment relationship represented by movement from bureaucratic hierarchical forms of organisation to sub-contracting introduces several sources of uncertainty into the process of ensuring an adequate supply of labour and inducing the desired contribution within production. This study examines whether the regulation of labour in terms of supply and performance can be reconciled through subcontracting mechanisms. In this case the experience of deregulation of the capital-labour relationship threw up unforeseen outcomes. The problems that arose from the reliance upon a labour source that was ostensibly beyond the control of the firm inspired initiatives that essentially represented the partial re-regulation of the capital-labour relationship.

Subcontracting and the Re-regulation of the Employment Relationship: A Case Study from the Telecommunications Industry

The deregulation of employment has been a key feature of the 1990s. There have been considerable reforms visited upon traditional systems of employment, over this period. The hierarchical-bureaucratic employment structures represented in traditional internal labour market have been undermined (Rubery 1994; Lovering 1990; Nolan and Walsh 1995). This has been paralleled by a revival of interest in the contract as the favoured mechanism for the organisation of economic activity (Deakin and Michie 1997).

The effect of deregulation upon employment is a complex and multi-faceted issue, as the concept of deregulation can be operationalised in a number of discrete, but often inter-related, ways. In the context of the UK economy, the denationalisation and liberalisation policies of the last two decades have brought about considerable industrial restructuring, with significant consequences for employment within these sectors

(O'Connell Davidson 1993; Wallis *et al* 2000). This must in turn be set in the context of the politically sponsored labour market deregulation of the 1980s and 1990s (Nolan and Walsh 1995). In addition the concept of deregulation can be applied to the reported reforms in the employment relationship itself, in terms of de-structuring of the capital-labour relationship, and the shift to what are supposedly more flexible and contingent arrangements (Clegg 1990). Firms have redefined their boundaries, revised the demarcation between the internal and external labour markets, and sought alternative mechanisms for the regulation of the capital-labour relationship (Peck and Theodore 1998).

A key feature of this restructuring of employment has been the use of subcontracting. This article is a study of organisational change and the reform of the capital-labour relationship represented by the use of subcontracting within BT plc, the UK's largest telecommunications firm. Historically BT demonstrated many of the characteristics of a highly integrated bureaucratic organisation, with the employment relationship regulated by structures and rules associated with the operation of a classic internal labour market. There was a clear demarcation between the internal and external labour market, reflecting the logic of insulating operations within the firm from the influence of external market forces. Changes to these employment structures and practices has been a relatively long running theme within BT (Batstone *et al* 1984; Colling and Ferner 1992; Ferner and Colling 1991). It is argued, however, that the pace of the reform of labour policies accelerated in the 1990s. There were two key elements to the logic of these reforms: increasing the exposure of internal mechanisms to the impetus of competition; and redefining the firm's relationship with the external labour market. Invoking the irresistible logic of the market had been a theme within BT for some years, predating

deregulation and privatisation (Batstone *et al* 1984). Subscription to this logic had found expression in numerous initiatives: from the commercialisation process of the late 1970s, to the competitive tendering of the 1990s, and the general movement within the firm to increase the exposure of internal processes to market forces, and assert the imperative of competition. It was this logic that provided the theoretical justification for the realignment of the boundaries between the inflexible internal labour market and the flexible external labour market.

The logic of orthodox competitive labour market analysis held that the flexibility inherent in the free operation of market forces, liberated from the rigidities caused by the structures of the internal labour market and unionisation would provide for the efficient allocation of resources. The utilisation of telecoms contractors was founded on the operation of a flexible market for ground level labour. The hiring and firing of labour according to work-flow was a key feature of the system, even if it was performed by someone else, an intermediary (Gottfried 1992; Peck and Theodore 1998) in the form of a subcontract firm. This numerical flexibility was based in the ability to attract labour within a flexible and competitive labour market - a labour market which would be able to respond quickly to the requirements of those wishing to purchase labour.

This article examines the developments in the firm's relationship with the external labour market during the 1990s, and highlights a series of ironies that emerged as a result of these changes. In time the short-comings of reliance upon this less regulated source of labour began to emerge in the mid-1990s, with tensions arising from processes that could be considered essentially characteristic of a greater dependence on the external market. This resulted in responses from BT to intervene in the process of the

allocation of labour resources, to boost the confidence with which management could venture beyond the internal labour market. It is argued that the experience of deregulation of the employment relationship was not the panacea to flexibility that had perhaps been expected. The problems arising in the mid-1990s from a lack of regulation in supply led to initiatives that often contradicted the logic of externalisation. These were however short term responses; interim measures in the prelude to the attempted partial *re-regulation* of the capital-labour relationship undertaken by BT in the mid to late 1990s. It is argued that this reflected the firm's aspiration to reclaim the control over labour that was associated with the internal labour market, through alternative means.

Subcontracting and the Employment Relationship

According to Deakin and Michie (1997) one of the key features of the deregulation of the economy over the past two decades has been the revival of the contract as the foremost organising mechanism of economic activity. The growth in the utilisation of subcontracting over this period has been recorded in various studies (McGregor and Sproull 1991; Wood and Smith 1987; Marginson 1989; Hunter and MacInnes 1991; Hunter *et al* 1993), and the recent WERS study demonstrates that subcontracting remains a significant feature of UK industry (Cully *et al* 1999). The emergence of external contracting represents a significant development in the organisation of production, relocating the mediation of the firm's activities through a series of commercial contracts rather than via vertically integrated bureaucratic structures. This also represents the reorganisation of labour within production (Nolan 1983) and thus holds significant implications for the capital-labour relationship. The deregulation, or rather the shift in regulation, of the employment relationship, represented by movement from bureaucratic hierarchical forms of organisation to sub-contracting, introduces

several sources of uncertainty into the process of ensuring an adequate supply of labour, and inducing the desired contribution within production. The regulation of supply to guarantee a sufficient quantity of suitably skilled labour, both in the immediate and the longer term period, was traditionally one of the roles of bureaucratic employment structures (Doeringer and Piore 1971; Williamson 1975). The additional capacity offered by bureaucratic structures for the assertion of control over labour within production provided the key alternative critique to these early contributions (Edwards 1979; Gordon *et al* 1982). The twin problems of guaranteeing the supply of labour and exerting control over labour in production require the development of corresponding mechanisms of regulation. If not by vertically integrated bureaucracies then by some other means, such as the use of intermediary mechanisms to link the internal and external labour market (Gottfried 1992; Peck and Theodore 1998).

Subcontracting, therefore, entails both the mediation of a relationship between two discrete units of capital and the regulation of a capital-labour relationship. The changes to the organisation of production, and the organisation of labour within production, inherent in subcontracting must accordingly be considered across a number of dimensions. Firstly, the peculiarities of the production process, and the role of labour within it, impact upon the utility of subcontracting, and upon the nature of the contract relationship (O'Connell Davidson 1993; Bresnen *et al* 1985; Rubery 1994; Rees and Fielder 1992; Macneil 1981). Secondly, subcontracting essentially represents the redefinition of the boundaries between the internal and external labour markets. The deregulation at both a macro and micro level witnessed in the 1980s and 1990s (Nolan and Walsh 1995) was informed by a desire to remove hindrances to the free operation of the labour market in accordance with the assumptions of orthodox competitive labour

market theory. Yet critics suggest that neither individuals nor firms behave in ways consistent with the assumptions and operation of the orthodox Neo-classical model, nor are wages and labour mobility determined solely by the impartial forces of demand and supply. (Reynolds 1951; Ozanne 1968; MacKay *et al* 1971; Nolan and Brown 1983; Brown and Nolan 1988; Nolan, 1983). This is not to deny the role of market forces, but rather to recognise the impact of the institutional forms through which they are mediated and thus to locate the influence of the market in terms of the range of factors affecting the firms operations (Nolan and Brown 1983; Brown and Nolan 1988; Nolan 1983). Recognising the constraints acting upon a firm's labour policies, both institutional and environmental, is vital in understanding the use of such contingencies as subcontracting (Rubery 1994; Rubery and Wilkinson 1994).

Thirdly, the organisation of economic activity via contract relationships between two discrete units of capital, in any but the most abstractly contrived situations, require mechanisms to ensure the adherence to obligation. This is reflected on an empirical level by the interest in so called Japanese style 'relational' (Oliver and Wilkinson 1992) or 'obligational' (Morris and Imrie 1993) contract relationships (Oliver and Wilkinson 1992; Morris and Imrie 1993; Turnbull 1991; Trevor and Christie 1988), many of the features of which are mirrored elsewhere, within 'supplier partnerships' or 'partnership sourcing' arrangements (Collins 1997). Running such contracts require the developments of relations that go beyond the formal, and into the development of 'trust' (Deakin and Walsh 1996; Butler and Carney 1983; Deakin and Michie 1997; Collins 1997; Lyons and Mehta 1997; Deakin *et al* 1997). Trust must, however, be rooted in the institutional framework or contractual environment (Deakin *et al* 1997) within which it operates. Assurances of performance may be associated with co-operation fostered by a

longevity of association, but this is often underpinned by substantive regulatory mechanisms, such as TQM registration and BS5750, or ISO9000, accreditation (Deakin *et al* 1997; Collins 1997). In addition to formal mechanisms and informal relationships the articulation of the underlying power relationship between parties to a contract must also be recognised (Macneil 1981; Bowles and Gintis 1993; Deakin and Walsh 1997; O'Connell Davidson 1993). Collins (1997) suggests that large firms can compel suppliers to comply with such schemes, and points to the widespread incidence of large firms supplementing these awards with their own accreditation systems. Mechanisms for auditing, reporting, and communicating information are therefore essential components of such relationships, and the control of such mechanisms may reflect the underlying power relationship between contract partners. This raises the issue of the extent to which similar mechanisms could be employed within the regulation of the capital-labour relationship when this is articulated through non-standard employment contracts.

This study examines how subcontracting works as a substitute for the employment relationship once the externalisation process has occurred, and the extent to which issues of the regulation of labour in terms of supply and performance can be reconciled through these mechanisms. It is suggested that subcontracting should not be conceptualised as a given and constant occurrence, but rather as an ongoing process. It is a process that is complex, heterogeneous and dynamic in nature, and as such problematic, contested and riddled with internal contradictions. The data utilised within this article was collected using semi-structured interviews and non-participant observation within BT and several of its contract partners. The contracting process was traced from end to end through the structures of the firm, and beyond. Interviews were conducted with representatives from the internal operational groups that impacted

directly and indirectly upon the contracting process. This included senior operational managers with responsibility for the performance of work whether by direct labour or subcontract, senior, middle and line management within the contracting function, and representatives from each subsequent stage of the contracting process, from the initial decision making, through the allocation and planning of work. Interviews were also conducted with representatives from the industrial relations function within BT, at the Group (corporate), national divisional, and operational levels, plus representatives from the Communications Workers Union (CWU), at both national and local level. Although subcontracting moved a significant number of jobs beyond the jurisdiction of the collective bargaining mechanisms, the internal industrial relations process continued to impact significantly upon the use of external labour. Under the Group level 'Consultation Policy on the use of Contractors in BT' the relevant local operational units were obliged to consult the local union on the on-going use of contractors; the proposed extension of volumes or time scales; and crucially the expansion of contractors into new work areas. Although geared towards consultation rather than negotiation, local mechanisms ultimately did shape management agendas, and was cited by representatives from the contracting function as a key factor effecting the decision making process. The union's involvement with the contracting process was, however, purely internal to BT; the regulation of the actual employment relationship was beyond the province of collective bargaining.

As the engagement of labour for use within production went beyond the boundary of the firm, analysis followed this path. A series of interviews were conducted with representatives from each of the main contract partners, (and even with a representative from a firm ostensibly subcontracted by one of these partners, and thus twice removed

from BT). More than 80 interviews were conducted over the various stages of the research. A significant amount of the fieldwork was located at the interface between the organisations that were party to these contracts. By focusing on the organisational interface between BT and its contract partners, it was possible to gain insight into the relationship between them, which provided a dimension that would not have been accessible had the focus been purely upon processes internal to the patron organisation. In the course of the research the opportunity arose to attend a series of Review Meetings, to observe the conduct of the meetings, processes at work, and the dynamics that characterised what represented the main operational interface between BT and its contract partners. These Review Meetings provided crucial insights into the nature of the relationship between BT and its suppliers. Non-participant observation was also conducted on unannounced site inspections by both BT and one of its contract partners.

Contracting and the Organisation of Production

In order to examine the implications of changes in the contracting for labour, developments must be located in terms of the peculiarities of the production process. There was a long precedence within BT for operating within the external labour market on a contingency basis to supplement the labour available on the internal market; BT and the Post Office before them had a history of using contract labour¹. During the 1990s, however, there were significant changes, both quantitative and qualitative, in the use of contractors within the firm. Since the late 1980s the use of contractors had proliferated throughout the corporation, the focus of the study, however, is upon the unprecedented expansion of the use of contract labour in the engineering functions during the early to mid 1990s. According to union figures the presence of contract labour within the Field Engineering functions grew over this period from less than ten to

around ten thousand (BT estimated their average use of contract labour at around 10% of the workforce). The majority of this growth in the use of contractors was in civil engineering (or 'Civils'), and 'Cable and Jointing' work, within BT's national network². 'Cable and Jointing' work involved the laying of cables along the duct put in by the Civils contractors and the 'jointing' or connecting of cables in preparation for the final interconnection into the network, which was performed by direct labour. There was a long held tradition for subcontracting within the civil engineering function of BT. The use of subcontractors had however been expanded through the 1990s as internal capacity was reduced. It was an area of work where a 'core-periphery' logic was often invoked, as one BT Contracts manager asserted, 'civil engineering is not the work of a telecommunications company' (Field notes). The skills utilised in this area were in civil engineering, and not those of a telecommunications engineer. The skills required to perform the work were therefore not idiosyncratic to the telecommunications industry, and BT had never monopolised the supply of labour in this field.

The nature of the supply of labour for the cable and jointing contracts was very different. The area of work did not have a long tradition of contracting within the firm, and there was no long standing network of suppliers in place as there was to be found in other areas of work. Although cable laying could be found in several sectors, the skills required for jointing work were idiosyncratic to the telecommunications industry. The more complex aspects of this field, such as 'up-lift' work - the replacement of cabinets that serve as junctions connecting groups of customers to the main part of the Access Network - required a level of skill and knowledge that made comparisons to basic electricians skills untenable. BT, and its suppliers, required labour with telecoms specific training. Therefore, unlike in the Civils function, the telecoms specific nature of

the work meant that previously BT itself had held a practical monopoly on the supply of such labour, in its position as the national telecommunications provider and the principal employer in the market. Although the liberalisation of telecommunications sector had brought competitors into the market, BT had remained the dominant player; reflected in terms of employment, BT retained a higher workforce than the sum of its competitors.

The Supply of Labour

In the labour market for telecommunications skills, post-liberalisation, BT had effectively played the role of the 'supplier' of suitably skilled telecoms engineers. Although Mercury Communications was operational in the 1980s, the major growth in the sector, sparked by the development of the Cable companies following the regulatory changes of 1991, coincided with the major labour shedding programme at BT³. The 'right-sizing' process within BT saw the staff in post figure reduced from over 245,000 employees in 1990 to around 130,000 by 1996. This was pursued through a series of voluntary redundancy programmes, or 'Release' schemes, the largest being in 1992 which saw nearly 40,000 people depart BT in one year, nearly 20,000 of whom left on a single day. The process also corresponded with, or rather provided for, the expansion in the use of contractors in BT, both in term of volumes and work areas. Managers, from both BT and the contractor firms, conceded that the availability of experienced telecoms staff in large numbers allowed for the use of non-direct labour in areas of work where previously the idiosyncratic nature of the skill required would have acted as a bar on the use of such labour. As one Contracts Manager observed:

It wasn't there readily available on the open market; a contractor couldn't just set up and say; right, I think I'll set myself up with 60 jointers, 30 cablers etc, and go and stick an advert in a paper and expect to attract those people, because they weren't there. It wasn't a ready resource, it had to be created. Fortunately for the cable contractors it was created by the down sizing of BT.

In addition, the availability of internally trained skilled labour provided some assurance on the quality work performed under such contract arrangements. The shortcomings of this apparently propitious solution would in time become apparent, but the availability of such labour played a vital role in the expansion and development of the contracting process. In many ways therefore BT ultimately became its own supplier of 'flexible', non-direct labour. The Release schemes flooded the external market, in parallel to an increase in the demands put on contractors, who tapped into the pool of labour created - and periodically topped up - by BT. This represented one of the ironies of the deregulation of the employment relationship associated with subcontracting. The shift to a less regulated supply of labour was predicated upon the former existence of regulatory mechanisms, manifest in the internal labour market of BT.

This was not the sole source of supply for BT. In addition to the series of zonally based contracts with various telecoms contractors, BT had entered into the nation wide agreement with TE Services (TE). Operating in the UK as a telecoms contractor, TE Services was part of Telecom Eireann, the Irish national telecommunications company. Under the terms of the contract a rotating group of TE staff were placed on long term secondment to the UK, to work within the BT network. These workers were direct

employees of Telecom Eireann, and were widely regarded as being equivalent to BT direct labour in terms of training and quality. In addition, where as labour remained unorganised in the other contract firms, despite the evoking of portability rights by some ex-BT workers, the unionised status of TE workers eased negotiations over the use of contractors with the CWU. However, the crucial and unique, feature of this arrangement was the capacity within the terms of the contract to draw upon the main body of TE staff, to bring further labour across from Ireland to cover shortages in the resources available to BT - whether due to a sudden peak in demand for labour, or a shortfall in supply from other sources. Then, conversely, the ability to send labour back to Ireland when there was a shortage of work, thus providing a fluid supply of highly skilled, highly motivated labour. The cost to BT of good quality, trained, labour from TE was relatively high in contracting terms, nevertheless the advantages of the arrangement, especially in the nascent stages of contracting, justified this premium. In the words of one Contract Manager:

They're the only contractor who've got this bottomless pit of resource, if you like. When we get into emergency situations, we can call TE, and we can have 300 engineers sat on Liverpool docks. You can't do that with everybody else.

The key feature of the arrangement was the establishment of a reserve of labour available exclusively to BT, that demonstrated the characteristics and advantages associated with directly employed workers - highly trained, highly motivated, and regulated in supply - without the overheads associated with retaining the staff

themselves. The existence of this regulated supply alternative proved extremely important in terms of BT's shifting labour policies.

The Uncertainty of Externalisation

BT had traditionally regulated its labour supply through direct employment relationships; BT monopolised the market, and regulated almost exclusively through the bureaucratic mechanisms of an internal labour market. Since both relinquishing control of the market, and taking steps to operate outside of the internal labour market the regulation of the employment relationship, in terms of both supply and quality, had proved problematic in several ways. By the mid-1990s the contractor firms had begun to experience problems in their capacity to supply suitable labour consistent with the demands put upon them by BT. This impacted on the suppliers' ability to meet the terms of the contract, and thus was to the detriment of BT operational requirements. The market for such skilled labour had tightened and, due to the winding down of the major Release schemes, the supply of ex-BT workers was no longer being replenished. BT had also become more targeted in terms of the skills of the staff it released, which did not necessarily benefit the supply of labour tapped into by the contractors. Furthermore the inherent obsolescence of the stock of ex-BT staff already available to the contractors had begun to take effect, as those workers who took Release as a form of early retirement began to reach a pensionable age.

These supply side issues intensified the competition within the labour market, which brought problems for contractors in terms of the recruitment and retention of staff. As one senior representative from the contracting function recalled:

We have had problems in the last two years when we've gone to contract and the contractor has not been able to deliver the volume of people to deliver the work requirements at the rate we needed, and he has had to struggle to get people on the labour market, because it's... quite a fluid labour, in that it will move to the contractor that is offering the best weekly rates at that point in time.

The very flexibility that was invoked as the advantage to BT of engagement in the external labour market began to undermine the utility of reliance upon it. Problems emerged with the ability of the external labour market to respond quickly enough to changes in demand. These problems became manifest in the inability of contractor firms operating in the external market to 'ramp-up' quickly enough to meet the requirements of the BT workload. Shortages of work often resulted in lay-offs; and firms began to experience difficulties in recruiting with sufficient speed when work-flows picked up again. The impact of this upon BT was doubly problematic in that not only could the failure to satisfy labour requirements potentially undermine immediate operational effectiveness, but also, from a more strategic perspective, the utility supposedly associated with the availability of such alternative supplies of labour would be diminished. The general tightening of supply, and the lack of responsiveness of the market to changes in demand, therefore prompted a number of overlapping initiatives from BT. Relating to both demand and supply-side issues, these responses were an attempt to address these problems associated with the firms operation within a labour market that was not regulated by the structures of the internal labour market.

Regulating Demand

Demand side initiatives were undertaken to ameliorate the difficulties experienced by contractors in relation to lay-offs and 'ramping-up' according to fluctuations in the workload provided by BT. The inconsistency of workflow was much bemoaned by the contractor firms. Although by virtue of the decision to go to contract BT had nominally exported this problem, the reality that it may have ultimately affected BT's operational requirements enticed a response. Despite the difficulties in making forecasts due to often reactive nature of the work, BT made an effort to smooth out the discharge to a more consistent flow. A senior representative from the contracting function explained the logic of this:

One of the key things I've tried to do with the contract is actually create as best as possible a stable environment between us and them because they were struggling to retain skills... So my whole approach has been to give them a look ahead of how many people we need, so that they could have rough confidence in us, to take on people; retain them; and keep them trained.

The process operated on a non-committal basis; the resources employed by the contractor firm at any given time were transparent to BT, and work was allocated with reference to these figures; a mixture of courtesy and pragmatism encouraged the avoidance of major fluctuations where possible. This represented further ironies within the contracting process. The underpinning of the operation of the contract by a BT function in effect contradicted the logic of the market associated with contracting. This was not only because being involved in this fashion appeared to belie the concept of

externalisation, but also that the tacit acceptance of the need to manipulate work-flows, seemed to contravene the logic of flexibility that was for some observers at the very heart of the rationale of contracting (Atkinson and Meager 1986). In fact this represented a direct inversion of the notion of flexibility based on flexing the workforce to meet fluctuations in work flows.

Despite these efforts, however, the unpredictable could not be avoided. Sudden peaks in work, as a result of bad weather for example, were a key aspect of BT's contracting policy, and as such the demand these peaks created needed to be resourced. Difficulties with the capacity of suppliers to 'ramp-up' left BT having to rely upon the ability to bring in a reserve of labour from Ireland, via TE Services. Thus, significantly, due to the failure of the external market to respond quickly enough to changes in demand, a reserve was introduced from outside the traditional labour market. The orthodox competitive labour market theory response would call for more flexibility not less - the removal of further rigidities. However it was the inherent uncertainty associated with the operation of a flexible labour market that had proved unacceptable, due to the potentially detrimental affect on operational capabilities. Therefore another irony of this process of deregulation was that despite espousing the benefits of the flexible external labour market, BT in fact ameliorated its dependency upon it by the use of a reserve of labour bought in from outside the market – a labour resource itself regulated within the structures of an internal labour market. The continued recourse to the reserve offered by TE represented one solution to these problems, and was a policy that ran concurrently with initiatives to address the problems in the other contract relationships. Therefore the relationship with TE underpinned the short-comings of the other systems, and provided the time and space to develop alternative mechanisms in the standard contract

arrangements; a compensatory influence that prevented the system from stalling. Thus in tandem with this arrangement BT embarked upon several initiatives that in effect represented attempts to stabilise the external labour market.

Regulating Supply

The free movement of individuals between contractor firms, and Cable companies, had caused problems for BT in terms of its supply of suitable labour from external sources. In the first instance workers that took up contracts with other - potentially competing - firms became unavailable to BT, thus exacerbating the shortage of suitable labour. Furthermore, although the movement of individuals between firms may not necessarily have precluded the availability of that labour to BT, as individuals did move between competing subcontract firms who were both engaged in work for BT, this in turn caused alternative problems for the parties involved. The unexpected movement of labour between contract firms who were both working for BT could cause disruption and imbalances in the resources available, which informed the allocation of work. This negated the advantages of transparency of resource and the associated initiative to regulate the distribution of the work-load accordingly. Such incidents had a short term detrimental affect on the capacity of contractors to execute the work allocated to them, and thus impacted negatively upon BT's successful execution of operational requirements. Furthermore, the potential loss of qualified individuals crucially acted as a disincentive for firms to train staff, thus undermining commitment to the nascent training programmes within contractors, the development of which BT was keen to promote. This therefore held implications for the long term capacity of contract firms to meet the requirements of the work allocated to them, and thus by extension the utility of the sub-contract option for BT.

Competition for a finite resource is an essential characteristic of the market. The expression of this through the movement of individual contract workers between firms was recognised internally as inherent to the nature of the industry with which BT had developed an involvement. Similarly, the dwindling nature of the supply of suitable labour within the contracting sector should have been regarded as ‘someone else’s problem’ - an issue external to BT, exported within the process of sub-contracting. However, the impact this shortage could have on BT’s ability to engage the contract option, and the implications of this for limiting choices in the pursuit of operational requirements, again led BT to tacit acceptance of a role in the process. This resulted in the development of various initiatives to address both the difficulties arising from these supply problems, and latterly their causes. This approach was illustrated by a critical incident during the time of research. The introduction of a third contractor into the cable and jointing work area within one of the geographic zones under study had coincided with a spate of labour mobility, as a number of workers quit one of the incumbent firms to take up employment opportunities offered by the new entrant. The firm that lost out through voluntary quits voiced its grievances over this occurrence to BT, through the established mechanisms of administration. In effect the contractor approached BT to act as an arbitrator in what was essentially a market process; a process that was beyond the boundaries of BT, and the remit of the patron firm’s individual relationships with the two contract partners. In essence this labour mobility represented no more than the workings of a flexible labour market. However, the detrimental effect in operational terms inspired BT to bring pressure to bear, through the established bureaucratic channels that administered the contract, to discourage the practice. Again an irony had

emerged within the contracting process, as in effect this represented the intervention in the operation of the labour market in order to impose some degree of stability.

The Imperatives of Regulation

Ultimately the effectiveness of BT's ability to exert such influence was limited in scope; circumscribed by the extent of the contract network and the visibility of such mobility this provided. Attempting to influence the recruitment practices of the contractor firms was thus a secondary measure; the focus of attention rested far more on the issue of supply. BT faced a number of problems in terms of the regulation of supply from the external labour market. First of all it needed to guarantee supply in sufficient quantities, in the face of a diminishing pool of existing resource. It was also essential to be able to ensure the appropriate quality of labour, given the growing inability to rely on references to internal benchmarks as the presence of ex-BT labour became less prevalent. In addition the patron firm needed to underwrite the productivity of labour, in the absence of direct control over it. Finally BT needed to protect itself against the uncertainty inherent in the external market, in order to establish some form of stability in the supply of labour. Recognition of the longer term implications of these problems with the supply of labour therefore led to new developments to address the diminishing returns from previous practices.

The need for trained labour could no longer be satisfactorily met through reliance on the pool of ex-BT workers created by the Release schemes; skill regeneration could only be achieved through the (re-)establishment of training. The previous generation of contract labour had in large part relied on BT for training by virtue of former direct employment, thus contract firms had hitherto had no need to develop the capacity for training their

own staff. However, with encouragement from BT, the external suppliers had begun to set up their own training programmes in order to address the emerging shortages of labour. As one Contracts Manager commented, the benefits were of this development were significant:

Once they've got that system in place, they take guys off the street, put them through the training cycle and out, get them accredited, and then out there. And they've got a source of their own people then; they don't need to depend upon BT.

BT's contribution to this process was notable, ranging from informal direct involvement in the establishment of the programmes, and the coincidental influence of the presence of ex-BT training staff providing continuity of skills and practices, to the underwriting of the whole system with a registration scheme that endorsed these programmes as being accredited by BT to train telecoms workers. The training facilities were audited by BT to ensure their suitability, and the execution of the training programmes was transparent to BT via the bureaucratic mechanisms that had been established for the administration and monitoring of the contract relationship. Therefore, through direct involvement at the inception and the monitoring of the development of training, BT sought to guarantee the supply and quality of the next generation of telecoms skilled labour that would be available externally. These were essentially 'supply side' solutions, and thus in keeping with the general logic of the 'move to the market', but they were solutions that relied heavily on regulation. In this instance, the function of co-ordination was supplied by the customer, therefore, curiously, BT played the dual role of regulator and principal patron. In the final irony, BT was compelled to fill the gap in the regulation of the capital-labour

relationship left by the dismantling of the structures of the internal labour market, in order to guarantee the supply of labour and the reproduction of skills.

Accreditation and Reregulation

At the time of research, 1996-1997, the principle of accreditation was being expanded as a method of regulation, with BT positioning itself as the ultimate authority within the system. Hitherto the accreditation principle had been focused on the contracting firms at an organisational level. However, in what was perhaps the most remarkable development in BT's attempts to regulate the external labour market, mechanisms were being put in place for the rolling out of a national accreditation scheme that extended the process down to a focus on individual workers. Therefore, anyone wishing to work within the BT network, regardless of not being in a direct contract relationship with BT, would have to become licensed to do so. The aspiration for such a system was significant in itself, in that it reflected the recognition of the need for additional mechanisms of regulation. The accreditation system would have effectively re-established a direct link with labour working within the network under the terms of an indirect contract, going some way to reasserting the control that was at one time held through direct employment relationships.

Accreditation was to act as a guarantee of the quality of the expanded supply of skilled labour created by the training schemes operated within the contractor firms. Although the contractor firms would have been responsible for running the programmes, the individual licensing system would have underwritten the final product, thereby ensuring the genuine effectiveness of the dissemination and reproduction of skills, and acting as a safety mechanism on the quality of the training process. Thus BT would have been able

to assert jurisdiction over the process, whilst allowing the burden of the training programme to have been borne by the contractor. Furthermore, achieving accreditation was not intended to represent the end of the process for the individual; the licence awarded by BT was to be open to continual review and reassessment. The auditing process would continue, and unsatisfactory performance, as identified through the established monitoring mechanisms, could therefore have been registered against the individual. This could have been utilised for the identification of training requirements - or alternatively used as a basis on which to enforce or even revoke the licence. The potential of this as a means by which to assert discipline over labour were momentous; holding implications for issues of productivity, and wider questions of control in light of the absence of mechanisms of direct management, which again had been relinquished by the movement beyond the internal labour market.

The availability of the database to contract management firms would have further ensured the effect. The transparency of previous employment and conduct through these records may have had a further disciplinary influence on the issue of voluntary quits, which had troubled the contract partners. If firms did wish to stabilise the movement of labour, to discourage voluntary quits in search of short term financial gains, they would have had the data available to monitor the practice, and potentially the basis on which to penalise transient individuals. Consequently, such visibility may have acted as a deterrent to the freedom of movement in the market, reducing the propensity to quit that had been a feature of the employment relationship. Greater stability would have had immediate benefits for BT also, however in the longer term the scheme would have the consequence of making the ground level labour once again directly visible to BT, even if workers did move between firms. Therefore the system would in effect by-pass the

reliance on the contractor firms to regulate the external supply of labour, and essentially reassert a mechanism of direct BT control. In terms of the wider market for telecoms skills the establishment of the system of accreditation by BT as an explicit benchmark of quality would tie labour to the firm in a prolonged association, outside of the standard employment relationship; whilst putting the onus on the supply side (either individuals or firms) to maintain skills commensurate with BT standards, practices and systems.

Through the accreditation system BT sought to underwrite the supply of labour from external sources. The system would guarantee the quality of skill development, provide a visibility of labour in production, install the mechanisms for monitoring the conduct of individuals, and establish a means of disciplining labour. This could have been seen as providing many of the benefits previously associated with the operation of an internal labour market, without the cost of such structures. BT was endeavouring to reclaim the advantage surrendered by moving into the external labour market, but also, by establishing itself as the regulatory authority in this area, the firm could be seen to have been attempting to recapture the dominance it enjoyed in that market and the control of labour it relinquished over the course of the 1980s and early 1990s. Through a series of incremental and often reactive manoeuvres, BT had redefined the relationship with labour within the organisation of production in these areas, and latterly had sought to re-establish the control it had surrendered in the process of externalisation.

Conclusion

It was suggested earlier in this article that subcontracting must be considered across three dimensions. Firstly, in terms of the reorganisation of production. Secondly, the deregulation of the employment relationship through the redefinition of the boundaries

between the internal and external labour market. Thirdly, issues of trust and power must be considered notably in relations to the establishment of mechanisms to ensure adherence to obligation between the discrete units of capital that are party to the contract. These dimensions are of course overlapping. Over the 1990s BT underwent a reorganisation of production through the increased use of subcontractors in significant areas of its network operations. As a result thousands of workers engaged in the production process were located beyond the boundaries of the internal labour market. Commercial contracts had supplanted the internal apparatus of the firm as a means of co-ordinating economic activity. The running of these contracts demonstrated relations that went beyond the formal. The development of longer term more stable contract partnerships, and the growth of informal relations between management functions fostered the development of trust, to bolster the administration of the contract and underwrite the adherence to obligation. This in turn cannot be separated from the power relationship between these units of capital. The ability to assert informal influence beyond the formal content of the contract, and the capacity to essentially externalise the costs of the reproduction of skills gave witness to the power relationship between the large patron corporation and the somewhat smaller supply firm. Although such developments may have been mutually advantageous, the exertion of influence was unidirectional. Intrinsically linked with both these more ethereal influences was the development of accreditation processes; substantive regulatory mechanisms that underpinned trust and informal mechanisms, whilst in turn reflecting the power relations between actors. The accreditation process, however, must also be conceptualised in terms of its role in the regulation of the supply of labour, the main theme of this paper.

In terms of this case study the deregulation of the employment relationship reflected in the shift to a greater reliance on the external labour market can be characterised by the emergence of a number of ironies. Notably, the opportunity to pursue the flexibility advantages associated with a less regulated supply of labour was predicated upon the prior existence of regulatory mechanisms to ensure the creation and reproduction of skills, and not simply the absence of institutional obstacles to the free working of the market. The problems emerged within this situation were associated with the lack of regulation over labour supply and skill reproduction. This led to the series of essentially interim measures aimed at coping with the symptoms of this lack of regulation. These initiatives were again beset with ironies, such as the manipulation of workflow in contradiction of the logic of the flexible workforce, or the attempt to assert stability over the external environment despite the espoused logic of externalisation. In a further irony, these initiatives were underpinned by the regulatory function provided by TE's internal labour market. This essentially provided a bridging mechanism between the faltering reliance on the prior existence of regulation, in the form of BT's internal labour market, and the subsequent attempts to re-regulate the capital-labour relationship.

It is important to locate these developments in relation to a general movement within the firm and its environment. The deregulation of the employment relationship within the firm had been reflected in initiatives undertaken to reform traditional mechanisms of regulation. Changes had been witnessed to key points of reference; there had been a plethora of reforms to the structures of the internal labour market; the role of the industrial relations process had been circumscribed as management sought to assert greater control over internal processes (Batstone *et al* 1984; Colling and Ferner 1992; Ferner and Colling 1991; Barrett and Heery 1995; Smith and Terry 1993); plus the

utilisation of labour from beyond the boundaries of the firm had increasingly supplanted the direct employment relationship, thus precluding access to the associated mechanisms of regulation.

Crucially, the alternative mechanisms of regulation that were being developed were beyond the influence of collectively bargained structures and procedures, and therefore subject to unilateral management sovereignty. It is therefore argued that through the development of these alternative mechanisms, the firm essentially had sought to address the problems experienced in association with the processes of deregulation, by appropriating the role of regulation wrested from, or surrendered by, traditional instruments and agents associated with the direct employment. The firm was attempting to fill the gap left by the absence or retreat of other agents (including to an extent the state, in terms of the wider labour market) and thereby shifting the boundaries of responsibility in terms of the regulation of the employment relationship. It seemed that the experience of deregulation was not the panacea it had been expected to be, and consequently provided the imperative for the partial regulation of the capital-labour relationship. The extent to which the combination of developments within the contracting process were peculiar to this case study is arguably not the key issue; to comment would be inappropriate to the methodology of the study. Where the work may have wider resonance is in terms of the experience of labour market deregulation. The case illustrates the potential dangers of subscribing to orthodox assumptions regarding the efficacy of 'flexible' external labour markets, and the extent to which firms can expect skills to be available on the open market in the absence of some form of regulation to ensure their reproduction.

Acknowledgements

I would like to thank Miguel Martinez Lucio and Peter Nolan for their comments on earlier drafts of this paper.

¹ See Post Office Prospects 1967-8 (CMND 3218, 1967), The Post Office Reports and Accounts 1968.

² For organisational purposes BT's national network was separated into two parts; the Access Network connected individual users to the 'exchanges' for interconnection into the national transmission network – or Core Network. Subcontractors were used on the Core network, in the form of specialist exchange equipment suppliers providing the labour for the installation of new plant. Such arrangements had a long precedence within BT and its predecessors, although the range of tasks performed by external supply firms was expanded in the mid 1990s. The major growth in subcontracting was however in the Access Network.

³ In the words of one operational manager from the telecoms function of a Cable firm - an ex-BT person, who was himself responsible for attracting ex-BT engineers - 'If you want trained telecoms engineers, you don't go to the Gas Board' (Field notes).

Atkinson, J. and Meager, N. (1986) *New Forms of Work Organisation*, Brighton: Institute of Manpower Studies.

Barrett, M. and Heery, E. (1995) 'It's Good to Talk? The Reform of Joint Consultation in British Telecom', *Industrial Relations Journal*, 26, 1, 5764.

Batstone, E. Ferner, A. and Terry, M. (1987) *Consent and Efficiency: Labour Relations and Management Strategy in the State Enterprise*, Oxford: Blackwell.

Bowles, S. and Gintis, H. (1993) 'The Revenge of Homo Economicus: Contested Exchange and the Revival of Political Economy', *Journal of Economic Perspectives*, 7, 1, 83-102.

Bresnen, M. J. Wray, K. Bryman, A. Beardsworth, A.D. Ford, J.R. and Keil, E.T. (1985) 'The Flexibility of Recruitment in the Construction Industry: Formalisation or Recasualisation?', *Sociology*, 19, 1, 10824.

British Telecommunications plc Annual Reports and Accounts. Various Years. London. British Telecommunications plc.

Brown, W. and Nolan, P. (1988) 'Wages and Labour Productivity: The Contribution of Industrial Relations Research to the Understanding of Pay Determination', *British Journal of Industrial Relations*, 26, 3, 339-61.

Butler, R. and Carney, M.G. (1983) 'Managing Markets: Implications for the Make-Buy Decision', *Journal of Management Studies*, 20, 2, 213-31.

Clegg, S. (1990) *Modern Organizations: Organization Studies in the Post-Modern World*, London: Sage.

Colling, T. and Ferner, A. (1992) 'The Limits of Autonomy: Devolution, Line Managers and Industrial Relations in Privatised Companies', *Journal of Management Studies*, 29, 2, 209-28.

Collins, H. (1997) 'Quality Assurance in Subcontracting', in Deakin, S. and Michie, J. (eds.), *Contracts, Co-operation, and Competition*, Oxford: Oxford University Press.

Cully, M. Woodland, S. O'Reilly, A and Dix, G. (1999) *Britain at Work*, London: Routledge.

Deakin, N. and Walsh, K. (1996) 'The Enabling State: The Role of Markets and Contracts', *Public Administration*, 74, Spring.

Deakin, S. Lane, C. and Wilkinson, F. (1997) 'Contract Law, Trust Relationships and Incentives for Cooperation: A Comparative Study', in Deakin, S. and Michie, J. (eds.), *Contracts, Co-operation, and Competition*, Oxford: Oxford University Press.

Deakin, S. and Michie, J. (1997) 'The Theory and Practice of Contracting', in Deakin, S. and Michie, J. (eds.) *Contracts, Co-operation, and Competition*, Oxford: Oxford University Press.

Doeringer, P. and Piore, M. (1971) *Internal Labour Markets and Manpower Analysis*, New York: M.E. Sharpe.

Edwards, R. (1979) *Contested Terrain: The Transformation of the Workplace in the 20th Century*, London: Heinman.

Ferner, A. and Colling, T. (1991) 'Privatisation, Regulation and Industrial Relations', *British Journal of Industrial Relations*, 29, 3, 391-409.

Gordon, D. Edwards, R. and Reich, M. (1982) *Segmented Work Divided Workers*, Cambridge: Cambridge University Press.

Gottfried, H. (1992) 'In the margins: flexibility as a mode of regulation in the temporary help service industry' *Work, Employment and Society*, 6, 3, 44-60.

Hunter, L.C. and MacInnes, (1991) *Employers' Labour Use Strategies: Case Studies*, London: Department of Employment.

Hunter, A. McGregor, A. MacInnes, J. and Sproull, A. (1993) 'The Flexible Firm: Strategy and Segmentation' *British Journal of Industrial Relations*, 31, 3, 383-407.

Lovering, J. (1990) 'A Perfunctory Sort of Fordism: Economic Restructuring and Labour Market Segmentation in Britain in the 1980s', *Work, Employment and Society*, Special Issue, May, 28.

Lyons, B. and Mehta, J. (1997) 'Contracts, Opportunism and Trust: Self-interest and Social Orientation', *Cambridge Journal of Economics*, 21, 239-57.

MacKay, D. Boddy, D. Brack, J. Diack, J.A. and Jones, N (1971) *Labour Markets Under Different Employment Conditions*, London: Allen and Unwin.

Macneil, I.R. (1981) 'Economic Analysis of Contractual Relations', in Burrows, P. and Veljanovski, C.G. (eds.) *The Economic Approach to Law*, London: Butterworth & Co.

Marginson, P. (1989) 'Employment Flexibility in Large Companies: Change or Continuity', *Industrial Relations Journal*, 20, 101-109.

McGregor, A. and Sproull, A. (1991) *Employer Labour Use Strategies: Analysis of a National Survey*, London: Department of Employment.

Morris, J. and Imrie, R (1993) 'Japanese Style Subcontracting: It's Impact on European Industries', *Long Range Planning*, 26, 4, 538.

Nolan, P. (1983) 'The Firm and Labour Market Behaviour', in Bain, G.S. (ed.), *Industrial Relations in Britain*, Oxford: Blackwell.

Nolan, P. and Brown, W. (1983) 'Competition and Workplace Wage Determination', *Oxford Bulletin of Economics and Statistics*, 45, 3, 269-87.

Nolan, P. and Walsh, J. (1995) 'The Structure of the Economy and Labour Market', in Edwards, P. (ed.) *Industrial Relations Theory and Practice*, Oxford: Blackwell.

O'Connell Davidson, J. (1993) *Privatization and Employment: The Case of the Water Industry*, London: Mansell.

Oliver, N. and Wilkinson, B. (1992) *The Japanisation of British Industry: New Developments in the 1990s*, Oxford: Blackwell.

Ozanne, R. (1968) *Wages in Practice and Theory: McCormick and International Harvester 1860-1960*, Madison: University of Wisconsin.

Peck, J. and Theodore, N. (1998) 'The Business of Contingent Work: Growth and Restructuring in Chicago's Temporary Employment Industry', *Work, Employment and Society*, 12, 4, 655-74.

Post Office Prospects 1967-8. (1967). Cmnd 3218, London: HMSO.

Post Office Reports and Accounts. Various Years, London: Post Office.

Rees, G. and Fielder, S. (1992) 'The Services Economy, Subcontracting and the New Employment Relations Contract Catering and Cleaning' *Work, Employment and Society*, 6, 3, 347-68.

Reynolds, L. G. (1951) *The Structure of Labour Markets*, New York: Harper and Brothers.

Rubery, J. (1994) 'Internal and External Labour Markets: Towards an Integrated Analysis', in Rubery, J. and Wilkinson, F. (eds.) *Employer Strategy and the Labour Market*, Oxford: Oxford University Press.

Smith, J. and Terry, M (1993) 'Industrial Relations Developments in the Telecommunications Industry: The English Case' *Bulletin of Comparative Labour Markets*, 25, 185-267.

Trevor, M. and Christie, I. (1988) *Manufacturers and Suppliers in Britain and Japan. Competitiveness and the Growth of Small Firms*, Policy Studies Institute Report 682.

Turnbull, P. (1991) 'Buyer-Supplier Relations in the UK Automobile Industry', in Blyton, P. and Morris, J. (eds.) *A Flexible Future? Prospects for Employment and Organisation*, Berlin: de Gruyter.

Wallis, E. Winterton, J. and Winterton, R. (2000) 'Subcontracting in the privatised coal industry', *Work, Employment and Society*, forthcoming December 2000.

Williamson, O.E. (1975) *Markets and Hierarchies: Analysis and Antitrust Implications*, New York: The Free Press.

Wood, D. and Smith, P (1987) *Employers' Labour Use Strategies: First Report on the 1987 Survey*, London: Department of Employment.