Privatisation and Liberalisation in European Telecommunications

The last three decades have witnessed a significant reorganisation of established European telecommunications administrations and the transformation of monopolistic markets to more open and regulated forms of competition. Prompted by structural advancements such as technological innovation, increasing demand for competitive and specialised services, together with the globalisation of business and European harmonisation and integration, these recent developments have marked a fundamental shift away from the traditional organisation of this rapidly expanding industry as a national, state controlled affair.

*Privatisation and Liberalisation in European Telecommunications* combines a detailed, sector-specific study of comparative telecommunications regimes set in the context of the EC, with an extensive historical and empirical analysis of individual policy management and change as experienced by three diverse regulatory cultures, namely Britain, the Netherlands and France. By adopting a comprehensive analytical framework based on far-reaching literature, the author explores a wide range of theories, addressing key issues at the forefront of contemporary political and academic debate. Do nation states matter in the globalising telecommunications industry? Does the common challenge of techno-global telecommunications restructuring elicit different national responses? What is the significance of a single-speed or multi-speed Europe in implementing telecommunications governance regimes?

This book will be of interest to people studying in the fields of comparative and European business, economics and politics.

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Privatisation and Liberalisation in European Telecommunications
Comparing Britain, the Netherlands and France

Willem Hulsink
I remember that we, Bavink and I, once arrived at the sea, when the half-sun was on the horizon, big, cold and red. Bavink struck his forehead with his fist and cursed: “God, God, I will never paint that, I never could.” (. . .) It’s as if that sea wants something from me. In it, God is too. God is calling. It is truly no picnic. He is everywhere. And everywhere He is calling Bavink. You go mad from your own name, when it is called out that often. And then Bavink has to paint. Then God has to be put on a piece of canvas with paint. Then Bavink is calling “God”. And thus they keep calling one another. To God, it’s a game, He is infinite and everywhere. He just keeps calling. But Bavink only has one silly head and one silly right hand and he can only work on one little painting at a time. And whenever he thinks he’s caught God, then he has canvas and paint. Then God is everywhere, except where Bavink wants Him. (. . .) Do you know what I wish? That I could make railway timetables. Such a man God leaves in peace, he is not worth the trouble.

(Nescio (1914), *Titaantjes (Little Titans)*. Nijgh & Van Ditmar (1983:45–58))
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The similarities between academic research and the art of painting are striking. Both the academic and the painter feel an almost obsessive need to transform a vague and implicit set of ideas into an artefact that claims a certain degree of originality among the sources it uses and by which it is inspired, in terms of the method and approach, and the distinct argument or perspective it offers. In addition, there are parallels concerning the intangibility of time, which make planning these endeavours extremely hard, and the difficulty of striking a balance between hard work and skill, and between concentration and inspiration. Furthermore, both researcher and artist will experience mixed feelings when the process nears completion, ranging from relief because the job is almost done, to vexation because the work is never really finished, and further details can always be found and nuances added, to the sheer pragmatic necessity of putting in the final touches. Finally, both are painfully aware that the chances of their work ever receiving a wider audience are slim to say the least.

Perhaps the differences between the two disciplines are as striking as the similarities. In academia, given the cumulative and evolutionary development of knowledge, one has to acknowledge one’s sources explicitly, and indicate where the ideas and data come from upon which one has elaborated. The artist, on the other hand, has a far greater degree of freedom: he can stay within an established and recognised art form, or combine artistic elements into a new eclectic style, or overhaul established routines by ignoring the past and making his individual contribution on canvas. Second, the academic is less of an individualist than the painter: he has to depend much more on his colleagues and supportive institutions.

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This study is dedicated to my family, friends and colleagues, all of whom showed their interest in the progress of the research, either by encouraging me to finish quickly, or by putting things into perspective by saying that it is only a book.

Willem Hulsink
1 Introduction

1.1 Introduction

Since the late 1970s, serious doubts have been cast upon the established telecommunications regime as a public monopoly in all industrial democracies. This is a result of structural developments such as technological innovation, increasing demand for competitive and specialised services, globalisation of business, international deregulation and European integration. Together with the recent moves towards harmonisation and integration of national policies into a larger European Community the question ‘Does the common challenge of technoglobal telecommunications restructuring elicit different national responses?’ has moved to the forefront of political and academic debate. This book provides a comparative study of three different European responses to the common stimulus of structural changes in the telecommunications industry.

The process of adjustment in European telecommunications manifested itself in the early 1980s, when national policy makers started to realise that the challenge posed by structural developments in technology, markets and international regulation, together with Europe’s lack of competitiveness in high-tech industries vis-à-vis the USA and Japan, required an appropriate policy response. Recent political debate in the three chosen Western European countries has centred on whether and to what extent the telecommunications monopoly should be liberalised and state control ought to be privatised (and, if yes, at what speed) and how an appropriate new framework for market regulation should be set up.

Instead of a cross-national convergence towards open markets and a level playing field, the outcome of this study reflects a variety of policy measures being implemented, such as non-decision making in one country, incremental adjustments in another or policy innovations in a third. These differences in policy response might be explained by examining the domestic priorities as defined and advocated by key actors and ruling coalitions in the policy arena and the larger national setting, made up of persistent rules, institutions and economic conditions (for example, the scale and the degree of openness of the economy), which shape the process of telecommunications decision making in a particular way. In this study we will examine how the United Kingdom, the Netherlands, France and (to some
extent) the European Community as a whole, have adjusted to the new technological, economic, regulatory and international conditions of modern telecommunications. Do the aforementioned states have any manœuvreability in the formulation of a national strategy with respect to telecommunications, reflecting domestic values and priorities? And if so, what factors explain the strategic choice made within a given country?

The aim of this research is to analyse and compare the British, Dutch and French strategies with regard to the restructuring of telecommunications. Section 1.2 discusses the putting into question and the subsequent restructuring of the traditional ownership and control structures of the public service industries in Western Europe. Section 1.3 briefly introduces the traditional telecommunications regime based on domestic public monopoly and international cartel arrangements. Section 1.4 discusses four exogenous variables challenging the sovereignty of national telecommunications regimes in Western Europe, namely the structural forces of technological progress, changing demand and supply conditions, international deregulation, and European integration. Section 1.5 examines the search for an adequate policy response to international techno-economic restructuring. The formation of industrial adjustment strategies will be discussed against the background of the academic debate in comparative policy and business studies on the validity of cross-national convergence versus national diversity. The theoretical concepts throughout the study, deriving from organisation theory, strategic management and political economy, are introduced in Section 1.6. The organisational and institutional perspective adopted in this comparative study of the changes in telecommunications policy in the three countries, is offered in Section 1.7. The research model on the basis of which the study is carried out, is spelt out in Section 1.8.

1.2 The restructuring of public service industries in Western Europe

The focus of this research is on the process of monopolisation and demonopolisation in the West European telecommunications industry. The collectivisation of the provision of telephony and telegraphy that started at the end of the nineteenth century and lasted until the 1980s, became institutionalised through statutory monopolies, authorised by the central government and operated by state-owned PTT administrations. In Europe’s mixed economies the state has traditionally played a leading role in key sectors such as railways, telecommunications and energy by acting as entrepreneur, direct supplier of services, lender of last resort and planner for the industry in question or the economy as a whole (Ambrosius 1984; Jänicke 1990). The European governments relied upon interventionist instruments, such as indicative planning, nationalisations and state monopolies, extensive public works and procurement programmes, and demand creation/income redistribution policies. The increase of state intervention at the sector level was paralleled by the establishment of the welfare state at the macro-level. In his In Care of the State, De Swaan (1988) has referred to the gradual rise of nationwide,
collective and compulsory arrangements to structure the provision of public services, social security, and welfare systems. In the formation and implementation of these Keynesian macro-economic policies, the state apparatus was supported by the active participation of centralised labour and employers, organisations, jointly combating inflation and unemployment, and securing substantial levels of economic growth (Shonfield 1965). European governments and their recognised social partners established tripartite arrangements to settle wage/price levels, working conditions and labour market issues. At the end of the 1970s, European public sectors were relatively large and characterised by an extensive bureaucracy, a substantial degree of public ownership and public resource allocation, and ambitious redistribution and employment programmes. Consequently, civil servants and their labour unions had substantial power: public sector employees had a solid legal and political position, based on the civil servants’ statute, favourable working conditions and extensive participation mechanisms. Ministerial intervention in the day-to-day operations of the nationalised industries and interference with the pricing, personnel and investment decisions of public managers was frequent and all-pervasive. Majone (1994a, b) has identified a failure of nationalised industries, based on the following elements: the capture of public managers by politicians and trade unions, a general overmanning of state monopolies, ambiguous and inconsistent corporate objectives and portfolio, poor co-ordination among the various public enterprises, and the absence of effective control over public enterprises by Parliament, the courts or the sponsoring minister.

As a consequence of the collapse of the Bretton Woods system of fixed exchange rates and the two oil crises in the 1970s, the post-war period of prolonged economic growth, full employment, low inflation and organised capitalism came to an end (Lash & Urry 1987). European economies were hit hard by the subsequent economic recession and increasing competition from Japan and the newly industrialising countries, resulting eventually in de-industrialisation, long-term unemployment and cutbacks in public spending. From the late 1970s onwards, governments became concerned with how to adjust their stagnating economies to the new techno-economic and international conditions. In order to strengthen Europe’s position in a more turbulent and volatile world economy, the established national frameworks, based on extensive welfare state provisions, state-owned infrastructure provision and industrial policies aimed at strengthening the countries’ key sectors and national champions, needed rethinking and restructuring. The big challenge for national policy makers in the 1980s became to prepare domestic firms, strategic sectors and the national economy as a whole for international competition, and to develop an appropriate mix of strategic responses (for instance deregulation, privatisation, innovation policy, selective liberalisation).

At the end of the 1970s, politicians, businessmen and intellectuals rediscovered economic liberalism: they promoted the de-collectivisation of the economy by giving clear priority to market mechanisms over government intervention. Littlechild (1978) raised serious doubts about large-scale and far-reaching state intervention in the national economy. He argued that private enterprise (laissez faire) and the smooth functioning of markets and competition would not only generate overall efficiency
gains, but stimulate entrepreneurship and innovation. As illustrated by Swann (1988) in *The Retreat of the State*, before radical deregulation and privatisation programmes were implemented in the US and the UK, the various activities carried out by the governments in the two economies were critically reviewed and discussed in Parliament. On the European continent, conservative and Christian Democratic parties followed the Anglo-Saxon path by giving priority to scaling down welfare provisions, contracting out public services and privatising state-owned enterprises. By the mid-1980s, the Social Democratic parties were also converted to economic neo-liberalism and they too actively supported pro-market adjustment policies. In their responses to economic stagnation, European governments laid emphasis on curbing public expenditure, on administrative reform and deregulation, on the decentralisation of collective bargaining, on shifting resources from sunset to sunrise sectors and on modernising traditional industries.

Western European governments are now in the process of gradually withdrawing from their active role in the provision of public services and are transferring assets from the public to the private sector. They have granted substantial managerial autonomy to former state enterprises and have separated operational activities from regulatory controls. Deregulation has been described as the process of reducing state control over an industry or activity so as to make it structurally more responsive to market forces (Baldwin & McCrudden 1987). In practice, however, deregulation often means less restrictive or rigid regulation, rather than no regulation at all. Public policy objectives, like universal service, price controls, innovation and fair competition, are now achieved through different means, for instance through market co-ordination, administrative regulation and private law techniques. The former two instruments safeguarding the public interest refer to the control of market entry and market behaviour and to the scrutiny of quality of service provision and overall industrial performance. The latter includes bilateral contracts between the government and the franchisee and specific provisions in the articles of association to prevent hostile take-overs or restrict foreign ownership. Furthermore, in Western Europe, deregulation at the national level has often been followed by reregulation at the EC level. As a consequence, public utilities in Western Europe have lost their pre-existing statutory immunity from the Community’s competition legislation and their business activities have become subject to the anti-trust provisions of the Treaty of Rome.

These drastic policy changes implied a shift towards the (managed) liberalisation of market segments, the corporatisation and (intended) privatisation of the former monopolies and a reform of the institutional structure, in order to avoid the conflicting interests of the administration as market player and referee at the same time. The process of liberalising the public utilities refers to the removal of statutory restrictions on market access, henceforward encouraging new entry for private sector participants. The traditional state monopolies have often been replaced by a mixture of (more) market-oriented arrangements, such as new entry, the increase of competitive tendering and franchising, the introduction of yardstick competition and competition between different technological modes and capital market competition. Privatisation refers to the idea and practice of the transfer of productive
assets from public ownership and control into private ownership through either public offering, management buy-out or traded sale (Veljanovski 1989). In addition to the fiscal objective to use the receipts from the sale of public assets to reduce government ownership, the decision to privatise has often been motivated by a desire to improve the management of public corporations by reducing state intervention and stimulating efficiency, innovation and customer responsiveness. It often implies a change in the legal form (from public to civil law), a replacement of senior management and a drastic corporate reorganisation. The utilities are transformed from departmental administrations to state-controlled or state-regulated corporations and granted access to capital markets and allowed to develop more flexible personnel policies. Although put at arm’s length, the privatised company still has direct links with the government, which more often than not remains the key shareholder in the new situation.

1.3 Traditional telecommunications regime: domestic monopoly/international cartel

The telecommunications industry until recently was characterised by a stable and predictable environment, in which technology, institutional patterns and decision making were relatively stable and well organised. There existed a broad consensus about the organisation of the industry as a national public monopoly, relying upon the collective good of the telecommunications network, the large sunk costs of the infrastructure and a basic orientation towards the domestic market. The telecommunications network was operated by a government-controlled monopoly provider with the exclusive responsibility to serve everyone without discrimination. Three versions of such a hierarchical governance regime were in use throughout the telecommunications domain: government department, public enterprise or regulated private monopoly. In most West European countries the operation of the telecommunications system was exclusively assigned to a government department or a public enterprise, generally known as the PTT, with responsibility for the postal, telegraph and telephone monopolies, and sometimes also for the public money services. These PTTs belonged to the public administration and as such were subject to strong government interference: revenues went into the treasury and decisions regarding tariffs, investments, capital and labour conditions needed legislative acceptance. Special cases were Belgium and Sweden, where separate public monopolies for telecommunications and mail were established. The second mode refers to the public enterprise regime: in Japan and the UK one public corporation, separated (more or less) from the public administration, was in charge of operating the telephone system. The third mode is the private regulated monopoly, in which private corporations were given an exclusive licence to manage the network and provide the postal, telephone and telegraph services. Illustrations can be found in the US and Canada where private firms such as AT&T were given the exclusive licence to function as telephone operators.

The postal and telecommunications sector has traditionally been characterised by a high degree of government intervention. Besides the concern about strategic
industries crucial to national security and safety, state involvement existed for two reasons: the natural monopoly attributes of the postal and telecommunications network, and the fact that a nationwide coverage of these networks would contribute to a country’s socio-economic cohesion. The economies of scale and the network characteristics of the telecommunications industry generate positive network externalities, in that the value of the telephone service increases as the number of interconnections increases. Furthermore, the telecommunications and mail services were regarded as essential public utilities with an overriding importance for the national economy; they provided socio-economic infrastructures that, when implemented nationwide, reached, interconnected and integrated every citizen into society. National governments promoted the objective of universal public service for telecommunications by an ingenious system of cross-subsidisation, long-distance telephone services sponsoring local calls and international calls financing domestic services (more generally, business use subsidising residential use). The legitimate use of cross-subsidisation in price setting on the one hand served to spread the overall costs of enlarging the network as much as possible and, on the other hand, defended the national monopoly by referring to the need to prevent cream skimming in lucrative market segments. In other words, the public telecommunications network was not only a techno-economic system, but also a socio-political system of burden sharing that promoted the transfer of benefits towards the economically weak in the form of redistribution.

The governance regime of traditional telecommunication, characterised by the provision of a public infrastructure, universal service at the lowest cost, standard price setting and redistribution in charges, has become known as the public monopoly model. To typify the long-standing and protectionist arrangements between domestic public and private actors around the PTT monopoly, Noam coined the term ‘postal-industrial complex’, referring to a closed system in which government, parliament, the telecommunications administration, the domestic suppliers of telecommunications equipment, the domestic newspaper industry, residential users and the labour unions were involved in a ‘rent-seeking’ coalition of mutual benefits (Noam 1987, 1992). The exclusive position of the PTT was acknowledged on the condition that all the other major stakeholders in the PTT system were allowed to share in the revenues from its services. The cartel-like system was profitable for insiders and, furthermore, its inefficiencies were hidden by the general downward trend in the cost of electronic technology (Noam 1987:32). Within this regime PTT was the monopolistic network operator and the domestic equipment manufacturer(s) served as its monopsonistic supplier(s). These telecommunications equipment firms produced mainly for the domestic market to meet (public) demand for switching and terminal equipment; they became the PTT’s preferred suppliers. The interests of equipment suppliers were protected by ‘buy domestic’ policies and idiosyncratic standards set by the PTT in narrow collaboration with its established supplier(s) to the exclusion of domestic and foreign outsiders. For governments the PTT monopoly was a major source of revenue for the national treasury; in many countries the PTT was seen as the goose with the golden egg that helped to settle the government’s
budget deficit. The PTT configuration also received strong support within the political system from the social-democratic factions in government and parliament, and from trade unions, whose material and ideological interests lay in policy objectives such as the redistribution of charges, universal service, employment and job security, and industrial and regional policy. The interests of households were also incorporated in this postal-industrial complex; the revenues of long-distance telecommunications were redistributed and used to subsidise the local telephone costs of residential users.

As the monopolistic provider of the telecommunications infrastructure, services and terminal equipment, the PTT had to meet two ambiguous goals: it had to perform reasonably well economically and technically, and at the same time offer a universal public service. The performance of the PTT was furthermore hampered by the difficulty of managing internal dependencies between the growing and capital-intensive telecommunications and the saturating and labour-intensive postal subsidiaries. It was common practice within the PTT administration for the flourishing telecommunications subsidiary to sponsor the loss-making mail subsidiary. Externally, the PTTs were confronted with national governments using the telecommunications revenues to balance the budget, while on the other hand refusing the PTT the necessary investment funds for upgrading its networks. The long waiting lists for telephone connections that existed in the 1970s in Western Europe were partly due to the inefficiencies within the then overtly bureaucratic PTT administrations and the difficulties PTTs had in carrying out their daily activities, due to government interference. The PTT administration was a single-service organisation with a strong technocratic and engineering orientation. Both the corporate strategy of the PTT organisation and the national telecommunications policy were devised by technical experts rather than politicians, and largely escaped public scrutiny (Noam 1987; Mansell 1993). Traditionally, the PTT’s orientation towards its customers could be characterised as paternalistic and household-oriented. Its view on telecommunications management was essentially that of an engineer, with heavy emphasis on technical performance, long-term planning, economies of scale and scope, system integration and centrally co-ordinated end-to-end services. Basically, the PTT offered standard homogeneous services (telephone and mail) to the general public, whereby any special demands on the part of the business community were largely ignored. The somewhat rigid and inflexible attitude towards business users changed in the late 1970s when the markets for telephone services became saturated and demand for dataprocessing services from professional and business users started to grow rapidly. After the objective of universal availability of telephony was achieved, the PTT developed a diversification strategy by extending its range of services, to include datacommunications services, videotex, fax, video conferencing, etc.

Apart from its pivotal position in the governance regime, much of the PTT’s influence came from allowing other groups within society to share in its monopoly revenues. The huge procurement contracts of equipment by the PTT provided a large market for the domestic equipment industry in which maximum economies of
scale could be achieved. The relationship between the PTT and the equipment industry in designing and manufacturing network facilities developed into longstanding and close arrangements. Transaction-specific investments in network engineering and interoperability, and standard setting, reinforced by restrictive government procurement policies, produced a monopsonistic market with the PTT as the primary buyer and the domestic equipment industry as its sole supplier. The highly concentrated market for public switching equipment was protected from foreign competition by a variety of protective measures that safeguarded the position of the domestic supplier(s): national preferences, joint research and development and the setting of common standards. The consequence of such a politicised market environment and the tight quasi-vertically integrated links between the PTT and one or two manufacturers was that the price of equipment was too high and the quality too low (Dang-N’Guyen 1986). Examples of such quasi-vertical relationships between national PTTs and their domestic equipment manufacturers were: Philips and the Dutch PTT, GEC & Plessey and British Telecom, CIT-Alcatel and France Télécom, and Siemens and Deutsche Bundespost.

Other stakeholders in the postal-industrial complex were the labour unions, left-wing cabinets and government in general. The PTT administration and the equipment firm(s) ranked among the largest national employers with relatively high levels of union membership. On the basis of such a strong representational basis the labour unions established a close relationship with the PTT administration and the domestic equipment industry. As a consequence, the PTT employees and the employees of the equipment manufacturers enjoyed relatively high levels of job security and salaries. To left-wing cabinets the PTT, as a public corporation in a key industry, was relevant in the formation and implementation of technological and industrial policies. With its vast procurement budgets and huge labour forces, the PTT was one of the largest investors and employers in the country. Traditionally, government involvement in telecommunications has been extensive. The reasons for this high degree of state intervention were manifold. Besides the natural monopoly character of the telecommunications network, governments regarded the telecommunications infrastructure as strategically important for both the national economy and national defence/security. Sometimes the PTT was used by government to achieve other objectives than providing universal telecommunications services: competition policies, innovation policies, macro-economic policies, employment and regional policies. The centralised and hierarchical telecommunications network enjoyed broad public and political approval because it supported the concept of public service: it was universal in reach, common carrier-based in access, price-controlled by necessity, and redistributive with regard to its charges (Noam 1987). In exchange for their monopoly status, the telephone administrations were obliged to extend their service to all. Therefore consumers, small firms, the self-employed and rural communities supported the PTT system because they feared that a liberalised regime would threaten the subsidy of their service. Consumer organisations, the chambers of commerce, employer associations and labour unions were directly represented in an integrated institutional framework of various advisory and
consultative councils for PTT affairs. The poor and the elderly played a mere token role in the policy-making process, as symbols of the universal service character of the telecommunications network.

The office equipment manufacturers and dataprocessing industry have remained somewhat outside the postal-industrial complex, at least in the past. In the last two decades the PTTs have been able to draw some of them into their dominant coalition of organisations by giving them a key role in the introduction of office automation and the upgrading of dataprocessing facilities in the PTT administration. For the computer industry, PTT has been both a highly valued customer with a solid financial backbone, and also a (potential) competitor. As we will see later on, the computing industry maintained a position on the periphery of the postal-industrial complex that proved strategically important. They served another big group of customers who were left out of the postal-industrial coalition: big business users such as banks, news agencies, publishers, insurance companies, airline companies, and other big multinationals with subsidiaries all over the world, to name a few. These businesses demanded cheap international calls, customised (data)communications facilities and flexible regulations, demands that at that time could hardly be met by the PTTs. To these large users telecommunications has simply grown too important, in terms of corporate strategy and costs, to be regulated in the traditional way. Rather than be made subject to the vagaries of monopolistic pricing by a public telephone company that offered mainly conventional telephone services, large business users slowly started to develop their own telecommunications links and operated their own private networks, or they leased them at low and stable rates from new service providers such as IBM and General Electric Information Services (GEIS).

The national network operators jointly controlled the market for international telecommunications services. The point-to-point nature of international telephone, telex and telegraph services fostered a bilateral governance mode, based on the conception of international telecommunications as a jointly provided service. The provision of cross-border communications services was regarded as the result of a shared investment by the carriers of origin, transit (or through-traffic) and ultimate destination. Besides being exclusively responsible for the provision and operation of the domestic network, the national PTTs were joint monopolists in the operation and management of global telecommunications services. The rates for international calls and the division of revenues were negotiated by the two national network operators involved in establishing the link. The established network operators furthermore agreed on setting tariffs for international telecommunications high above cost in order to subsidise domestic telecommunications. As well as through bilateral agreements, international telecommunications was also organised through multilateral arrangements between public network operators, for instance negotiated within the International Telecommunications Union (ITU). The ITU is the key intergovernmental organisation to monitor and ensure the interconnection and interoperability of national systems in international communications on a technical and administrative basis. As an agency of the United Nations, the ITU is intended
to maintain and extend economic co-operation between its more than 150 member states in all fields of telecommunications, such as developing recommendations about standards and tariffs, allocating frequencies, and co-ordinating the development of telecommunications infrastructures (Aronson & Cowhey 1988; Cowhey 1990; Renaud 1990). Officially, the ITU negotiations were led by representatives of the nation states, but in practice the influence of PTT administrations was always substantial; PTT engineers tended to dominate the discussions on technical and regulatory matters. In this exclusive regime, entry of new service providers was restricted at both the national and international level.

In short, the national postal-industrial complex consisted of the major stakeholders in the telecommunications industry, all sharing in the revenues generated by the domestic monopoly of the PTT. The international telecommunications system consisted of a system of national monopolies embedded in an international market/price cartel centred around the ITU. To identify this traditional governance regime of telecommunications, we will put forward the term *national public monopoly/international cartel*. However, the traditional framework of telecommunications was seriously questioned when the foundations on which the monopoly/cartel regime was built started to erode as a result of a conjunction of technological, economic, international and institutional developments, which we will discuss in the following section.

### 1.4 Structural forces setting the national telecommunications agenda

The shifts in the telecommunications polity that took place in the 1970s and 1980s can be explained by referring to technological, economic, international, European, and domestic-political factors. The technological factors included the diffusion of new transmission alternatives, challenging the natural monopoly characteristics of the network, and the convergence of technologies, blurring the traditional boundaries between telecommunications and sectors like broadcasting, dataprocessing, and electronic publishing (Pool 1983, 1990). The economic factors were the non-sustainability and inefficiencies of the established market structure, leading to the introduction of more competition and the consequent promotion of innovation, quality of service and customer responsiveness by suppliers (Noam 1992; Mansell 1993). The international factors were the internationalisation of business and politics, furthered by transnational users and the early-deregulating governments of the USA, the UK and Japan, which had a substantial impact on mercantilist policies in Western Europe (Noam 1992; Mansell 1993; Davies 1994). The European factors were the ongoing process of European integration and the implementation of supranational telecommunications regulations, constraining the policy process in the constituting member states even further (Schneider & Werle 1990). Domestic-political explanations focus on the strength and interplay of stakeholders in the policy process and the legal-institutional setting that constrains their interplay in the formulation of an appropriate reaction to the ongoing restructuring in telecommunications. The actual strategic response of particular
countries in terms of degree and timing of implementing changes, as assumed in this study, will be shaped partly by the impact these structural trends have upon the ruling coalition and institutions at a national level. Telecommunications policy and decision making also reflects the distribution of power among domestic stakeholders and their strategic interactions intended to shape appropriate institutional structures.

The first development that seriously questioned the state-controlled European telecommunications industry could be labelled the technological revolution; computerisation and digitalisation have eroded the boundaries between technologies and industrial sectors and have allowed for a sharp rise in both quality and quantity of communications facilities. Innovations like micro-electronics, computers, radiowave, satellites, cable and videotechnologies and their functional linkages have enabled a convergence between print, dataprocessing, broadcasting and telecommunications by integrating these formerly separated sectors in one integrated information/communications market. These developments have enabled a flexible and customised use of the telecommunications network by allowing to unbundle the distribution of information through infrastructure provision, bearer services and enhanced services. Information and communications technologies proved to be what Pool (1983, 1990) has called ‘technologies of freedom’ and ‘technologies without boundaries’, eroding the existing national monopolies and making telecommunications almost insensitive to geographical distance. As a consequence the position of incumbents has eroded and new entrants have been encouraged to penetrate various segments of the telecommunications market. The diffusion of cable, satellite and radiowave technologies has offered new opportunities for outsiders to provide alternative networks and competitive products and services.

One also has to take into account changes in the economic structure of the telecommunications industry, like the development of the information society and the service economy, the emergence of new markets, and the evolution of multimedia conglomerates. These developments have led to a proliferation of new value-added services and to the entry of private service providers, challenging the PTT monopoly. This diffusion of new technologies was stimulated by an increasing demand from large businesses for cheap and professional services, encouraging even more competition among equipment and service providers and the traditional operators. Together, these two developments have resulted in a considerable downfall in the costs of information and communications. Large business users and private service providers have fiercely lobbied against the cross-subsidisation of tariffs, criticising poor performance of some of the public operators in favour of a more cost-related structure and greater freedom to operate private (inter)national communications systems. The established administrative structure of mutual dependencies between PTT, government, domestic equipment industry, labour unions, and households was not seriously adapted to meet business demands for specialised, international and cheap communications services. These mutually beneficial relationships had led to major economic inefficiencies, such as overpriced equipment, low quality levels, idiosyncratic standards, barriers to innovation, expensive long-distance
tariffs, and low levels of international trade. Telecommunications, once a stable and protected industry, gradually became an innovative high-tech industry, where rising R&D costs and shortening production life cycles were demanding a more international outlook. The markets for equipment and services, once subject to national protection and market fragmentation, evolved into a global and oligopolistic affair, dominated by multinational corporations like AT&T, Siemens, Alcatel, IBM, MCI, as well as the strategic alliances formed by the various European PTTs within their own ranks. This globalisation and differentiation of communications markets also made a reconsideration of the existing national policies necessary.

Another development that demanded such a fundamental reappraisal was the process of international deregulation, which in the US had already started in the early 1960s. In the early 1980s, these American deregulatory policies were emulated by ambitious privatisation and liberalisation programmes in the United Kingdom and Japan. The promotion of international deregulation also spilled over to discussions in the GATT framework, where the early liberalisers sought to liberalise free trade in telecommunications equipment and services. The regulatory reforms of US telecommunications implied a gradual relaxation of the entry conditions for new businesses in specific market segments of the domestic industry (peripheral equipment, cellular radio and long distance telephony) and an overall enlargement of discretion to market co-ordination and a curtailment of the regulated private monopoly. A landmark in American telecommunications deregulation was the Modified Final Judgement of 1984, leading to the divestiture of AT&T as a nationally regulated monopoly. AT&T was broken up into seven separate local/regional companies, the so-called Regional Bell Operating Companies (RBOCs) to be regulated by the government, and the slimmed-down AT&T was freed from any regulatory impediments to enter new markets. As a consequence, competition was fostered between the telecommunications and the dataprocessing industry and their major protagonists AT&T and IBM.

The deregulatory package was part of a deliberate American strategy to strengthen its global hegemony in information technology and telecommunications (Schiller 1982; Hills 1986; Pool 1990). Given their strong dependence on US technology and the large size of its market, European and Japanese policy makers had to take the American move to deregulate its domestic telecommunications and computing industries into account. First, the American programme served as an impetus and model for other countries also wanting to restructure their domestic telecommunications monopoly. Second, the global shift of AT&T and IBM exerted a strong pressure on the European and Japanese governments to open up – at least to some extent – their highly protectionist telecommunications markets. One of the consequences of US deregulation was that firms like AT&T, IBM, the RBOCs and MCI sought market expansion abroad. When confronted with the US demand for market access, Japanese and European policy makers had to take into account the actual strength and the (potential) entry of and competition from large American firms in formulating an appropriate policy response to the new techno-economic developments.
The strategic move of the US government to deregulate its telecommunications industry was quickly emulated by the Japanese and British governments, who decided to privatise their public operators and to a large extent liberalise their home markets between 1980 and 1994. European states were more or less forced to respond and adjust their domestic public monopoly regime to the new conditions. The position of European countries, however, has remained relatively weak: their national markets are too small to compete with the US and Japan, nationally oriented operators and manufacturers are behind in transnationalisation, and the Common Telecommunications Market is as yet not fully accomplished.

Another major challenge facing Western European states is the process of European integration, illustrated by the growing power of EC institutions in the design of Community-wide telecommunications and Internal Market policies. Although the European Commission could have intervened since 1962 when the rules of free movement came into effect, there existed a consensus within the European Community to keep the telecommunications sector subject to the member states’ control and organised through a state-controlled monopoly, with hardly any concern for domestic and international competition. The launch of the Internal Market programme in the mid-1980s was inspired by the idea that market integration, industrial restructuring and the upgrading of the Community’s technological base would prove vital in catching up with Europe’s major competitors, the US and Japan. The supremacy of Community Law over national legislation and the ongoing process of European integration has reduced the freedom the Community’s member states have to pursue public policy objectives (Volcansek 1992b). As a consequence, protective arrangements between national government and their domestic industry, were increasingly overruled by Community regulations to ensure the operation of free markets and encourage ‘national policy competition’ between the member states (Jacquemin & Wright 1993; Sun & Pelkmans 1995). The growing importance of the European level of decision making is not only the result of the increase of responsibilities for Community institutions. The ‘Brusselisation’ of policy making has also fostered the formation of influential supranational interest groups and their participation in the policy process and the development of cross-national strategic alliances in the European market place.

For a long time the European Community hardly put any restrictions on national telecommunications policies. There was a change, however, in the early 1980s, when telecommunications deregulation in the UK forced the Commission to intervene to deal with attempts by British Telecom to abuse its monopoly power. With the publication of the Green Paper for European Telecommunications and subsequent legislation in the late 1980s, the leeway to develop specific domestic policies, reflecting particular ownership structures, domestic priorities and national legacies, was seriously reduced. For instance, the Commission successfully attacked protective procurement policies and telecommunications lost its immunity from the anti-trust provisions of the EEC Treaty. The role of the European Commission has changed from being a mere international and collective regime, relying upon the consent of its constituencies, to that of a corporate actor in its own right, actively engaged in a comprehensive R&D framework, collective standardisation and the
creation of a European telecommunications market (Schneider & Werle 1990; Hulsink 1994). Notwithstanding the Community’s efforts and relative successes in harmonising the various domestic policies and creating a Common Market for terminal equipment, value-added services, satellite and cellular communications, and access to public networks by 1993, the existing public monopolies on infrastructure provision and basic services (‘voice telephony’) remained unaffected. Only recently, the European Council of Ministers decided that from 1998 the entire telecommunications sector would be open to competitive entry, including the aforementioned key markets.

So far the Commission has been relatively unsuccessful in forging a Communitywide consensus on the aims and scope of an adequate common strategy. The political responses to the economic recession and transnational pressures have remained biased in favour of the member states and domestic stakeholders. The reason for this lack of support can be traced back to a decision-making structure in which the interests of the member states still prevail through the body of the Council of Ministers. So far little discretion has been given to the supranational bodies of the Commission and Parliament. EC-wide telecommunications policies cannot be imposed upon member states, but are jointly decided by the intergovernmental Council of Ministers. This body, in which national governments directly participate, offers the possibility either to further or block national interests. Basically, the policy outcome of this joint decision making in the European telecommunications domain is a political compromise between the Scylla of uncontrolled liberalisation leading to destructive competition and cuts in public service provision, and the Charybdis of too much state intervention, effectively blocking institutional change and innovation.

Structural developments in technology, markets and regulation, however, do not automatically produce new institutional arrangements; a new industrial order needs to be negotiated, agreed upon and implemented by national and sectoral actors. As argued by Blankart and Knieps (1989:594): ‘technical progress and efficiency arguments are a necessary but not sufficient reason to change the status quo towards deregulation.’ Besides being constrained by techno-global developments, the formulation of appropriate national strategies is to some extent shaped by factors and actors at the macro-level of the national economy, for instance a country’s legal-administrative tradition, the scale and degree of openness of the economy, particular arrangements linking the state with business and labour, and the prevailing economic ideology. Blankart and Knieps (1989) have referred to diverging institutions of political decision making to explain different paths of telecommunication deregulation. In comparing the policies of the US and Germany in the 1980s, they have found differences in interest group structure and access to the political system. While the US exhibits a more decentralised and pluralist structure of decision making at both the federal and state level, German decision making is centralised at the federal level. According to Blankart and Knieps, these institutional differences between the US and Germany explain why the former has followed the more radical strategy. In addition to these national contingencies, policy responses are also influenced by constraints at the sectoral level, referring to the intrinsic
features of the domestic telecommunications industry, like the power distribution between the incumbents and their political allies and the attempts by (potential) new entrants seeking access to the market place and the policy arena.

1.5 Comparative analysis of telecommunications restructuring in Europe: global forces and domestic responses

In strategic management, organisation theory and political economy, there is a lively debate about whether ‘nations matter’ in an internationalising political economy with respect to the public policy choices and private strategies pursued by leading domestic actors (e.g. Zysman 1983, 1994; Katzenstein 1985; Gourevitch 1986; Porter 1990; Whitley 1992a, b; Ruigrok & Van Tulder 1995). Researchers disagree as to the extent to which policy processes and outcomes are shaped by factors unique to a particular policy field or whether they are a function of the political and social characteristics of the nation in which they are developed. Two different approaches to the comparison of public policies across nations and across sectors have been put forward (Freeman 1985; Feick 1992). The cross-national convergence or policy sector thesis stipulates a differentiation within individual countries across sectors and a convergence across nations within sectors, whereas the national diversity thesis stipulates a differentiation within individual sectors across nations and convergence across sectors. In this study, we will apply the two theses to analyse two opposing trends in the high-tech industry of telecommunications, that seemingly pose a dilemma both for governments and (multi)national corporations, namely the choice between techno-globalism and techno-nationalism (Stevens 1990; Ostry & Nelson 1995; Sally 1995).

The convergence thesis assumes the appearance of similar problem definitions, policy goals, instruments, styles, and outcomes across nations, ultimately leading to increasing similarities between nations’ policies (Bennett 1991). These corresponding policies have proven or promise to be the most efficient, effective and/or legitimate, and hence it is assumed these ‘best practices’ ought to be widely diffused and universally adopted. With the globalisation of particular industries and European harmonisation and integration, domestic politics have become more and more intertwined with international matters, forging a convergence of national responses to structural economic developments. The intensification of transnational economic and political linkages, manifested by the globalisation of firms and industries and the internationalisation of policy communities and regimes, have restricted the room for manoeuvre of small and medium-sized states. However, there still seems to be significant room for diversity in the strategies pursued by individual European states to cope with an increasingly complex and global environment (Dyson & Humphreys 1986, 1990; Humphreys 1990b; Grande & Schneider 1991; Unger & van Waarden 1995; Berger & Dore 1996). Despite the gradual process of globalisation, there are arguments to support the claim that the national level, where both public and (multinational) private actors are deeply embedded in and rely on supportive domestic networks, is still important. The national diversity (or
techno-nationalism) thesis claims that domestic politics and policies still matter, and that, as a consequence, there continues to exist a number of diverging approaches. Each country has its unique mix of economic, political, social, and historical elements. Consequently, each has its own particular inheritance in terms of economic organisation, interest intermediation and decision making.

The convergence hypothesis

In the post-war period the level of economic and political interdependence between the economies of Japan, the USA and Western Europe has increased sharply. Today’s companies, triggered by the search for economies of scale and scope, rising R&D costs and a quickening pace of technological change and worldwide convergence of consumer preferences, are competing for world market shares and technological leadership. Although, admittedly, the notion of an open world economy is to a degree wishful thinking and one should not forget that the internationalisation of economic activities is still limited, the rise of powerful multinational companies, the increasing worldwide flow of goods and money, and the formation of supranational trading zones and economic blocs all make it clear that things have changed (Ruigrok & Van Tulder 1995; Hirst & Thompson 1996). For instance, the globalisation of the automobiles, electronics, computing and aerospace sectors took place through the formation of foreign direct investment strategies and international strategic alliances: if one wants to operate a global business, one needs to co-operate with international partners to serve customers in a global environment. As argued forcefully by Ohmae (1985, 1990), every corporation that wants to have a strong position in the ‘interlinked’ world economy needs to create a direct presence in each of the key markets. Transnational firms must be able to penetrate and strengthen their position in the three regional markets of Japan, the USA and Europe simultaneously. A foothold in the regional market one wants to conquer can be created by establishing joint ventures or mergers with enterprises from that region. Once an ‘insider’ in the host market, protectionist trade barriers and a foreign business environment are successfully overcome: European firms went transnational and have become insiders in Japan and the USA, and Japanese and American corporations in their turn have moved into Europe and have also become insiders in that part of the world market.

The international economic environment is not only shaped by increasing competition between multinational firms from the three leading regions and a consequent concentration of production, trade and finance at world level, but also by the interactions between governments and (multi)national corporations concerning investments at home or abroad (Porter 1986; Gilpin 1987; Stopford & Strange 1991; Strange 1992). The process of world market integration has reduced the ability of national governments to control and manage their domestic industries. In a global economy states can no longer follow costly and risky mercantilist strategies, exemplified by support for national champions, protective trade barriers and massive government subsidies. Constrained by cuts in public spending and
free trade provisions enacted through the EC and the GATT/WTO frameworks, governments keep an eye on the competitive position of their domestic industries, welcoming foreign investments in key economic sectors that help to strengthen their domestic techno-industrial base and hoping to find an attractive international partner for their national champions to enable access to foreign markets. For instance, in heavily regulated markets such as telecommunications, financial services and high technologies, it is almost impossible for foreign firms to enter those markets without joint ventures with domestic partners: market entry has to be negotiated. A clear free trade policy, whereby foreign investors are welcomed without any local content provisions, is not a viable alternative for local governments seeking to achieve durable economic wealth. In line with Lindblom’s claim with regard to the privileged position of business, multinational companies always have the (potential) ability to invest and operate abroad to avoid high taxes and a burdensome regulatory environment (Lindblom 1977). Therefore governments have to find a balance between the restructuring of national champions and domestic industries and the promotion of free trade and market access for its domestic firms abroad.

This strategy of liberalising markets sequentially in order to give domestic firms sufficient time to adjust to the new conditions in international markets, is followed by a majority of nation states. The emerging global economy seems to be characterised by a system of free trade within the regions and managed trade between the regions (‘quasi-trading blocks’), in which national governments or regional administrations are involved in setting the terms and conditions (Ruigrok & Van Tulder 1995; Hirst & Thompson 1996). The present relationships between states and firms in the international political economy could be interpreted as a mixed-motive game in which ‘rival states and rival firms’ attempt to strengthen their economic position in the worldwide competition by relying upon a mixture of competitive and collaborative strategies (Stopford & Strange 1991; Strange 1992). This new game of competing for world market share forces firms to bargain with host governments and/or other companies seeking access to new technologies and markets (Ostry 1990; Cowhey & Aronson 1993). National governments also have to be alert and responsive, and try to attract foreign investments in key economic areas as well as support the domestic activities and the presence abroad of its ‘home’ multinational companies.

Although it has lost substantial market share in some industries, like car manufacturing, steel and electronics as well as losing monetary controls (Keohane 1984; Hart 1992), the United States is still the unquestioned hegemon of the world system (Strange 1987, 1988). The control of US government and US business over key areas such as security, economic production, finance, technology, transport and communications systems and energy supply (i.e. the Pax Americana), has allowed for substantial bargaining power in determining the terms of individual international exchanges and the trade negotiations within the GATT framework in the post-war period (Vernon 1971; Gilpin 1975). The US strengthened its strategic position and created a competitive edge in the airline, finance and telecommunications sectors by being the first to deregulate and to demand a free trade regime in the 1970s and
1980s, based on the principles of market access, reciprocity, non-discrimination and the most-favoured nation principle applied multilaterally. This clear relationship between a country’s position in the international division of labour (i.e. degree of international competitiveness) and particular trade policy preferences (i.e. degree of free trade) has been described by Gourevitch (1986:56):

Economic actors at the cutting edge of international competition are likely to support policies that promote open trading, not only for their own products, but more generally for intensified specialisation in international trade. Actors less well placed in international competition are more likely to support protection or modes of shelter or subsidy.

The increasing growth of economic interdependence at world level has been the outcome of major transnational corporations establishing subsidiaries, agreements and alliances all over the world. Especially big American firms like AT&T and IBM, relying upon a vast home market and tight links with the American defence industry through large procurement contracts, have become major players in global telecommunications. After the deregulation of their home market, these two leading American firms have acquired minority stakes in a number of European firms engaged in the communications and electronics industry. Compared to Japanese and especially European companies, there is a big difference in size of the companies, technology and market leadership, and a high level of transnationalisation. The American companies, encouraged and supported by their government’s pro-market programme, were at the forefront of the globalisation process in telecommunications. The US government was the first to question the monopoly regime as well as the first to turn it into a market-oriented industry by loosening and lifting government regulations in order to stimulate innovation, competition and international trade. It was believed that such a deregulated regime would be beneficial not just for the American telecommunications industry, but for American business in general, operating all over the world. Given US world leadership in computing and telecommunications in the early 1980s, Japan and the EC had to react to this challenge. At that time the European Community was made up of a number of small, fragmented and sheltered markets, which had become a handicap to innovation, growth and international competitiveness.

Although it is true that globalisation has to a large extent been accomplished by international firms, business was supported in its effort to transnationalise by international economic and political institutions operating at the regional or world level, such as the EC, and the multilateral arrangements established in the OECD and the GATT/WTO frameworks. These international institutions are highly involved in the making and shaping of policies concerning transnational competition, trade and innovation issues in either gathering data about these issues (OECD), enforcing a common European market (Commission) or facilitating worldwide trade (the GATT/WTO). EC law has an impact both on member states who are directly bound by it and on companies who are constrained by the competition provisions. The GATT/WTO framework is a forum for negotiation that is becoming increasingly
important for international telecommunications. For a long time cross-border traffic was organised in a cartel-like way through various agreements between the national PTTs and regulated by the ITU. As it is losing its public and monopolistic character, telecommunications is increasingly becoming an industry like any other, and as a consequence it faces the rise of falling under GATT jurisdiction. In the Uruguay Round of GATT negotiations a broader coverage of trade liberalisation was suggested, one of the areas targeted being barriers to international trade in services and market access (for example standardisation and public procurement). Discussions are taking place to subject the international trade in telecommunications services to the free trade rules in the foreseeable future.

**The national diversity hypothesis**

The institutional environment of a particular country provides both constraints on and incentives for discretionary action in the formation and implementation of industrial policy and corporate behaviour. The term ‘institutional contingencies’ refers to whether (and how) countries organise and regulate their domestic economy in a particular way, reflecting a unique mix of social, economic, political and historical elements, such as a specific production profile, distinctive domestic priorities and industrial culture, and the particular role(s) of the state and its interaction patterns with private actors (such as firms, financial institutions, trade associations, and labour unions) in the policy process. When a nation state consistently shows a distinctive way of acting, structuring and performing in terms of policy making and/or implementation processes, influencing the development of public policies across time and across sectors, one could argue that a specific national policy style exists (Kelman 1981; Richardson *et al.* 1982; Vogel 1986; Feick 1992). The concept of style has originally been defined by Gombrich (1979:352) as ‘any distinctive and therefore recognisable way in which an act is performed or an artefact made, or ought to be performed and made’. In this research we will investigate whether there are diverging responses, based on particular national policy styles, to the techno-economic challenges posed by international telecommunications. When comparing public policies, we must include both the macro-economic and the legal-political environments, as they, too, constrain industrial behaviour.

A first difference is a country’s comparative advantage based on natural resources, factor endowments (the level or amount of available skills, technology, capital), particular relationships among the nation’s competitive industries, and various macro-economic variables (exchange rates, aggregate level of demand, the level of savings, interest rates and investment) (Shonfield 1965; Porter 1990). A second difference is the size and openness of the domestic economy (Katzenstein 1978, 1985): the first element refers to the magnitude of the domestic market in terms of economies of scale and scope and of R&D efforts, and the second refers to the relative weight of transnational actors, including multinational companies and international institutions, on national policy formation. Some countries have a small and open economy (e.g. the Netherlands), other countries have a medium-sized
economy with a relatively open (e.g. United Kingdom) or with a rather closed character (e.g. France). Others still have a large economy which could be qualified as relatively open (USA) or closed (Japan). Compared with big economies, small industrialised countries have to rely upon niche strategies and exports to gain the benefits of economies of scale and recoup R&D costs. Because of their openness and relatively small size, states like the Netherlands and Belgium are very sensitive to trends in the world economy. In response to meet this high international sensitivity, the small European countries have developed a stable system of political accommodation at home, in which the major parties in economic policy (business, labour, government) work very closely together in the formation and implementation of economic policies (Katzenstein 1985). Their innovation policies are oriented towards the diffusion and widespread application of advanced technologies, seeking to combine domestic capabilities with inward investment by foreign multinational firms (Freeman & Lundvall 1988). While smaller countries will conceive a structural industrial crisis as a cyclical occurrence generated outside their economy over which they have hardly any control, bigger countries have the ability to initiate mission-oriented innovation programmes on their own, aiming at technological leadership (space, semiconductors, aircraft manufacturing, etc.), which may to some extent combat the crisis (Ergas 1984). While a large majority of the industrialised countries in the early 1980s were considering or already implementing privatisation and deregulation measures, the French socialist government, for instance, opted in favour of nationalising the advanced sectors of its economy.

A third difference between national economies has to do with the relative strength and the autonomy of the state vis-à-vis society as a whole. In explaining differences in international competitiveness between sectors and between countries, Hart (1992) has referred to the varying patterns in the creation and diffusion of new technologies, that are in turn affected by particular state–society arrangements. The distribution of power between state, business, and organised labour and their specific interaction patterns helps to explain changes in international competitiveness, because these state–society arrangements can accelerate or impede the development and diffusion of technological innovations and breakthroughs crucial to a nation’s competitiveness. Particular state–society relationships manifest themselves not only at the macro level of economic policy making, but at micro and meso level as well. Individual businesses and industries are embedded in a complex network of distinctive relationships with central and local governments, national financial institutions and trade unions etc.; even multinational companies are strongly entrenched in specific networks of suppliers and supportive institutions at home (Porter 1990; Grabher 1993; Ruigrok & Van Tulder 1995; Hirst & Thompson 1996).

Zysman (1983, 1994) and Katzenstein (1985) have referred to the different ways in which the costs and benefits of industrial change can be distributed throughout society and the different means by which political settlements as to who benefits and suffers from growth can be reached. The Anglo-Saxon countries are characterised by a liberal tradition with business operating at arm’s length from the
state. The principal role for government is to provide the appropriate economic conditions for domestic companies and markets to operate effectively. In these market-led or company-led countries the political settlement with regard to the distribution of the costs and gains of industrial growth is left to the market mechanism and competitive rivalry. The German, Swedish and Dutch states are examples of so-called negotiation-led or neo-corporatist systems with moderate government intervention, where the state and its ‘social partners’ (organised business, labour, the banking community and agriculture) collaborate intensively to secure domestic peace and together they develop a joint trade policy. In these countries industrial adjustment is achieved through explicit bargaining and consensus building to make arrangements that will benefit all the domestic stakeholders as well as the national economy. France and Japan can be characterised by the leading role played by central government in guiding and orchestrating the national economy. In these dirigiste or state-led countries, the distribution of the costs and benefits of industrial change is determined by political manipulation of the market. Through indicative planning, public ownership, investment subsidies and large public procurement programmes, industrial targeting policies, control over the financial system, and superior expert knowledge, the state bureaucracy is able to develop and effectively control the crucial sectors and key technologies of the national economy.

The participation of industrialised countries in world markets and international economic rivalry constrains domestic decision making with regards to the formulation of appropriate industrial adjustment strategies and macro-economic policies. International developments, however, do not necessarily have a direct impact on national economies, but are reflected or refracted through policy choices, developed and negotiated by political actors and dominant organised interests at the national level. In his comparative study on the impact of international economic crises on domestic economic policy making, Gourevitch (1986) has distinguished five options to adapt domestic economic policies to the new techno-economic and political conditions in the world system:

1. the neo-liberal market orientation;
2. socialisation of planning and production;
3. protectionism;
4. demand management;
5. mercantilism.

These policy alternatives may prove useful to our study if we place them between free trade and mercantilism/nationalisation: the first assumes a subordination of politics to a dynamic market rationality generating economic efficiency and industrial innovation, the second assumes the supremacy of state intervention over market and political grand design strategies.

The answer to the question: Is it convergence or national diversity that matters most? may be that they both play a significant role, but that they do so at different stages in the policy process. The convergence dictum is relevant because all countries feel the impact of international restructuring in telecommunications: every
nation state participating in the world economy is confronted with the problem of how to adjust its domestic industries, policies and institutional structures to drastic changes in technology, markets, competition and international deregulation. National diversity, however, may prove significant in the implementation stage, when national governments, firms, labour unions, and other actors decide upon the actual enforcement of adjustment programmes. Domestic decision making and policy making could be relevant because variations across nations may occur in the degree and the pace of responding and adjusting to international restructuring.

1.6 Conceptual framework

Strategic formation and public policy making will be analysed from a power perspective, characterised by a focus on the resource dependencies among stakeholders and the strategic interactions and negotiations between public and private actors in the policy arena (Crozier & Friedberg 1977; Olsen 1981; Wassenberg 1985). The strategies of the various actors and the interactions between them as they (re)shape the negotiated order, are the central elements in such an approach. Negotiation behaviour is aimed at the scope of the mutual dependence of the actors involved, by recognising the ambitions, plans and interests of allies and adversaries, and the support or opposition from the various stakeholders with regard to a change in public policy. The negotiation perspective attempts to make clear that the availability, of blueprints is no guarantee for the effective development of policies, but that, basically, policy and strategy are the outcome of bargaining within and between mutually dependent organisations. In that respect, the discretionary power the players involved have at their disposal is crucial, and dictates whether they are able to change the range of options open to others without apparently putting direct pressure on them to make one decision rather than another. As made clear by Schattschneider (1975), one should not only pay attention to the final outcomes of decision making, but also take into account how subjects and proposals emerge in the first place and eventually get sufficient political attention and support. His emphasis is on the variation and selection mechanisms inherent in the political process: out of the various conflicts that arise, only a few are filtered out by the interplay of dominant stakeholders, and finally generalised to the broader public. Some (potential) issues, values and participants are not considered seriously, or even excluded, and kept out of the public domain. So the scope for conflict and available alternatives is continuously being redefined and rearranged by the organised interests involved in the policy process:

All forms of political organisation have a bias in favour of the exploitation of some kinds of conflict and the suppression of others because organisation is the mobilisation of bias. Some issues are organised into politics while others are organised out.

(Schattschneider 1975:69)
Changes in policy making and the duration and pace of implementation are the result of power shifts in the policy arena and/or changes in the composition of the political agenda, prioritising some issues and excluding others.

Actors seek to strengthen their position and enhance their effectiveness in the political system and the market place. It is in those places where the struggle for control over the terms of resource exchanges and the pursuit of dominance take place. Each actor seeks to reduce environmental uncertainty and control critical resources and contingencies by aiming at governing, directly or indirectly, the other actors involved and thus escape the constraints that others would impose on him. In their effort to control interdependencies and overall uncertainty, organisations can follow several strategies to achieve a relatively steady state of social closure, varying between collaboration, conflict seeking, competition, secretive manipulation and overt integration (Murphy 1988). Cawson et al. (1990) have suggested that organisations can follow at least three strategies to safeguard a solid power base and achieve some state of closure in the market place and/or the policy arena: a market-orientated strategy aimed at strengthening its competitive position vis-à-vis other competitors, cartel-oriented strategies promoting associative action to guarantee monopolised advantages for the members of the élite, and state-orientated strategies demanding protection and shelter from the state.

Furthermore, one should pay attention to both actual and potential issues, as well as any observable, repressed and latent conflicts between stakeholders in the policy process. Lukes (1979) has discerned three dimensions of power: the pluralist notion of power covering the behavioural analysis of overt and observable decision making by political actors (i.e. the execution of force), the revisionist view defining power in terms of control over the political agenda and the mobilisation of bias in the political system (i.e. the manipulation of decisions and non-decisions), and the radical perspective conceiving power as working through the suppression of latent conflicts and the shaping of consensual authority (i.e. power or domination as a legitimate system property). Anyone wanting to analyse institutional change from a power perspective must also pay close attention to overt decision making and hidden control over the political agenda, taking into account both the subjective and concealed interests of the parties involved.

The negotiation/power perspective provides a lucid process-oriented outlook on the strategic interactions among public and private actors. The approach disregards, however, the persistent influence of institutional arrangements that may constrain the bargaining process. The term ‘institutions’ is used in a rather general sense in this study, referring to a relatively persistent set of rules, norms and values that structure the economic and political exchanges between stakeholders. In analysing the acquisition and exchange of critical resources and the mutual search for external control by organisations, we have to ask in what way these transaction and interaction patterns are governed. As made clear by Hage and Clignet (1982) and Williamson (1993), economic production and distribution processes are contingent upon an institutional environment, made up of relatively stable and persistent state society relations and socio-legal ground rules. Because different types of business have different requirements with regards to governing
transactions and interaction patterns, there does not exist a single and optimal way to organise particular industries or public programmes and to maximise their economic performance. The concept of governance structure has been put forward to refer to alternative institutional arrangements that control the processes of production, resource allocation and decision making in a specific industry. Or stated differently, governance structures are ideal-typical organisational forms that coordinate and control economic (or political) activity and transactions among interdependent organisations within a particular domain.


1. market forms based on bilateral exchange, classical contracting, price coordination and incentive-intensity;
2. hierarchy: based on administrative command, authority relations and legitimate powers (e.g. horizontal and/or vertical integration, state intervention);
3. obligational networks: based on resource dependencies, partnering, relational contracting and contractual bonds;
4. promotional networks: based on group loyalty, socialisation, joint interests, mutual trust and confidence relations;
5. association: based on membership agreements, recognition by the state and intermediation.

Markets are self-regulating exchange systems in which buying and selling takes place in a competitive bidding process between atomised utility maximisers. The market process is governed by the price mechanism that reveals more or less adequate information in the allocation of goods between buyers and sellers. Market forms co-ordinate economic transactions between private actors, holding separate property rights in the different resources to be bartered, actors that are voluntarily engaged in the contractual exchange of goods and services. Hierarchies are administrative systems that govern economic activities by fiat, centralised controls, and formal procedures. In this institutional form the property rights are vested in one integrated formal organisation to which both supervisor and subordinates belong. The exercise of managerial prerogatives by one category of actors in wielding authority over others through hierarchy is often explained by the uncertainty and frequency of transactions and the need to address the hazards of opportunism, free riding problems and secure task-specific knowledge and skills.

The network form can be located in between bilateral market or contractual resolutions and administrative hierarchical control as a kind of intermediate or hybrid form. In this horizontal and multilateral governance structure economic activities are conducted by reciprocal communications and exchange patterns and a strong value consensus. The network lacks a formal authority structure and decision making relies upon a mixture of mutual adjustment, negotiation and arbitration (or mediated enforcement). Obligational networks maintain control through corporate interlocks between a core firm and its satellites or between two firms of equal size through equity-sharing arrangements, joint ventures and quasi-
vertical structures, such as long-term subcontracting, franchise arrangements and corporate transfer pricing. Promotional networks are temporary coalitions or clans, established to accomplish a common purpose, such as R&D alliances and bidding consortia. Associations promote the establishment of a representative monopoly among specific categories of actors in identical, similar or adjacent market positions or policy domains and the organised concertation of individual actors in the policy process. These collective organisations mobilise sectoral or collective interests and organise and enforce co-operative behaviour among their members in order to define and further public or categorical goods (e.g. sector-wide training, standardisation). Besides sectoral inclusion and internal coherence, associations derive their political and economic powers from recognition by the state as the single interlocutor, acting on behalf of one particular sector or category of interests in the policy process.

A governance regime is the totality of institutional arrangements, including rules as well as rule-making agents, that regulate economic activities and transactions inside and across the boundaries of an economic system at certain moments in time (Lindberg et al. 1991; Hollingsworth et al. 1994). Economic action and co-ordination is shaped, not just by markets, corporate hierarchies and control over the means of production, but also by a wide range of non-economic institutions that create and maintain the minimal conditions without which economic exchange and organisation would not be possible. Economic institutions are embedded in and modified by a social and political institutional context, including shared cultural beliefs, interdependent networks, systems of interest representation and the degree and mode of state intervention, that create pressures for economic change or preserve the existing situation (Granovetter 1985; Zukin & DiMaggio 1990). While private property rights, free market exchanges and the overall efficiency imperatives to integrate economic activities within managerial hierarchies make up the common elements of capitalism as an economic system, social and political institutions contribute to the differences among capitalist economies.

The state plays a special role in shaping the actions and transaction of private actors and the stipulation and enforcement of governance structures. Governments are both actors (or a configuration of actors) pursuing goals of their own, a political arena where deliberation and struggles over power take place, and institutional structures in which economic transactions are embedded (Lindberg & Campbell 1991; Hollingsworth et al. 1994). The state is a political and economic player acting in its own right, relying upon hierarchical control and authoritarian command on the basis of its unique coercive capacity to provide, enforce and adjust the laws and traditions in society. The state is exclusively authorised to define and manipulate the rules that determine the conditions of ownership and control over the means of production in society, to enforce contracts, and to set general rules of competition associated with the co-ordination of economic activities. The state is prominent in the organisation of political participation at both the sectoral and national levels by providing diverse economic actors and various societal groups differentiated access to the economic policy-making process. Last but not least, the state also provides the legal-institutional framework by shaping the strategic choices and relative
opportunities of economic actors and their exchange patterns. Governments legitimise particular industrial structures by not only defining the relationships of economic actors to property, but also settling the wider institutional basis of economic production, allocation, and accumulation within the national economy.

In its broadest sense, regulation refers to government intervention and control over specific markets and industries, channelling and directing economic activities generally regarded as desirable to society (Reagan 1987). The purpose of overall regulation is to facilitate and accomplish the realisation of socio-economic goals such as allocative efficiency and economic growth, price stability, employment, and the provision of public goods by shaping the structural characteristics of an industry. The justification for administrative regulation has to do with market imperfections that produce sub-optimal outcomes in terms of efficiency (e.g. natural monopolies, externalities, excessive competition, and information asymmetry) and – to some extent – equity (e.g. universal service provision). Anti-trust regulation aims at encouraging competition and curtailing the influence of monopolies, cartels and other restrictive business practices that might disturb the proper functioning of markets. Economic regulation refers to the imposition of controls over prices, entry, exit, output, services rendered, markets served and profitability in particular industries. Social regulation deals with the protection of the environment, consumer protection, occupational health and safety etc. Regulation can be interpreted as an informal system of rule making, which operates through negotiation and bargaining between politicians, civil servants, industry, consumers and administrative bodies in the shadow of the law (Hancher & Moran 1989; Veljanovski 1991a). Such a regulatory framework of organisations includes vertical relationships (e.g. goal setting, licensing, performance control, mandatory reporting, sanctions) and horizontal relationships (e.g. competition, cooperation, conflict, accommodation).

Regulation may be organised in a variety of ways: from self-regulation through self-imposed codes of conduct for a specific industry or profession to externally imposed regulation whereby public organisations have legitimate coercive responsibilities in regulatory policy making. Two variations of externally imposed regulation may be discerned: public monopoly and public regulation. The first one works through direct public intervention whereby a state enterprise has the exclusive responsibility for the provision of particular services. Here the government controls the operational and strategic activities of the state enterprise, such as capital allocations, investment plans, pricing and personnel policy. Public ownership is a means to deal with the natural monopoly conditions described above and the (actual or potential) abuse of private monopoly power. It could also be conceived as a means of dealing with socio-economic problems that cause the market to function badly or not at all: national security, externalities, universal service provision, industrial adjustment and restructuring, regional development and/or ideological concerns. The second form works through administrative agencies that enjoy a considerable degree of independence from the industry (and sometimes from government as well) in regulating a particular market (Selznick 1985). The role of a regulatory agency is restricted to that of referee in charge of general oversight.
and legal enforcement, reflecting a more judicial relationship between the state and the private sector (Volcansek 1992a; Majone 1994a, b). Public regulation refers to a package of legislative and administrative controls designed to structure and alter politically the operation of particular markets of basic importance to the national economy through an independent regulatory authority, while leaving private property intact. Reagan (1987) has characterised public regulation as a half-way-house between government intervention and laissez faire, with markets being organised by the stipulation of entry and ownership conditions and control of market behaviour through rules on price setting, fair competition, and universal service requirements.

The strategic choice between different governance modes of industry can be seen as a strategic game in which interests and values of the involved parties play a vital part and the political-economic organisation of society is at stake. Regulated firms and industries, public agencies and other actors operate within the political and administrative process in exactly the same way as they operate in the market (Owen & Braeutigam 1978; Vietor 1989, 1994). Public or private companies that want to operate effectively in a regulatory environment must be active both in the market place and in the political arena, and complement their business plans with political action. The larger business environment provides opportunities for strategic and tactical behaviour: the realisation of economic objectives and innovation could be used as an offensive instrument, whereas the gathering of information, co-optation of experts, lobbying, cross-subsidisation and litigation are illustrations of more defensive means to strengthen one’s position. Established parties and prospective entrants alike make extensive strategic use of information in the administrative process, taking virtually every opportunity to make detailed economic and technical information available and understandable in ways which emphasise the strong points in their cases and obscure or at least diminish the weaker points. The affected parties in regulatory policy making can also respond by resorting to delaying tactics: for instance, by flooding the regulatory agency with more information than it can absorb.

1.7 Explaining governance transformation: an institutional perspective

From the 1970s onwards, the academic interest in the study of economic, political and legal institutions has increased. New Institutional Economics and New Institutionalism in sociology and political science have started to conceptualise and investigate institutions as organisational forms, socially constructed and routinely reproduced rule systems, and particular state–society arrangements that structure politics, respectively. According to the New Institutional Economics (NIE), institutions can be seen as being incentive and governance structures designed by rational actors to respond to economic needs by reducing transaction costs and information uncertainty (Williamson 1975, 1985, 1991). The emergence, functioning and transformation of institutions is explained with the help of micro-economics,
with the focus on the rational choice for the most efficient outcome and the incentives associated with a particular complex of interdependent rules and informal constraints, which in total determine economic performance (North 1990). For instance, the transaction costs associated with hierarchical forms tends to be lower than the costs of market co-ordination under conditions of high frequency, high asset specificity and high uncertainty. The underlying assumptions of NIE: the primacy of economic goals, the rational actor in pursuit of self-interest, and the emergence of institutions as efficient responses to external requirements, have been strongly criticised by the institutionalist approaches, as developed in sociology and political science.

According to the New Economic Sociology, institutions are shared cognitions and socially constructed rule systems by agents whose actions are embedded in concrete networks of social relations (Granovetter 1985, 1992; Powell & DiMaggio 1991). Besides pursuing the goal of economic efficiency, actors strive for non-economic objectives as well, such as power, dominance, status and public recognition. In analysing rule-bound organisational behaviour, the sociologist J. Thompson (1967:24) has made a useful distinction between constraints and contingencies: the former are fixed institutional conditions to which organisations must adapt, and the latter are not necessarily fixed conditions, but they are not subject to arbitrary control by the organisation. The development and transformation of both political and economic institutions is contingent upon ongoing interaction patterns, lasting cognitive frames and shared norms as well as the constraints imposed by the historical legacy of (in)formal rules and procedures and the overall structure of society (Scott 1995). In their more or less deliberate search for appropriate institutional solutions to their problems, actors creatively select, (re)combine and modify already existing rules, belief systems and scripts, thereby creating new institutions which are different but still resemble the old ones. Institutional arrangements are both a dependent variable at time t and an independent variable at time t + 1 (Krasner 1988). In interpreting the enabling and constraining effects of institutions, Douglas (1986) has characterised these ongoing processes of puzzling, shaping and (re)integrating various institutional elements in a variety of new ways as *bricolage*.

In political science, institutions refer to ‘formal rules, compliance procedures, and standard operating practices that structure the relationships in various units of the polity and economy’ (Hall 1986:19). Central in this respect is the notion of the institution as a set of rules affecting the structure of particular situations at various levels and in particular ways by requiring particular actions, prohibiting certain other outcomes and/or allowing others (Ostrom 1986). In the political version of institutionalism, it is assumed that the socio-economic organisation of a country both conditions and reflects the distribution of power among the key stakeholders affected by particular state–society arrangements and policy outcomes (March & Olsen 1989). Specific institutional arrangements shape particular kinds of politics by affecting the way an actor defines his own interests as well as the degree of power that any set of agents has over policy outcomes. These institutions have evolved out of previous situations and rule settings in which human actors found
themselves and that have caused policy makers to take certain courses of action. Given that each alternative course of action tends to favour the interests of particular stakeholders over others, the parties involved will bargain about certain institutions and policy outcomes to further their interests. So agents will actively attempt to further their interests and particular policy outcomes while at the same time being subject to institutional structures that set limitations to their operations and interactions.

Governance transformations are the outcome of the dynamic interplay between actors, private and public, either in favour of change or eager to preserve the status quo, and the larger technological, economic, cultural and political context, constraining their strategic behaviour. In the explanation of why governance regimes emerge, persist or change, Campbell and Lindberg (1991) have suggested five possible factors:

1. the search for economic efficiency;
2. innovation and technological developments;
3. the quest for power and control;
4. the impact of cultural beliefs;
5. the role of the state in promoting or foreclosing particular courses of action.

The first factor pressing for governance transformation, economic efficiency, relies upon rational actors trying to find more efficient and/or effective ways of doing business. Consequently, economic actors will probably select those governance structures they believe will reduce transaction costs and improve economies of scale and scope. Technology provides new opportunities for governance transformation by expanding the range of choices to innovate production, restructure product markets and facilitate new entry for outsiders.

Besides the continuous search for economic efficiency and innovation, one has to include the importance of power struggles and the pursuit of control over technology, critical dependencies and market competition in maintaining or challenging established governance structures. Actors are concerned with safeguarding their private interests, balancing the power relations with their stakeholders and controlling the terms under which these transactions and economic activities take place. Culture also plays a role in the occurrence and transformation of economic governance, although its explanatory power is limited. Cultural and ideological factors constrain the range of available governance mechanisms from which actors might choose by inhibiting or facilitating particular co-ordination mechanisms that fit within the encompassing system of beliefs, norms and values of a particular sector. The role of the state in structuring and transforming industries is more complex. State actors shape the selection of governance regimes by defining and enforcing the property rights within the national economy and they determine the conditions under which each of the governance arrangements may exist. The government devises policies that prohibit certain courses of action, promote institutional change and certain kinds of behaviour through incentives, and legitimise and enforce the (newly established) governance regime.
In explaining policy change, shifts in power dependencies between stakeholders in the policy network and the larger governance regime play a dominant role. However, one should not underestimate the significance of new persuasive ideas, intellectual debates and prior experiences with related policies in the political process. Social scientists are seemingly more interested in the ‘political’ aspects of the policy process, referring to elements as power struggles, bargaining and conflict resolution, and neglecting such cognitive and argumentative aspects as problem solving, advocacy, communication, deliberation, persuasion and learning. Ideas, being a propelling force in the search and implementation of new solutions to collective societal problems, will be seen as an equally relevant explanation for the development of public policy (Hall 1989, 1993; Majone 1989a, 1992). Hall (1993) has distinguished between three forms of change in policy content: first-order change, caused by incremental and routinised decision making regarding socio-economic problems, second-order change, caused by altering the instruments without challenging the overarching hierarchy of objectives behind the policy, and third-order change referring to a coherent set of new ideas that redefine the persistent problem and its possible solutions. Hall considers first- and second-order change as manifestations of normal incremental problem solving and third-order change as a paradigm shift, provoked by an accumulation of policy failures that trigger the promotion and discussion of new conceptions and institutional structures.

The extent to which these alternatives become widely accepted and implemented depends on their techno-economic, political and administrative viability and the support they receive from communities of experts, leading socio-economic groups, politicians, and administrators (Hall 1986, 1989; Rose 1993). March (1989) and Kingdon (1984) have referred to the linkage of four largely independent streams, namely the flows of energy from participants, problem recognition, available alternatives and choice opportunities, that makes policy breakthroughs possible. Derthick and Quirk (1985) have described the drastic changes in US regulatory policy on transport, airlines and telecommunications, that were the result of a shift in the dominant interests and a surge of conceptual innovation generating new arguments, evidence and proposals. Originally, the alternative of regulatory reform was developed by economic experts advocating deregulation as a way to cut back often unnecessary forms of regulation and hence reduce social costs. These intellectual suggestions for pro-competition policies were picked up and supported by leading politicians responsive to public concerns about high levels of inflation and government intervention and/or inclined to free market ideologies. Although hindered by a relatively late and ineffective reaction from the affected industries to protect their vested interests and slow down far-reaching reform measures, entrepreneurial office holders, commissions and advisory working groups further advanced the ideas for deregulation and eventually implemented them.

We will follow an evolutionary theory of institutional change that emphasises both rational variation and (re)adaptation, and the constrained selection of appropriate forms and the elimination of all the others (Aldrich 1979; Nelson &
Winter 1982; DiMaggio & Powell 1983; Campbell & Lindberg 1991). The mechanism of variation refers to the more or less intentional motivations and cumulative search efforts of actors to improve their capabilities and strategic position. The strategic responses of organisations to transform governance regimes more favourable to their interests, are triggered by changes in their techno-economic or political environment. The selection mechanism refers to the filtering process of how better-fit forms are picked out by the environment and less-fit forms are replaced or rejected. The mechanism of structural adaptation refers to the incremental choices made by policy makers aimed at reforming and adapting institutional structures in response to environmental changes, threats and opportunities. Those particular forms are selected out, that are effectively pursued by powerful actors and are best suited to the changing environmental conditions. The shape organisational forms eventually take is the outcome of a step-by-step process of trial-and-error learning, adaptation and persuasion.

The more or less intentional variation process is seriously constrained by strong inertial forces like sunk costs in plant, equipment and personnel, established routines and experiences, regulations, and barriers to entry and exit, all of which may set strong limits to organisational adaptability (Hannan & Freeman 1984). Organisations confronted with high levels of uncertainty, resource scarcity and constraints often follow ‘best practice patterns’ and ‘survival paths’ by borrowing or emulating structural forms of relevant other organisations. DiMaggio and Powell (1983) have emphasised that organisational fields are continuously being (re)shaped by environmental developments and ultimately stabilise through the emergence of institutional forms that are the most compatible with their environmental characteristics and requirements. Organisations and institutions may, deliberately or necessarily, model themselves on similar organisations and institutions that they perceive as more successful or legitimate. They may adopt a form that has been shown to be efficacious in another context, or be forced to emulate a powerful organisational form in a neighbouring field. The mechanism of imitation refers to the availability of blueprints that could function in cases of high uncertainty and ambiguity as exemplars of problem solutions in the reform of organisational and institutional forms at hand. Majone (1991) and Rose (1993) have pointed out that policy makers, operating under tight resource and time constraints, often rely on pre-existing models from politically and economically powerful countries and make incremental adjustments only at the margin, instead of developing new frameworks. Given the inevitable differences in cultural, economic and social settings, foreign institutional forms are never exactly and directly implemented, but only imitated partially with such minor adaptations and adjustments as fit with local circumstances.

The thrust of the evolutionary approach is that environments select only those policy ideas and forms that fit within a predefined configuration of interests, and filter out those that are maladapted to meet the demands of the political and economic environment. The selection process within the environment is conditioned by historical contingencies and constraints, including the legacy of past policy choices, locked-in phenomena, and long-term commitments. As argued by North (1990), the
continuity of history and institutional persistence often acts as a constraint on the ability of organisations to respond to changes in their environment:

History matters. It matters not just because we can learn from the past, but because the present and the future are connected to the past by the continuity of a society’s institutions. Today’s and tomorrow’s choices are shaped by the past. And the past can only be made intelligible as a story of institutional evolution.

(ibid. 1990:vii)

So policy responds less directly to the current social and economic conditions than it does to the consequences of previous initiatives: ‘Policy makers are inheritors before they are choosers’ (Rose 1993:78).

This path-dependent behaviour is inspired by the fact that an alteration of rules and practices usually involves high switching costs and impaired learning effects and adaptive expectations; instead yesterday’s experiences will provide the opportunity set for today’s actors and organisations (David 1986; Arthur 1988, 1996). Institutional settings, however, may temporarily shield an organisation or an industry from selection pressures. Organisations will then seek to buffer their technical core and interests from environmental disturbances through the pursuit of various closure strategies, aimed at reducing or suppressing competition and technical innovation. Random initial institutional choices and small historical events which preclude future options, including those that would have been more efficient and effective, may be locked in early, and increasingly impede the future adoption of alternative policies and institutional arrangements. While the room for future strategic choices may eventually become limited over the long run, those particular routines that were adopted initially may become more efficient over time, due to the increasing return mechanisms that reinforce the direction once on a given path; in the words of Krasner (1988:83):

Institutions (….) persist because they follow path-dependent patterns of development. Path-dependent patterns are characterised by self-reinforcing positive feedback. Initial choices, often small and random, may determine future historical trajectories. Once a particular path is chosen, it precludes other paths, even if these alternatives might, in the long run, have proven to be more efficient or adaptive.

1.8 Comparing telecommunications governance regimes across nations and across time: a research framework

In this institutional analysis of the restructuring in European telecommunications, we investigate the occurrence of similar and different policy responses over time and across countries. The underlying assumption is that nation-specific adjustment trajectories are shaped through the search strategies of domestic actors, enduring
government–business patterns and external institutional contingencies that narrow the range of policy choices (Zysman 1994). A comparative historical approach is, according to Chandler (1990), essential for the evaluation of industrial and institutional transformation across nations, sectors and over time:

To be valid, historical analyses must be comparative. They must compare the histories of enterprises within the same industry, and then they must compare the collective history of the enterprises within that particular industry with that of other industries in the same nation and also with that of the same industry in other nations. Only such broad-based data can provide the comparisons that indicate common patterns of institutional growth and reveal the impact of cultural, economic, and historical differences on institutional evolution. Such comparisons, in turn, provide the underpinnings for a systematic analysis of the dynamics of modern industrial capitalism.

(ibid. 1990:10)

For the comparative analysis of big structures and large processes, Tilly (1984) has introduced a $2 \times 2$ framework based on two dimensions: the multiplicity of forms, i.e. the number of different kinds of forms studied, and the share of all instances, ranging from the study of an example to all known examples of the form (see Figure 1.1). Individualising comparisons clarify the characteristics of the case at hand by means of contrast with another well-documented case(s). The goal of the comparison is to specify the uniqueness of a case and to establish exactly what is particular about a particular historical experience. Encompassing cross-national and cross-sectoral studies put all the different instances at various locations within the same system with the objective of explaining their characteristics as a function of their varying relationships to the system as a whole. Variation-finding comparisons establish a principle of variation in the character or intensity of a

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**Figure 1.1** Ways of comparing political and economic structures and processes
Source: Tilly 1984
phenomenon by examining systematic differences among instances. No claim is made to account for the full range of experiences, but instead the goal is to make sense of particular social structures and processes and eventually to extend principles and properties of one case readily to new ones. *Universalising* studies identify common properties among all instances of a phenomenon and aim to prove the point that every instance of a phenomenon follows essentially the same stages, rules and standard sequences and transitions. This comparative study on telecommunications restructuring in France, the Netherlands and the UK can be located right in the centre of this matrix: the multiplicity of forms is restricted to three, and the share of all instances is set within a time span of almost twenty years, namely the 1980s and 1990s, when the telecommunications industry in those countries was substantially transformed.

The aim of this study is to compare and explain telecommunications restructuring as it took place in three countries over a period of time. The period of study includes 1980–98 and the countries under investigation are the United Kingdom, the Netherlands and France. These states were selected on their distinct patterns of government action to stimulate the pace of technological and economic development in telecommunications. In previous research, analysing the process of states adjusting their domestic industrial structure to the changes in world economy, three national strategies have been distinguished: company- or market-led adjustment, state-led adjustment, and negotiation-led (or corporatist) adjustment (Zysman 1983, 1994; Katzenstein 1985). The UK approach in restructuring domestic telecommunications could be considered an example of the first strategy, as it relies on the extended role of market forces in the domestic and international economy, with a modest regulatory role for central government. The French approach is an example of the second strategy, emphasising far-reaching state intervention and political manipulation of the key markets of the national economy. The Dutch approach can be regarded as a manifestation of the third strategy, exhibiting explicit bargaining and consensus seeking among all the stakeholders involved, as to which adjustment policy to follow.

In this study we will examine whether there exist clear differences in the style, the degree and the timing of strategic responses of national governments and other stakeholders to adjust their domestic industry to the new techno-economic and international conditions in telecommunications. To investigate the various strategic responses to persistent structural forces, we distinguish three independent variables at different levels of analysis:

1. *(X 1)* an extra-national variable: includes the aforementioned four structural forces that effectively challenge the established telecommunications regime in the countries under investigation in this study. (i) Technological revolution, (ii) globalisation and differentiation of markets, (iii) international deregulation, and (iv) European integration are treated as exogenous variables. These structural forces serve as an impetus for the restructuring of telecommunications and set the agenda for the debate in the three political arenas to be analysed;
2. *(X 2) the sectoral regime variable:* refers to the distinctive distribution of power between the incumbents and their political allies, and (potential) new entrants, seeking access to the market place and the policy process, as well as the prevailing governance regime of the telecommunications sector of one particular country;

3. *(X 3) the national context variable:* determines whether states exhibit a unique mix of socio-political, economic and historical elements, making up a distinctive framework of incentives and constraints for policy making. Three national institutional settings are distinguished: a liberal regime (UK), a negotiated or corporatist regime (Netherlands) and a statist regime (France). This national context variable will be elaborated in Chapter 2, where an extended framework is presented. On the basis of Gourevitch (1986), a further distinction will be made between the particular production profile, the role of the state in the economy, the system of interest intermediation, the dominant economic approach (or ideology), and the positioning of the country in the international political economy. Together, these national variables make up the extended national context variable (X 3).

The dependent variable (Y) in this research is the pace and timing of change in British, French and Dutch telecommunications policy (see Figure 1.2). The time frame of this study runs between the early 1980s, when state monopolies were still (largely) intact in France, the Netherlands, and the UK, and the late 1990s, when all three countries had restructured their telecommunications sectors. The yardstick for comparison will be the timing and degree of implementation of the new governance regime which succeeds the traditional public monopoly model. The negotiation process and policy development over time are also investigated: were there any radical breakthroughs or incremental adjustments of the existing policies
and how did these major and/or minor changes take place? Interviews with officials, consultation of experts, official policy documents, position papers of (private) stakeholders, annual reports, background studies, etc., provide the data and insights for this study. Pace and timing refer to the implementation of decisions concerning the liberalisation of the telecommunications market, the privatisation of the public operator, and regulatory reform to ensure public service provision and fair competition.

Following this introductory chapter, we provide an elaborate discussion of the various approaches in the field of comparative government–industry relations and economic policy making. Chapter 3 will give an overview of the techno-economic and international forces in the telecommunications industry changing it from a national public monopoly into one that fosters new entry and innovation, the privatisation of PTTs, regulatory reform, and the creation of international strategic alliances between telecommunications companies. Chapters 4, 5 and 6 contain case studies on the restructuring of the British, Dutch and French telecommunications industries and investigate the deliberations, actual developments and experiences with demonopolisation in these countries. The degree and timing of the implementation of liberalisation, privatisation and regulatory reform measures in the United Kingdom, the Netherlands and France is discussed in Chapter 7. After this comparative institutional analysis of the decisive actors, factors and institutional contingencies in the three national settings being investigated, some final concluding remarks are given in Chapter 8.
References


References


Berenschot Consultancy (1985), Status en Structuur van de PTT. Notitie ten behoeve van de Bijzondere Commissie PTT over Enkele Centrale Vragen naar Aanleiding van de Rapportage van de Commissie Steenbergen. The Hague: Bureau Berenschot.


BTG (Dutch Association of Large Telecommunications Users) (1993), Commentaar van de BTG op de Hoofdlijnennotitie Wijziging Wet op de Telecommunicatievoorzieningen. Bussum: BTG.


—— (1984), The Battle for British Telecom. The Story of the British Telecom Unions’ Fight against the Bill to Privatise BT. London: BTUC.


—— (1983b), How Selling Off British Telecom Will Harm Consumers, the Blind and Disabled, Poor and Low Income Groups, British Business and the Economy. London: BTUC.


—— (1993b), Telecommunicatiewetgeving in een Open Markt. The Hague: CAPT.

References


References


References


References


KPN Royal PTT Netherlands (1989–96), Annual Reports. Groningen: KPN.


References


PTT (Staatsbedrijf der Posten, Telegrafie en Telefoon) (1987), Inspanningsverklaring Werkgelegenheid bij de Hoofddirectie Telecommunicatie. The Hague: PTT.

—— (1985a), Standpunt van de Bedrijfsleiding van PTT met Betrekking tot het Rapport van de Commissie Steenbergen. The Hague: PTT.

—— (1985b), PTT in Beweging. The Hague: PTT.

—— (1980–8), Annual Reports. The Hague: PTT.

PTT Telecom (1993), Lines to the Future. The Hague: PTT.


References


—— (1990), Review of the Telecommunications Environment and Proposals Regarding Further Liberalisation of Regulations Governing the Carrying of Voice and Data Services. London: TUA.


VECAI (Association of Operators and Licensees of Cable Networks) (1990), Toekomstvisie. Dordrecht: VECAI.


References


—— (1980), Plaats en Toekomst van de Nederlandse Industrie. The Hague: WRR.


