

Governing Dutch telecommunications reform: state–business interactions in the transformation of national policy regimes to (European) embedded policy regimes

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ABSTRACT In the last decade the Dutch telecommunications regime has twice been radically transformed. The nature of these reforms and their implications for the autonomy of the nation state *vis-à-vis* the Commission as well as business are often the subject of dubious generalizations and high-level macro-analysis. By distinguishing between four micro-policy regimes (etatist, liberal, intergovernmental and supranational) and two cases of reform (terminal type-approval and interconnection), this article sheds light on the complexities of the process of liberalization and the Europeanization of public policy. While type-approval is a clear case of deregulation (fewer rules, freer markets), interconnection is an equally clear case of reregulation (more rules, freer markets). At the same time, while the case of type-approval reflects a diminution in the role of both the Dutch state and the European Commission, the case of interconnection reflects a situation in which both strengthen their capacities and therefore also their autonomy. The complexity of this picture does not mean that one should adopt a middle-of-the-road attitude to the issue of state power and autonomy. The future of the Dutch economy and of national competitiveness in the ‘information age’ still depends on the policies and capacities of the Dutch state.

KEY WORDS Interest intermediation; liberalization; the Netherlands; public policy; supranationalism; telecommunications.

The Europeanization of public policy challenges traditional approaches to the study of public policy-making. Policy communities and policy networks which in the past had ‘national’ boundaries are now acquiring European dimensions. The discipline of public policy, which traditionally has been one-level and intra-national oriented, has to adapt to a multi-level policy-making reality. This necessitates the development of new analytical tools for the study of multi-level interest intermediation which will facilitate the examination of interactions, players, and decision-making processes in policy arenas which are ‘beyond the nation state’. We have more arenas of policy-making, more players, and new rules for playing the policy game. The new policy-making process follows multiple legal procedures, different decision styles, and different decision rules.

This new reality of making policy is reflected in the vibrant policy arena in Brussels. The number of organizations seeking to influence European Union (EU) policy rose from 300 in the 1960s to 750 in 1990, and as high as 1,200 in 1996 (Butt-Philip and Porter 1997). More than 250 firms have Brussels offices centred on lobbying, negotiating, and exchanging information with EU institutions (Butt-Philip and Porter 1997). Foreign countries, regions, cities, trade associations, law firms, professional lobbyists, financial consultants, and a great variety of other interest groups from various countries are represented in Brussels, creating one of the most intensive and comprehensive arenas for interest intermediation world-wide in a unique extra-national setting (Greenwood *et al.* 1992; Cowles 1996; Grande 1996; Coen 1997; Kohler-Koch 1996).

One critical issue that arises from this new reality is the role and autonomy of the nation state *vis-à-vis* both the institutions of the EU and big business. To deal with this issue we currently have macro-theories which basically derive from the sphere of international relations (e.g. intergovernmentalism, neofunctionalism). These may be instrumental in dealing with the EU as an international institution but not for empirical and 'micro'-policy research (cf. Lenschow 1997). Not surprisingly, the study of European policy-making was recently described as dominated by 'sterile debates and dubious generalizations' (Schmidt 1997). This article aims to bridge the gap between 'macro' theories of the EU and 'micro' realities by distinguishing four types of micro regime: etatist, pluralist, intergovernmental, and supranational. These micro-policy regimes help to shed light on two critical issues: (a) the effects of the institutionalization of multi-level policy procedures on the autonomy, strength, and capacities of the Dutch government *vis-à-vis* the Commission; and (b) the effects of the Europeanization of telecommunications policy on the Dutch government position *vis-à-vis* business actors.

The liberalization of telecommunications is an interesting subject for the study of the transformation of public policy for five reasons. First, telecommunications serves as a 'paradigmatic' case for advocates of 'the retreat of the state' thesis.¹ From formerly state-administered services, telecommunications operators around the world are being transformed into global corporations with world-embracing interests (Noam 1992). True, state-business relations in the field of financial capital are more critical for the future of the European nation state than they are in telecommunications. Yet in telecommunications the *scope* and *intensity* of the transformation are the more remarkable. Second, the European Commission has played a leading role in the reforms (Schneider *et al.* 1994; Fuchs 1994; Schmidt 1997, 1998). This is the sector where the European nation state is most radically challenged.

Third, critical components of the reform involved the promotion of competition. Competition policy was rightly named the 'first supranational policy' of the EU (McGowan and Wilks 1995). It thus makes sense to examine its implications for the role of the state. Fourth, the European integration process in general is one area where large European businesses are known to play an important role. This active role is reflected in the creation of a 'single market' and in the promotion of telecommunications reform (Esser and Knoppe 1996). Finally, the

Netherlands is a small state which is notably open to world markets, and therefore sensitive and amenable to the effects of globalization. It also has a strong liberal orientation (compared with other Continental countries), and its political and business élites are sensitive to developments in the United States and Britain (which led the 'telecommunications revolution'). Furthermore, despite its high-level welfare provision services, the Dutch state has always managed to keep its distance from direct intervention. Even in the heyday of post-war nationalization, state ownership in the Dutch economy was remarkably low (Andeweg 1994). Taken together, these five reasons impart to the Dutch reform the characteristics of a critical test case. If arguments about the retreat of the nation state and loss of political control over business prove unfounded in telecommunications, they promise to raise difficulties in cases which do not lend themselves so easily to these suggestions.

Since 1987 the Dutch telecommunications regime has been radically transformed (see Figure 1).² In a relatively short time the Dutch telecom policy community was essentially restructured and the rules of the game were rewritten. Nationally based and nationally shaped rules of behaviour are now grounded in EU law (and to a lesser extent in agreements, sponsored by the World Trade Organization). Over a period of less than a decade the state-administered telecommunications services were first incorporated into a business-style organization (the KPN, serving as the holding company for PTT Telecom and PTT Post); it was then partly privatized (its shares being traded in Amsterdam, New York, London, and Frankfurt). In a relatively short period of time, the employees of the Dutch Ministry of Transport, Public Works and Water Management became the employees of a global actor, which entered a joint venture with both the Swiss and the Swedish Telecom companies (through Unisource) and with the giant AT&T (through Uniworld). The policy community now includes an additional mobile telephony provider (Libertel) and two new national telephony providers (Enertel and Telfort). The new actors are owned by cable operators, the state railway company, and foreign telecommunications operators such as British Telecom, Deutsche Telecom, Sprint, France Telecom, and some of the Baby Bells. New governing bodies which exercise critical power over the competitive environment of business now include the European Commission, an independent Telecommunications and Post Authority (OPTA), and the Dutch Cartel Authority.

A study of telecommunications reform may choose to focus on the organization of business, the supply of services, the control over infrastructure (cables, satellites, mobile) and the supply of equipment (fax, telephone sets, mobile telephony, switchboards). The platform of this article limits the investigation to a comparative analysis of two issues: the regulation of equipment (type-approval) and the struggle over control of the physical networks as reflected in the regulation of interconnection among different operators. In both cases, there is evident growth in the EU's authority in determining the rules of the game, yet they differ in two respects. In the type-approval case deregulation is the dominant trend and liberalization is thus characterized by fewer rules; in the interconnection case reregulation is the dominant trend and the liberalization of markets is characterized

Consensus building and committees

Dutch arena: Swarttouw Committee (1982); Steenbergen Committee (1985); Zegveld Committee (1986); McKinsey Report (1993).

EU arena: The Commissions Green Papers on telecommunications reform (1987, 1990, 1994, 1994–5, 1996).

Legislation

1904 Telegraph and Telephone Act

1989 Telecommunication Facilities Bill

1996 Interim Telecommunications Act

1998 in preparation: fully revised telecommunications infrastructure Act and a licensing Act

The organization of government

pre-1989 – Government serves as provider of services, regulator, and policy-maker.

1989 – HDTP – in Ministry of Transport, Public Works, and Water Management – takes on the role of both regulator and policy-maker.

1997 – OPTA – separate, quasi-independent regulator functions in arm's-length relation to the policy-maker.

Corporatization

KPN BV (1989) – holding company for PTT Telecom, Casema and PTT Post.

Privatization of KPN

1994 30 per cent sold.

1995 25 per cent sold.

1998 15 per cent to be sold.

Devolution

Cable Casema (separated from KPN).

PTT Telecom (will be separated from KPN and PTT Post in 1998).

The extension of ownership patterns in the fixed network

- Enertel I (1994–5) – following a duopoly policy by the government, a consortium owned by Dutch Railways (NS), eleven utilities companies, and Bell South was formed. Disbanded in 1995 owing to internal frictions.
- Enertel II (1996) – ten large electricity utilities and Casema – holds national infrastructure licence.
- Telefort (1996) – joint venture of BT and NS Railways – holds national infrastructure licence.
- 1,400 regional licences were granted to approximately 160 companies.

Creation of cellular telephony system

- PTT Mobile Telephony established in mid-1994.
- Libertel – second mobile telephony, 1995.
- Two more mobile telephony operators were licensed at the beginning of 1998.

Unisource

1992 – Unisource, an alliance of Telia of Sweden and PTT Telecom, was formed. Swiss Telecom joined in 1993. Telefonica of Spain joined in 1995 but left in 1996.

1994 – AT&T and Unisource set up Uniworld which provides pan-European telecom service.

Figure 1 Key events in the liberalization of Dutch telecommunications

by more rules (Dutch and European). A second variation concerns the relations between the Commission and the Dutch state. While in the case of type-approval the trend is towards limiting the power of both the Commission and the Dutch state, in the case of networks interconnection the trend is of growth in the authority of both sides.

I. FROM MACRO (POLITICAL) REGIMES TO MICRO (POLICY) REGIMES

The strength of multi-level policy analysis lies in attention to different levels of the 'policy game', in the creation of complex sets of dependencies between actors in the national and extra-national arenas, and in the existence of multi-level policy actors (e.g. Bulmer 1994; Grande 1996; Kohler-Koch 1996; Richardson 1996). Yet the multi-level approach is unsatisfactory in one important respect. Rather than bridging the gap between macro-theories of European integration (inter-governmentalism, neofunctionalism) and policy studies, it continues to eschew international relations theories. This further divides scholars of different professional approaches but with a common interest in the study of the interaction between different policy arenas in shaping policy outcomes. Below, I offer a framework of political and policy analysis which uses the notion of international regimes to conceptualize policy-making. The concept of regimes was originally developed for the study of international organizations and international co-operation. It was applied effectively by Keohane and Nye (1977) in an analysis of the international monetary and ocean regimes, and further elaborated in an edited volume by Krasner (1983). It was also applied in the study of national policy patterns (Vogel 1996) and policy sectors (Hoberg 1990). In this article it serves to translate the macro-notions of intergovernmental and supranational regimes into the micro-policy arenas of terminal type-approval and networks interconnection.

A policy regime for type-approval determines the conditions that allow the introduction of means of equipment to the market (see Table 1). It seeks to ensure public control over features such as the quality, service, safety, network protection, and inter-operability. Terminal equipment includes any end-line device (e.g. telephone sets, fax machines, answering machines, mobile telephony, and private exchanges). Approval procedures involve the setting of standards, technical examinations, and certification of equipment. As with many other regulations they are the target of complaints from manufacturers. For example, the giant manufacturer Ericsson argued that 'the life-cycle of a mobile phone is eighteen months or less, and yet it currently takes around three months to get the product approved'.³ It is in Ericsson's interests to minimize the requirements and time involved in type-approval procedures, and to extend the validity of certifications beyond the nation state and ensure mutual recommendation of certification at least among the members of the EU.

A policy regime for type-approval can be analytically distinguished by three stages: setting standards, technical testing, and certification of products. It is possible to distinguish between four regimes for type-approval: etatism, pluralism,

Table 1 Telecommunications regimes: ideal-type regimes for type-approval and network interconnections

	<i>Type-approval regime</i>	<i>Network interconnections regime</i>
Etatist regime	<ul style="list-style-type: none"> a) standards are set by the state b) technical tests are done by the state c) certification is done by the state 	<ul style="list-style-type: none"> a) networks are limited to state borders b) rate structure is uniform nation wide c) legal rules cover the territory of the nation state
Liberal regime	<ul style="list-style-type: none"> a) standards are set by mutual and voluntary agreements between businesses in nationally based forums b) technical tests are done by independent laboratories c) self-certification by business. Liability is grounded in national law 	<ul style="list-style-type: none"> a) intra-national competition between different networks (similar or dissimilar technologies) b) cost-based tariff structure c) legal enforcement of competitive behaviour between different national systems
Intergovernmental regime	<ul style="list-style-type: none"> a) standards are approved in intergovernmental forums. Representation in standard-setting bodies is on basis of national quotas b) technical tests carried out in one country are recognized in all other countries c) certification in one country is recognized in other countries 	<ul style="list-style-type: none"> a) limited and tightly controlled numbers of international interfaces b) nationally grounded rules and enforcement of competition laws c) telephony costs are matter of intergovernmental agreement in the case of international calls and of national authority discretion in the case of domestic tariffs
Supranational regime	<ul style="list-style-type: none"> a) standards are set in supranational bodies. Representation in these bodies is not nationally governed b) testing of equipment is done by firms or private laboratories c) self-certification by multinationals 	<ul style="list-style-type: none"> a) creation of integrated network which does not subscribe to any national border b) legal rules of competition set and enforced by supranational institutions c) rates and structure of calls are cost-oriented in a way which does not distinguish between national borders but is based on principles, such as distance and marginal costs of the calls

intergovernmentalism, and supranationalism. In an etatist regime of type-approval, the state sets the technical standards, carries out the technical examinations, and grants authorization for the use of equipment by certification. Under a pluralist regime of type-approval, standards are set by voluntary standards organizations (with minimal state intervention), technical tests are done in independent private laboratories, and certification is given by manufacturers. In an intergovernmental regime of type-approval standards, technical tests and certification are conducted under state supervision but with mutual recognition of certification, tests and standards between states. In a supranational regime of type-approval there is self-certification of the equipment by the manufacturers, regardless of their 'nationality'. Testing is by a transnational set of standards determined by supranational standards organizations.

A policy regime for network interconnection determines the conditions that allow the integration of different telecommunications networks into one meta-system. Interconnection allows one end-user applying varied telephone equipment to interconnect with another end-user, employing the network of a different organization. Interconnection between similar technological systems (e.g. two different telephone networks), or even between technology-dissimilar networks (e.g. telephone and Internet telephony or mobile and fixed telephony), promotes competition by extending the scope of consumer choice. To a critical extent, competition among different network operators depends on an interconnection regime. A major problem in such regimes would be the opening of networks of monopolies to new rivals. The enforcement of rules for interconnection requires governments to take a position that will promote the interests of new entrants over monopoly providers; to set rules for such regimes; and to act as arbiters in a potentially endless struggle among different network operators over the conditions and costs of access to each other's networks.

An etatist regime of interconnection is a regime in which (a) the network reaches the borders of the nation state and does not reach beyond; (b) the rate structure determines one tariff for nation-wide telephony: thus, the network is used as a tool of nation-building and as a way of decreasing local and regional divisions; and (c) the legal monopoly over the telephony system is defined by geographical lines of national sovereignty. A pluralist regime of interconnection would be based on (a) intra-national competition among different networks as well as competition among similar and dissimilar technologies of telephony; (b) a cost-oriented rate structure of telephone calls and system maintenance; and (c) the legal enforcement of competitive behaviour between different systems. An intergovernmental regime of interconnection is one in which (a) international network integration takes the form of intergovernmental accounting systems with well-governed and limited points of interconnection among different national systems; (b) the rules of competition and/or monopoly are nationally defined; and (c) devising the structure and rates of international and domestic calls is left to the state authority or national companies. Finally, a supranational regime of interconnection would be based on (a) creation, consolidation, and ownership of integrated networks transcending national borders; (b) the legal rules of competition being set and enforced by supranational

institutions; and (c) the rates structure being cost-oriented to ignore national borders but sensitive to factors such as distance and marginal costs.

II. THE DYNAMICS OF CHANGE IN THE DUTCH REGIME FOR TERMINAL TYPE-APPROVAL

For most of this century, the Dutch regime of terminal type-approval mirrored the etatist characteristics of the national telecommunications regime. Type-approval was a monopoly of the state at all three stages: standard-setting, testing, and certification. The PTT administration, operating under the Ministry of Transport, Public Works and Water Management, and in its function as a state-administrated service, was authorized to set standards, test equipment, and issue certifications. The legality of this type-approval regime arose from the Dutch Telegraph and Telephone Act of 1904 which authorized the PTT's director-general to regulate the telephone network. Article 3(6) of the Telephone Regulations introduced the following conditions for the use of the network: 'All wires and equipment remain the property of [the PTT], unless otherwise agreed in writing' (Hins and Hugenholtz 1988: 81). Article 8(2) prohibits the use of terminals without the consent or the co-operation of the PTT.⁴

The power to set standards, test, and certify did not leave much room for manoeuvre in the introduction of competition in terminal-type equipment.⁵ Dutch users, business and private, were constrained by the PTT administration in regard to the telephone service itself and the terminal equipment. The purchasing power of the PTT as well as its status as a state service gave it a position of dominance over the manufacturers of terminals. The relations between the PTT and these (private) manufacturers are best captured by the image of 'court supplier' and the notion of a closed policy network. While the PTT enjoyed a position of authority, the Dutch manufacturers enjoyed wide margins of profit. This pattern of relations went unchallenged for a long time, and so secured the stability of the closed policy network.

However, the etatist features of the regime were 'moderated' in two respects. First, the creation of the Dutch standards for telecommunications rested largely on the international standards of the Consultative Committee of the International Telecommunication Union. Second, the enforcement of the terminal inter-connections regulations was very lax. This factor was especially critical in the 1980s, when cheap terminal equipment from East Asia was increasingly imported, and effectively decreased the ability of the PTT to ensure that the public would use its terminal equipment. Despite these aspects the etatist regime was fairly stable.

The Dutch etatist regime was essentially similar to that in most of the other OECD countries (OECD 1992). The legitimacy of these etatist regimes was grounded in their claim to serve the public interest by means of protective regulation. Public safety, damage to the network, and the safety of employees were the most important features. In many countries, including the Netherlands, there was yet another, more implicit, reason for type-approval procedures. The type-approval process served to protect the national industry against import. This

protectionism was fairly successful, and in the early 1980s more than 70 per cent of the terminals procured by the PTT were manufactured in the Netherlands (Hins and Hugenholtz 1988: 85). Indeed, terminal equipment was essentially a nationally produced product all over Europe (Schneider 1992: 48).

In the mid-1980s this situation began to change as a result of national and international political pressure for privatization and deregulation whose rationale was the changing technological environment. Digitalization of telephony, as well as convergence between the telecom and computer industries, promoted the introduction of new products on the markets. Digital tone telephones, answering machines, modems, and faxes were all produced successfully outside the traditionally closed network of the telecommunications industry, thereby fostering the creation of a community of outsiders who demanded an appropriate voice in the process of type-approval. On the national level, reports by the Swarttouw Committee (1982) and the Steenberg Committee (1985) recommended liberalization of the terminal-equipment market, including the type-approval process. A liberal coalition, with a preference for deregulation of the Dutch economy, adopted, and hesitantly implemented, these recommendations. Beyond the national arena, the development of a common market in Europe and the elimination of tariff barriers to trade made the national procedures of type-approval an obstacle to the free movement of goods. Type-approval procedures were increasingly perceived as technical barriers to trade (Vogel 1995). Technological developments outside the closed-policy community of the PTT and its suppliers, a national policy of regulation, and extra-national pressures led to a policy shift in the type-approval regime.

Following two white papers by the Dutch government and a process of consultations, a new regime was born. Its legal provisions were laid down in the Telecommunications Facilities Bill first introduced by the government in 1987 and put into effect in 1989. The major effect of this was the corporatization of the PTT (under a holding company, KPN) and the creation of a new type-approval regime in which approval was not controlled by the PTT but by the state (see Table 2). Anyone interested in manufacturing or selling terminal equipment could now approach testing laboratories, obtain a test report, and then apply for a certificate from the Ministry's newly established Terminal Equipment Admission Office (Overdijk 1993). New independent testing agencies were established and accredited for testing new types of terminal equipment. This regime was considerably more liberal and more market-oriented than its predecessor. The types of terminal equipment to be used by the Dutch in private and business environments were from now on a matter of the market power of the manufacturers and marketing people rather than of the preferences of public officials.

Yet this new liberal regime was still essentially national. Despite the liberalization process, the market for terminal equipment remained segmented according to national boundaries – a fact which pointed to a national rather than a European or global division of labour. This was reflected in the fact that PTT Telecom continued to enjoy a privileged position in the Dutch market. Its equipment was approved automatically, whereas its competitors had to undergo the

Table 2 The development of the Dutch type-approval regime

	<i>The etatist regime (1907–89)</i>	<i>The pluralist regime (1989–93)</i>	<i>The inter-governmental regime (1993–)</i>	<i>The supranational regime (regime in the making?)</i>
Definition of standards	PTT	BTR (Terminal Equipment Approval Section) of HDTP and the National Standards Institute	BTR (Terminal Equipment Approval Section) of the HDTP in collaboration with Dutch Tele-communications Committee of the National Standards Institute ETSI	In the case of MRAs, American, Canadian and Japanese standards will be equivalent to European. Dutch standards will not be relevant. In the case of self-certification standards definition will be less important than market power
Carrying out of technical tests	PTT	KEMA, NKT, AKZO	NKT, Telefonica Any other accredited laboratory in one of the member states	In the case of MRAs, the accredited bodies of the states. In the case of self-certification, in-house labs of the manufacturers
Certification	PTT	HDTP	Since mid-1997 HDTP for mobile telephony, the testing houses for other equipment	Not clear

process of type-approval (Hulsink 1996: 250). Not surprisingly, PTT Telecom still held around 50 per cent of the important PABX market (Hulsink 1996: 250). Probably more important is the fact that the standards and the certification process of the new regime were essentially national. The new regime was affected only to a limited extent by international standardization and European policies.

Indeed, since the mid-1980s the EU has been an active and relatively influential actor in creating a European-wide telecommunications regime. This is one of the spheres in which the Commission proved to be a significant actor, able to balance opposition from member states. The terminal equipment segment was the first

sphere in which the Commission started the transformation of national telecommunications markets into a single European market. In 1986 the Commission introduced a directive which set the terms for the initial stage of mutual recognition of type-approval for telecommunications terminal equipment in conformity tests carried out by approved testing laboratories. European standards as expressed in Norms Européennes de Telecommunications (NET) and formulated by organizations such as the European Conference of Postal and Telecommunications Administrations (CEPT) and the European Telecommunications Standards Institute (ETSI) served as a recommended basis for standard-setting. The efforts of the Commission to create a single telecommunications market were restated by the influential Green Paper on the Development of the Common Market for Telecommunications Services and Equipment, making the liberalization of telecommunications equipment markets a primary goal.

Despite the pressures of the Commission the Dutch regime maintained its national characteristics until the end of 1992. The fact that the European standards were considered as only recommendations, that mutual recognition was limited to a small part of the terminals, and that discretion over the approval of the equipment remained in the hands of the Dutch authorities caused the latter to shape the regime according to the national archetype. A significant change in the process of type-approval, which led to a second change of regime, came with the adoption of a second directive on type-approval in 1991. The deadline for implementation, November 1992, may be considered as the turning point for the transformation of the Dutch type-approval regime from national-pluralist to intergovernmental. The intergovernmental regime opened the field to all European players but regulations were still restrictive, and the Commission fulfilled an important role. The second directive established a European-wide regime based on mutual recognition, conformity assessment, and harmonized standards.⁶ Contrary to the first directive, the second extended the principle of mutual recognition to the certification of products (i.e. in addition to testing). Manufacturers would have the option to apply for EU-type examination or provide their own in-house testing results.

The new procedures have contributed to some progress in the harmonization of the market for type-approval in the Netherlands and Europe, but they have still not eliminated national requirements for type-approval. To avoid a 'race to the bottom', the principle of mutual agreement is limited only to equipment meeting Common Technical Regulations (CTRs).⁷ Unfortunately, the creation of these standards is a slow process. The first CTRs were published in September 1993 but the total number published by April 1997 stands at only fourteen. CTRs are automatically recognized all over Europe, but where European standards are not available, and where the Dutch network still requires a national standard, Dutch certification is needed; therefore a 'dual' regime has emerged. Indeed, as in other cases advancing the creation of European standards, the harmonization of terminal equipment has also proved to be a complicated and slow task (Vogel 1995).

The rapid transformation of the Dutch type-approval regulatory regime in the last decade is not complete. The European Commission is now leading another regime change, which could radically alter the way telecommunication terminals

are marketed in the Netherlands. Two developments are important in undermining the current regime. The first is the introduction of Mutual Recognition Agreements (MRAs) with the United States, Canada, Australia, and New Zealand. A similar agreement is at present being negotiated with Japan. MRAs concluded with the United States and Canada are not signed as yet (they will come into effect two years after signature). The moment they become effective, the MRAs will break the European regime, constructed so laboriously on the basis of the CTRs. While mutual recognition opens the market on a larger scale, effective European control over safety and quality standards will become a more difficult goal.

Second, the Commission and the European telecommunications and professional electronic industry (ECTEL) promote an even more radical move towards undermining the current regime. A draft of a directive which aims at creating a self-certification regime, as well as a single 'one-stop' conformity assessment procedure, has already been prepared by the Commission and presented to the European Parliament and the Council. If approved, this new regime will transform the relations between the European manufacturers and the Community. Problems of safety, health, and interoperability of telecommunications equipment will have to rely on liability and consumer protection legislation rather than on state-set testing procedures. In terms of business-government relations, this new regime will maximize room for manoeuvre for business, extend the scope of free-market forces, and narrow the discretion of the Commission as well as the member states. Although it is not yet certain that this new regime will be approved by the Council and the European Parliament, experience of the last decade strongly suggests that it will be.

All in all, the Dutch type-approval regime has been transformed twice over the last decade, and another regime transformation is expected in the next few years. The trend towards contraction in the role of the Dutch state and towards greater room for manoeuvre for business is clearly observable. And while the role of the Commission in the intergovernmental regime is growing compared with that of the member states, the supranational regime presages a decline in the power of the Commission. There are no observable indications, however, that the Dutch public is being harmed by these developments. The Dutch consumer organization, Consumentenbond, began litigation to open the terminals market a decade ago (Hins and Hugenholtz 1988: 194–5ff.). The Hague District Court, which failed to act to open the market at that time, has seen to its opening now. The Dutch state went even further than other European governments in liberalizing type-approval and accrediting private testing agencies with type-approval certification for everything except radio equipment.⁸ The change from (often excessive and costly) regulation to deregulation and the decline in the role of the Dutch state as well as of 'Brussels bureaucracy' (in the case of supranationalism) seem to conform to the neo-conservative vision of state-society relations and predictions about the dynamics of political, economic, and technological change.

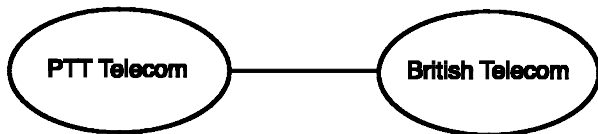
III. THE DYNAMICS OF CHANGE IN THE DUTCH REGIME FOR NETWORK INTERCONNECTION

The old Dutch regime for interconnection was essentially etatist. Some features of intergovernmentalism existed alongside the etatist system, but these chiefly served to reinforce the etatist system (see Figure 2). Begun in 1881, the first telecommunications networks in the Netherlands were built under private ownership. These telephone services were supplied under governmental concessions that covered regions and towns (Noam 1992: 170; Hulsink 1996: 222). Poor performance and excessive monopoly charges by these companies eventually led local authorities throughout the Netherlands to take over the operation of the networks. From 1907, the government led a process of network integration (and monopolization) which was completed only in 1940, under the Nazi occupation. The legal foundations of this system, which gradually integrated the Dutch telecommunications regime into the hierarchy of the state, were shaped by the PTT Designation Act of 1915. Because ownership was structured hierarchically, interconnection inside state borders was considered a technical rather than a political or economic issue.

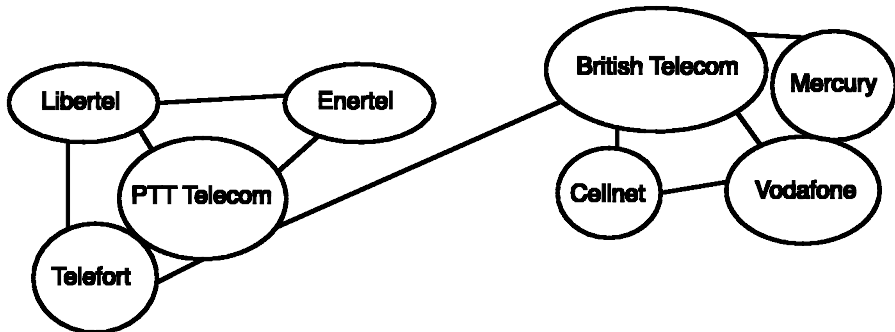
To resolve the issue of international calls, a supplementary intergovernmental regime was established. This was principally shaped by intergovernmental negotiations in the framework of the International Telecommunications Union (ITU), whose arrangements respected the sovereignty of the Dutch state over access conditions to its national network. A call originating from a foreign country had to be carried from the national border by the PTT. The setting of tariffs recognized the principle of economic sovereignty. Each country was free to charge whatever it wished. Accounting systems between the national monopolies were created, and these furnished the financial rules for monopoly interconnection. The gateways for interconnection were fixed and strictly controlled so that national PTTs could not route their calls to cheaper telephony providers (if any existed). In this way the intergovernmental regime effectively precluded price competition in international calls (Cowhey 1990).

Despite the early move of the Dutch towards corporatization and privatization and the opening of the terminal equipment market (compared with other Continental countries), a competitive interconnection regime was slow to emerge. The relatively slow movement of the EU determined the Dutch policy. Indeed, the Dutch state moved towards unilateral liberalization in 1995 and for a while created a duopoly regime for voice telephony. Yet this policy proved to be a short-lived fiasco and left the old regime intact (Davies and Hulsink 1997). The general approach of the Dutch government to the creation of nationally bounded competition was quite passive. Competition in mobile telephony was indeed successful, but it only affected marginal markets. Under these conditions the initiative was effectively shifted to the European Commission.

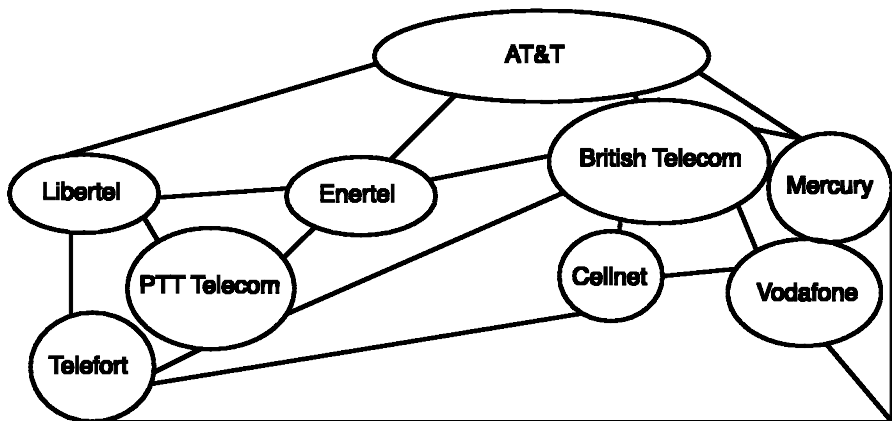
During the heyday of the etatist regime for interconnection there were many technological innovations. Yet they were all accommodated without undermining the etatist regime. This fact raises doubts about interpretations that emphasize the role of technology. The microwave radio technology of the 1950s, the mobile



The old (statist) interconnection regime



The liberal (national) regime



The supranational regime: a problem of interconnection

Figure 2 Policy regimes for network interconnection

telephony of the 1980s, the satellite network since the 1970s, the data-packet networks (for computer interconnection), and even the TV cables were dominated by the Dutch PTT without breaking the 'natural monopoly' system. Moreover, economics of scope and control over technology do not in themselves constrain the expansion potential of the PTT into the Internet and cable telephony. Technology is more neutral in this respect than is often suggested. At most, new technologies serve to create windows of opportunity for regulators and policy-makers as well as economic incentives for new market players. Yet technology alone was insufficient for the liberalization of markets; it had to be complemented by firm political leadership from either the Dutch state or the European Commission.

The importance of political leadership and regulatory regimes is most evident in the grant of non-discriminatory access to public networks. The design of an interconnection regime that can support competition is a key element in any policy of liberalization. The monopoly of the well-established telecommunications operators (TOs) is based on their control (technical, physical, and in property rights) of the gateways of the network. The economics of scale which typifies the creation of telecommunication networks therefore means that new entrants will have to make huge investments to be able to offer national coverage of network telephony. Without new entrants being allowed access to the property of the PTTs, effective competition is impossible. Therefore, where the regulatory regime is inadequate, the market power of the incumbents will effectively prevent competition. In the past, in the absence of a regulatory regime, such market manoeuvres were used: AT&T used them against its competitor MCI, and BT did so against Mercury. For example, to limit the entry of MCI to its turf, AT&T employed a range of anti-competitive measures such as unreasonable and stringent technical standards, limited access points to the network, excessive access charges, and dragging out negotiations (Weare 1996).

Perhaps the most problematic issue in creating a stable and open interconnection regime is interconnection tariffs. Because there is no market for either networks or calls, any decision on pricing involves some measure of arbitrariness. There is no clear answer about the optimal interconnection price (Armstrong *et al.* 1996; Laffont *et al.* 1997). Great practical difficulties also hinder the establishment of cost-sensitive principles for the evaluation of the market value of each component of the network. The problem is exacerbated by the rapid rate of technological innovation, which poses the dilemma of what is a reasonable rate that encourages network investment. Indeed, a recent study of the Netherlands Bureau for Economic Policy Analysis (CPB), which examined the issue of interconnection for the benefit of regulators, seems to favour a strong regulatory regime, namely strong state intervention, to deal with this problem (Bernardt and Canoy 1997). The sensitivity of the issue is enormous since the current imbalance between the PTT's market share and that of its new competitors makes the latter extremely vulnerable to overcharging. The future of competition in the Dutch telecommunications market largely depends on the interconnection tariffs.

The Dutch state is a follower rather than a leader in telecommunications reforms.

It is the Commission that shapes the character of the Dutch regime. From the experience of the United States, Britain, New Zealand, and others, the Commission is well aware that to make competitive telecommunications markets possible, a European-wide interconnection regime will be necessary. This is reflected in various policy statements favouring an effective interconnection framework based on commercial negotiations, a common regulatory framework on the European level, and effective mechanisms for the resolution of disputes. Following at least five years of negotiations, a directive on interconnection was published in June 1997. Article 7 of the Interconnection Directive determined principles on the sensitive issue of fixing charges and costs and establishing a uniform accounting system for cost calculations. The directive requires that the charges for interconnection follow principles of transparency and cost orientation. It put the burden of proof that charges are cost-based on the incumbent TOs. The publication of interconnection rates, broken down into components, is obligatory, and is intended to render the process transparent. A uniform cost-accounting system for interconnection will be set up to serve the National Regulatory Authorities (NRAs) as a basis for fixing interconnection rates.

The regime-in-the-making is most likely to have the features of a supranational interconnection regime. How fast and how vast the transformation will be remains to be seen. Still, the Interconnection Directive creates a new sphere of authority for the Commission and ensures its future active role as both a negotiator and an arbiter in critical issues concerning the future of European telecommunications. The wide margins for determination of what is a 'reasonable price' leave much room for discretion by the Commission. The issue will probably also be raised in the European Court of Justice. The growth in the Commission's power and the creation of a European interconnection regime do not seem to decrease the power of the Dutch state. The new European regime is accompanied by a new set of responsibilities. The discretion of the Dutch policy-makers and regulators is now wider, because of the reality of 'implementation' (which gives discretion to the implementers) and the principle of subsidiarity (which gives considerable discretion to the member states). First, the Dutch regulators are unlikely to narrow their discretionary options and act as the obedient servants of Brussels. Second, the principle of subsidiarity is reflected in the Interconnection Directive as it recognizes the need to give freedom to the NRAs to set the interconnection rates according to the specific conditions of their countries. All in all, even if one ignores the important positive-sum effects of the new regime for Brussels and The Hague, and chooses to define their relations in terms of a zero-sum game, the Dutch regulators and policy-makers have considerably more discretion than before.

The establishment of a new, independent regulatory authority for telecommunications and post (OPTA) is an important development that extends state capacities. The new agency seems to have sufficient power to allow it to promote a new supranational interconnection regime. The creation of an independent authority and the move towards a strong regulatory regime are indeed expressed in the policy guidelines recommended by the Ministry. These include the following principles: the PTT Telecom interconnection rates should be based on

costs, and these should be differentiated according to the types of services that the PTT supplies; the tariffs should be modular (to ensure transparency); PTT Telecom is obligated to provide access at all points of its network; finally, interconnection costs should form no more than 30–40 per cent of the total cost of new public telephony providers. Together, these measures promise to make the life of PTT Telecom much harder in the near future. Indeed, an interconnection dispute with Telefort, settled in June 1997, has already made the future trend clear: the rate charged by PTT Telecom was reduced by 10 per cent following a decision by the Minister.⁹

While the terminology of the Dutch telecommunications reform and interconnection regime continues to convey neo-conservative overtones,¹⁰ in reality, on both European and Dutch levels, the minimal *competition state*, represented by the Dutch Competition Authority and Directorate-General IV of the Commission, is still unable by itself to manage the specific sectoral problems of competition. A larger *regulatory state* is often necessary and, in some cases, such as the interconnection of telecommunications networks, it is practically unavoidable. If the Dutch state is to achieve a competitive telecommunications market, more rules will be required; thus, liberalization and regulation are not necessarily contradictory.

CONCLUSIONS

In order to place the role of the state in the larger context of the European policy regime, this article suggested four ideal types of policy regime: etatist, pluralist, intergovernmental, and supranational. These four were found to be helpful in conveying the dynamics of interest intermediation. Comparison of the dynamics of regime transformations reveals the complex nature of (a) the dynamics of regime change in telecommunications; (b) the distribution of power between the EU and the member states; and (c) the interaction between state and big business. Regime change followed different phases in two cases. Its dynamics in the type-approval case was from an etatist regime to a pluralist (yet national) regime, and then to an intergovernmental one. At present another regime change, towards a supranational regime, is observable. The dynamics of interconnection reveals movement from an etatist regime to a supranational one. The option, pursued by Britain since the 1980s, of building a national-liberal regime was not seriously considered by the Dutch. The different phases of regime change give a first indication of the complexity of the reforms in telecommunications and the multi-dimensional expressions of liberalization.

Regarding the distribution of political power between the Brussels bureaucracy and the member states, under supranational regimes the power of the Commission and the Dutch state was reduced in the type-approval case, but strengthened in the interconnection case. From a theoretical point of view, the interconnection case, that of the supranational regime for network interconnection, is of great interest. Both the Commission and the Dutch state are involved in a policy game in which they depend on each other to achieve the goal of network integration. Somewhat declining in its power and its regulatory capacities, the Dutch state is now

embedded in a complex system of policy-making which allows it to enforce fierce competition in telecommunications.

Political control over business evinces contradictory dynamics as well. While in the case of type-approval the trend is clearly towards a reduction in the regulatory powers of the state and the EU, the case of network interconnection reveals a dynamics of reregulation and growth in government regulatory powers over business. This complex reality is often overlooked from the extreme positions of the 'state debate'. The problem of the governability of these interdependencies and public control of business actors remains as open in the supranational regime as it is in the etatist, pluralist, and intergovernmental regimes. Regulatory failures may occur in any and all of them, and they are not specifically characteristic of the supranational alone.

The complexity and multi-dimensional nature of regime change in the two cases should not be taken as indicating the equal benefits that each offers for understanding the role of the state in the European policy process. There are good reasons why the interconnection case proves more fruitful in this respect than the case of type-approval. In both cases the object is to enhance competition, but in the case of type-approval the state reduces barriers to trade while in the interconnection case it has to confront the goal of enforcing competition directly. Because the enforcement of competition is a much more complex process than reduction of barriers, and because the two types of policy represent general trends in trade and competition policy, it seems reasonable to expect growth rather than decline in the state's capacities. Monopoly, merger, and cartel laws are not new phenomena. Despite the fact that they have become increasingly stringent, and that the agencies which apply them have grown larger and more powerful, they are not enough to enforce competition. The task of competition enforcement in the context of social and political constraints needs more than competition enforcement powers: it needs the creation of regulatory agencies on both the European and Dutch levels. The rise of the European regulatory state (Majone 1994) seems, at least in telecommunications, to be dependent on a rise in the regulatory powers of the nation state.

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NOTES

- 1 See Ohmae (1995) for a general discussion; Strange for telecommunications specifically (Strange 1996: 100), and Hulsink for the Dutch case (Hulsink 1996: 340).
- 2 Only a short introduction to the Dutch telecommunications reforms can be given here. For a comparative study of Dutch Telecom reform, see Hulsink (1996) and Davies and Hulsink (1997). A general study of the Dutch case is presented by Mansell *et al.* (1996). For legal aspects, see Hins and Hugenholtz (1988) and Eijsvooegel (1997). For a study of the Dutch unions and the privatization of telecommunications, see Den Besselaar and Visser (1993).
- 3 An Ericsson press release is cited in the EU press release on MRAs. IP/97/514REV, Brussels, 13 June 1997.
- 4 The old regulatory regime went as far as to add that only PTT employees could plug telephone sets into network sockets!
- 5 This does not imply that these regulations were the major barriers to free trade and a liberal regime. The freedom of the Dutch government to direct the procurement of equipment by nationally established corporations was much more important.
- 6 Conformity assessment is the systematic examination of the extent to which a product, process, or service satisfies specified requirements.
- 7 On the possibility of a 'race to the bottom' or the 'Delaware effect' and their implications, see Vogel (1995).
- 8 This process of privatization is optional in the EU directive on type-approval. It came into power after lobbying of the Dutch testing house in July 1997.
- 9 The *Financial Times* on-line telecommunications news service (IRU, 21 July 1997, Vol. 3, Issue 7) reported a reduction of 28 per cent. Yet in an interview with OPTA officials the effective reduction rate was put at the more modest figure of 10 per cent.
- 10 For example, according to the Ministry, 'OPTA should withdraw when liberalization and competition are completed.'

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