# Dutch negotiated regulation: The example of regulating public electric utilities

Maarten J. Arentsen, Rolf W. Künneke

Preliminary version for discussion only. Please do not quote without permission of the authors.

Reference: RKH11502 Date: 15-dec-95

#### 1. Introduction

'(...)where administrative agencies and private associations play up to each other and consult permanently, and where it is impossible to trace where decisions are prepared Where state authority is shared with private and where they are taken. organizations...twilight zones emerge. And concepts of consultation-democracy, coalition model or cartel-democracy are ever so many expressions of the factual limits to the power of the state<sup>2</sup>. This quote of the former Dutch Prime Minister Joop den Uyl, contrasts with the French King Louis XIV saying: 'L'etat c'est moi'. Both opinions manifest the range of 'statism' in countries. Now we are acquainted to differences in national regulation styles and the effects on state-society relationships. The French took up a more centralized tradition, nowadays known as etatism (Smith, 1978), the United States of America took up a more pluralistic perspective in a tradition of liberalism, whereas The Netherlands took up a corporatist tradition. Political science developed many concepts to characterize state-society relationships to explain (different) patterns of policy formation and interest mediation (Schubert & Jordan, 1992). To mention but a few examples of the concepts in use: clientelism, pluralism, corporatism, parental relations, iron triangle and issue networks (Van Waarden 1992a).

The Dutch negotiated and consociationalist democracy has a long and standing tradition, although its structure and manifestations changed over time (Lijphart, 1976, Williamson, 1985 and Scholten, 1987). In this tradition, the Dutch combined a strong state with strong societal interests (Van Waarden 1992a). Recently, due to general economic and societal developments, the limits of statism have initiated new trends in the Dutch tradition of corporatist regulation style. A decreasing political legitimacy was the actual manifestation of the need for new regulation styles. The Dutch society, as other modern societies, became more complex, resulting in societal and political fragmentation and differentiation

Our thanks to dr. Piet de Vries (University of Twente) for his most helpful comments of earlier versions of this paper.

Den Uyl, J. 'De tijd komt nooit meer terug' in: Wirardi Beckman Stichting (ed), En toch beweegt het, Kluwer, Deventer 1977. See also: Van Waarden, F. 'The historical institutionalization of typical national paterns in policy networks between state and industry. A comparison of the USA and The Netherlands'in: European Journal of Political Research, Vol. 21, no.1-2, 1992, pp. 131-162.

(Marin and Mayntz, 1991). Policy processes became inert, taking to much time without clear cut solutions for societal problems, asking for solutions.<sup>3</sup> The limits of the state became visible, introducing the need for a change in Dutch regulation style. Concepts such as deregulation, self regulation and general agreements, became the manifestation of a new area in the Dutch tradition of corporatist regulation.

In this paper the Dutch model of negotiated regulation will be conceptualized and illustrated. The central question to be answered is how within Dutch tradition of corporatism, the concept of negotiated regulation can be understood conceptually. Our argument is illustrated by the Dutch electricity sector. A sector with a long and standing, but decreasing, tradition in public dominance. Due to national and international changing patters of electricity production and distribution, the position of the public authority within the Dutch electricity sector became in upheaval. These developments illustrate the changing patterns in Dutch regulation style well.

The paper is structured as follows. The second section of the paper briefly describes some features of the Dutch tradition of negotiated regulation. This section combines a brief overview of the history of Dutch corporatism with some recent trends in negotiated regulation by the general agreement. Section three deals with the concept of regulation in economic and political theory. Regulation is conceptualized in accordance with the structure of economic sectors. Section four takes the developments in the Dutch electricity sector as illustration of our conceptualization of negotiated regulation. In section five the Dutch model of negotiated regulation is evaluated. The paper ends with some concluding remarks.

# 2. Dutch negotiated regulation

Consensus building underlying the Dutch tradition of corporatism, is institutionalized in our language. 'The Dutch word for policy, "beleid", means not only "course of action" but also prudence, discretion, tact, and is related to the word "overleg" which means both deliberation, judgment, forethought and consultation, concertation, to take council together. In contrast, the Anglo-Saxon word "policy" is related to policing, control, words that refer much more to a conflictual - and hierarchical - relationship' (Van Waarden, 1992a, p. 155). The Dutch seem to be consensus like, almost by habit. Corporatism is but one of the manifestations. In this paragraph first the background and tradition of Dutch corporatism will be illuminated and second some recent trends will be illustrated.

WRR rapport

The former Dutch prime minister Ruud Lubbers, recently nominated for chairman of NATO, is domestically known as the 'consensus machine'. As a prime minister he was able to bridge almost every political dispute, increasing the lifetime of the coalitions he chaired as a prime minister.

#### 2.1 Dutch corporatism

Dutch corporatism is rooted in Dutch history and culture, but it actually came into being after World War II. In the second half of the 19th century confessional and social groups started to emancipate, asking for societal, economic and political rights (Van Goor, 1985). Four so called pillars (in Dutch zuilen) developed out of these movements: the Roman Catholic pillar, the Orthodox Protestants, the social democrats and the liberals (Scholten, 1987, p. 122). These pillars segmented the Dutch society vertically. This vertical segmentation was perceived of as a treat for political stability. To attain political stability, the pillars integrated at the top, to overcome and to handle the segregation in the Dutch society. This is in a nutshell the basic structure of the Dutch corporatist model as it is called the pacification model. By controlled integration at the top (elite), political instability could be avoided in spite of the strong vertical segmentation of society.

After WO II the Dutch society became fully structured according to the pillar model, with elite-coordination as safeguard for political stability. During the war, representatives of the Dutch elite agreed upon a well structured and stable organized society in order to cope with the socio-economic rebuilding of the country. These agreements resulted in the well known corporatist structuring of the Dutch society. Scholtens distinguishes four aspects of neocorporatism in the Dutch postwar period:

- 1 Statutory corporations to regulate the activities within and between economic sectors.
- 2 Corporatist patterns of representation in parliament.
- 3 Extensive committee structures with institutionalized functional representation. Their tasks include advice, administration, policy evaluation, and appeal handling, and are performed in cooperation with (but often virtually independent from) governmental agencies.
- 4 Authoritative social-economic policy processes taking place via highly institutionalized interactions and structures of centralized employers' and workers' organizations.<sup>6</sup>

The statutory corporations were legally founded in 1950 by the Statutory Economic Organization Act. This act provided the legal framework for the restructuring of the Dutch economy in the postwar period along corporatist lines. Employers and employees where supposed to take joint responsibility for the economic development of economic sectors. The national economic aim was to rebuild the country and to attain national economic welfare for everybody as soon as possible. To attain this goal, the social economic elite of the country agreed upon a controlled wage policy for many years, public support of economic development, rationalization of the economy and industrializing the country. The organizational framework was dominated by the national Social and Economic Council, a national platform consisting of the elites of employers and employees

These points are taken almost literally from Scholtens, 1987, p. 124.

According to Van Waarden (1992a) Dutch corporatism is rooted far before the second half of the 19th, century. In explaining Dutch corporatism one has to point to the combination of a strong state with strong societal interests in his view: 'Corporatism(...)is often the outcome of a combination of a strong state and a strong civil society (p. 141).

and some independent scientists. The implementation of the agreements was delegated to economic sectors separately.

The organizational blueprint provided by the act of 1950, was never fully materialized. The materialization of the act was for the greater part based on the 'voluntarism principle' (Scholten, 1987, p. 125). It was left to the societal groups themselves whether to take the 1950 act as a leading principle. The basic result of the act was the establishment of the Social and Economic Council, as the national platform for social economic policies. The council is still in existence, although its impact and influence have eroded over time. The socio-economic structures initiated by the 1950 act have become the core of the Dutch corporatist system. In former days these structures were used to rebuild the country in a controlled way. Nowadays, the socio-economic structure is used for formation and implementation of socio-economic policies. The core-actors of these policies still are the elites of employers, employees and political parties.

The second aspect of corporatism, corporatist political representation, `(...)was particularly developed in the confessional parties' (ibid, p. 126). Also the non-confessionalist pillars had patronage patterns of representation. The social democrats had strong ties with the employees organizations and the liberals with organizations of employers. So every pillar had its own political representatives in parliament and each interest group had its own spokesman inside the political parties. In the political system, the actual decision making was up to the clites of the pillars, deciding about who is going to govern with whom and about the policies to develop. That is why in the Netherlands the establishment of a new coalition government might take a very long time (as long as six month). During these periods of negotiations between potential coalition partners it is `prime time' for interest groups to influence the political negotiators (ibid, p. 127).

A third aspect of Dutch corporatism is the extended structure of advisory boards. This is an other manifestation of the strong ties between the state and society. In the Netherlands there are some 400 advisory boards supporting the political system in policy formation. There are some main boards, such as the Social Economic Council, and the Health Council, dealing with problems of national interest. On the whole, the system of advisory boards consists of groups united around every detailed subject of public policy. As a heritage of the Dutch pillar system, it is common practice to have more than one advisory board for a single theme.

The climax of Dutch corporatism was in the fifties and early sixties. The functioning of the system was attacked in the late sixties, as part of the general social upheaval in many West European countries. During that time, the postwar generation attacked the societal establishment, injuring the Dutch corporatist structures at the same time. According to the political scientist Lijphart, the Dutch pacification model became into decline by processes of secularization and by the rejection of the rules of the political pacification game by many political leaders (especially left wing). Nowadays the Dutch corporatist tradition has entered a new area, in which the some basic features of corporatism are still visible. For our purposes, especially the Dutch practice of negotiation and agreement is of interest. In

some areas of public policy, such as the environment, negotiation has become a main tool of public regulation. The next subsection illustrates these developments in the Dutch tradition of corporatism.

#### 2.2 Regulation by negotiation

At the end of the eighties when the limits of regular public regulation became manifest, new forms of regulation came into being, in which regulation itself became subject of regulation. The general agreement, or the policy agreement, between government and societal sectors or groups, is the recent manifestation of this regulation style. In almost every sector of the Dutch society these agreements have come into being, although this trend is more extended in some sectors such as education, culture and welfare, housing and the environment and economic affairs. These agreements or convenats have some basic features. First, an agreement takes at least two parties, willing and able to agree upon a convenant. Second, a public authority cannot enforce a convenant directly, although it can do it indirectly by the authority cannot enforce a convenant directly, although it can do it indirectly by the authority cannot enforce a convenant directly, although it can do it indirectly by the authority cannot enforce a convenant directly, although it can do it indirectly by the attention with more restricted regulation. Third, there are no formal rules guiding the process of agreement, between the public authority and private organizations. For that reason, the legal status of a convenant is unclear, because in most cases the convenant cannot be understood as a legally based agreement between public and private groups.

The Dutch convenants can be devided in two main types: agreements about the attainment of common policy goals (policy convenants) and agreements about procedures to discuss policy problems and policy solutions (procedural convenants). In the Netherlands some 154 convenats are in operation nowadays, of which some 64 have been characterized as policy convenants and the rest as procedural convenants.

Many of the Dutch policy convenants, aiming at specific policy goals, have been evaluated negative by the General Account Council. In its conclusion the Council states: 'Most often, the convenants evaluated by the Council, do not guarantee compliance with the agreements and the attainments of agreed goals. Half of the policy convenants lacked guarantees for goal attainments. The same holds for the procedural convenants' (p. 19). Although convenants have become popular as tool of regulation, their effectiveness can be doubted, according to the General Account Council. A conclusion in congruence with other research (see Klok, op. cit.).

As stated above, in almost every policy sector convenants have become reality. To mention just a few examples. The Dutch government and the Dutch producers of electricity, united in the SEP, agreed upon reducing the emission of SO2 and NOx. From a regulatory perspective this convenant is rather unique, because it actually treads the whole Dutch geographic area as one girot bubble. The convenant only contains emission reduction goals. The attainment of these goals is the full responsibility of the sector itself. The goals have been formulated at the national level, providing the sector full flexibility to invest in the most cost-effective way.

The same ministry for the environment signed a convenant about the procedures to realize the mainport function of the national airport Schiphol, at the same time guaranteeing the necessary environmental conditions in the neighborhood of the airport area. Especially in the field of education, a field still dominated by corporatist structures, many convenants have been agreed upon. E.g., the convenant between the ministry of education and some Dutch technical universities to increase the popularity of technical scientific programs. All Dutch universities signed a convenant in which they agreed upon the outline of the governmental educational policy. The ministry for economic affairs signed a convenant aiming at the increase of sun heated boilers used by private households. The same ministry also signed a convenant to reduce the application of tropical wood as basic material for housebuilding. The ministry for social affairs signed a convenant to improve working conditions in the agricultural sector.

These are but some examples of the 154 convenants that have been initiated in The Netherlands. Looking at the ratio of convenants as stated by the Dutch government, the relationship between this kind of regulation and the Dutch corporatist tradition becomes visible. According to the Dutch government convenants seem to be suitable in new fields and subjects of public policy to prepare for the necessary conditions of policy formation and policy implementation. Convenants are also suitable as a condition to prepare for a joint responsibility for policy goals by public authorities and private groups. The government formulates its aspirations in a general document that afterwards should be operationalized en effectuated by e.g. convenants. In congruence with this perception, convenants are suggested a) when formal rules are expected and convenants can prepare for it, b) when formal rules become redundant, c) when there is still a lot uncertainty about the details of formal rules and d) when the effectiveness of a convenant is to be expected higher that that of formal rules (General Account Council, 1995, p. 20).

After World War II Dutch corporatist structures were established, finding their climax in the fifties and early sixties. As a result of the societal upheaval at the end of the sixties, new styles of regulation came into being, actually innovating the traditional Dutch corporatist structures that dominated political life in the Netherlands for some decades. In the next section the basic features of what is called negotiated regulation, will be conceptualized.

# 3. Conceptualizing different approaches of regulation

In conceptualizing different approaches of regulation, in general two different starting points can be chosen. First, what might be entitled as the 'market failure approach', i.e. governmental intervention is necessary to correct the market mechanism in order to induce a social performance which is as close as possible to the neoclassical model of complete competition. Economic literature on regulation often refers to this context<sup>7</sup>. Regulatory

Sugden (1993), p.xi

instruments are basically needed to correct the market mechanism in some way<sup>8</sup>. Regulation aims in this case to stimulate the economic performance of the system, for example in terms of cost efficiency, allocative efficiency, innovativeness and economic growth. A second approach goes back to the ideas of social and political engineering of society. Regulation is in this case used to guarantee some public tasks, which are defined by the political system as being of 'general interest'. Examples in the case of the electricity industry are a guarantee of low tariffs for low-income-consumers, the use of specific technologies for electricity production (like nuclear energy in the case of France, sustainable energy sources, or nationally produces charcoal like in Germany). Political science literature is often concerned with these specific aspects of regulation<sup>9</sup>. Both approaches are not exclusive by definition. In many situations, markets might perform 'tasks of general interest' or 'public tasks' without any interference of politicians. However, it might occur that certain socially desirable goals are not realized by autonomous behavior of economic actors. The use of sustainable energy sources for example is generally at the present time too expensive to be used on big scale by selfgoverned market action. In this context a normative choice has to be made whether to apply certain forms of regulation. The next paragraph will stress this normative element of regulation. In paragraph 3.2 it will be argued that there are different institutional arrangements of regulation, with regulation by negotiation as on of them. In paragraph 3.3 regulation by negotiation will be delineated from other forms of regulation. As a main conclusion of this section it appears that the institutional form of regulation can be related to different approaches of regulation, i.e. enhancement of the economic performance of the system versus the realization of certain public tasks. Regulation by negotiation as a specific position in between these two approaches.

### 3.1 Regulation as a normative concept

From an economist point of view, regulation is a concept, which is based on a conflict between market outcomes and allocations that would socially be desirable or acceptable. Traditional 'textbook' neoclassical economics explains the need for governmental intervention by the existence of market failures, like natural monopoly, external effects and collective goods. However, since in reality nearly no market is perfect in the neoclassical sense, government intervention is restricted to 'severe' cases of market distortion. The choice of a regulatory body whether to intervene into autonomous allocation processes is based on certain normative considerations. This point is stressed by Armstrong, Cowan & Vickers whom make a distinction between the normative desirability and the empirical scheme<sup>10</sup>: possibility of competition, which results in the following

Other authors are less decisive with respect to the role of government in the regulatory process. See for example Train 1994. However the definition given by Sugden is usefull as a reference in order to emphasise the specific aspects of regulation by negotiation.

T.R. Dye, Understanding Public Policy, Englewood Cliffs, 1975. A. Hoogerwerf, (red.), Overheidsbeleid, Alphen aan den Rijn, 1993 (1978).

Armstrong, Cowan & Vickers, 1994. These authors do not take into account all possible market failures. The example of natural monopoly in the south-eastern corner of the matrix might serve

Table 1: The desirability and feasibility of competition<sup>11</sup>
| competition desirable?

		Yes	No
Is competition	Yes	Vsual case	'Cream skimming' etc
feasible?		ļ	
	No	Latry deterrence	Severe natural
			monopoly

Regulation of economic activities appears to be necessary for the cases of cream-skimming, entry deterrence and severe natural monopoly. Electricity and gas industry is often considered as being severe natural monopolies, which require quite complex regulatory measures. However, this simple figure of Armstrong c.s. raises a question we will discuss in this paragraph, i.e. if competition on normative reasons is *not* desirable, regulation in order to get competition can not be a solution per definition. Regulation should be perceived of in relation to different institutional arrangements, with market coordinated allocations as only one of the alternatives. Allocating goods and services by means of prices in a free market, is but one of the institutional arrangements to allocate goods and services. At a basic analytical level, based on the allocating mechanism, other institutional arrangements can be discerned. Political science regulation literature is less stringent on the choice of the institutional arrangements. In general much broader institutional arrangements are considered, with market-oriented solutions as only one of the possibilities. This aspect is addressed in the next paragraph.

#### 3.2 Different co-ordination mechanisms

As we have argued elsewhere, <sup>12</sup> there are three basic mechanisms to coordinate economic activities, i.e. markets, networks and hierarchies. Among others, a distinguishing criterion is the allocation mechanism, which is in the case of market coordination the price mechanism, in the case of the network the mutual agreement, and in the case of the hierarchy the public rule. Each of these three systems can theoretically be used to coordinate all economic activities with an economic entity, like an industrial sector or a national economy. However, in reality these pure coordination systems do have only very limited significance, since mixed coordination systems are clearly prevailing. In order to be able to identify different mixed systems of coordinating economic activities, Arentsen & Künneke made a distinction between 'dominant coordination mechanisms' and 'added coordination mechanisms'. In both cases markets, networks and hierarchies can be dominant and/ or added coordination mechanisms, which results in to six mixed coordination systems and three pure systems, as it is illustrated in table 2.

as an example of all cases of market failures (external effects, collective goods, natural monopoly).

Source: Armstrong, Cowan & Victors, 1994, p.100

Arentsen, M.J., Künneke, R.W. Economic organization and liberalization of the electricity sector: In search of conceptualization, forthcoming 1996.

Table 2: Pure and mixed systems for coordinating economic activities<sup>13</sup>

Added coordination mechanism	Dominant coordination system			
	Price	Agreement	Hierarchy	
Price	Full free market	Liberalized coordination	Liberalized hierarchy	
Agreement	Coordinated free market	Full coordination	Coordinated hierarchy	
Hierarchy	Controlled free market	Controlled coordination	Full hierarchy	

This scheme indicates the interrelatedness between institutional arrangement and regulation and can be used to characterize the specifics of various types of regulation. Basically, the potential of regulation in the various institutional arrangements differs, because the position of the public authority varies per system. In the case of the price as a dominant co-ordination mechanism, government is basically subordinated by market actors. In the most ideal case of neoclassical full free market government only provides some general framework of property rights, in which economic action takes place. In this case it can be stated that the interdependence between the public authority and market actors to improve market failures or to attain public goals is maximal. In the other extreme case of the hierarchy, government is able to impose its goals on the economic actors. The public authority has thus a dominant position and its interdependence with market actors is at a minimum. In a system of full co-ordination the interdependence may vary on subjects. 14 In order to be effective in regulation, public authorities have to account for their position to other actors in various institutional arrangements. In market systems dominated by the price mechanism it is most feasible to regulate by incentives, whereas in hierarchical systems directives seem to be most suitable. Actually, in full hierarchical systems, the dominant co-ordination mechanism coincides with public dominance and regulation by directives. Negotiated regulation seem to be most suitable in coordinated systems. Thus in accordance with our scheme elaborated in table 2, three main categories of regulatory instruments can be distinguished:<sup>15</sup>

- Regulation by incentives, based on the price mechanism as basic coordination mechanism of government to influence economic behavior;
- Negotiated regulation, based on mutual agreements between governmental institutions and firms;
- Regulation by directives, based on public rules which enforce certain forms of economic behavior.

Source: Arentsen & Künneke, forthcoming

Arentsen & Künneke elaborated the interrelatedness between system oganisation and regulation in a former publication which is only available in Dutch language. See Kunneke, Manders and Arentsen, 1994.

For the discussion of various types of distinctions between regulatory instruments see foe example Mitnick.

It can be stated that each of the main types of regulation suits well the normative base of regulation as stated in the introduction of section 3. Incentives, negotiation and directives are suitable to attain normative public goals and to neutralize market failures. But in order to achieve effective in regulation, it is necessary to take the position of the public authority in its relationship with other economic actors into account. From a viewpoint of effectiveness of public regulation, the relationship between sector organization and public regulation can be hypothesized as a probability relationship. In the next section we will elaborate this position only for one type of regulation, i.e. negotiated regulation. We concentrate on this type, because as stated in section two of this paper, this type of regulation is typical for The Netherlands. We will illustrate that in the Dutch tradition, negotiated regulation is most effective to regulate the process of institutional change in the electricity sector that is still ongoing in this country.

#### 3.3 Delineating regulation by negotiation

In this section different aspects of negotiated regulation will be analyzed. The electricity sector will serve as illustration. We will elaborate our argument with respect to differences in the regulatory body and what we call the 'object' of regulation. As a conclusion we will relate different objectives of sectoral change to different regulatory instruments.

#### 3.3.1 Regulatory body

In reality regulation often relies heavily on governmental institutions as regulatory bodies. Regulation by negotiation does not per se require government as a regulator. In section two we have illustrated this argument by the Dutch tradition of corporatism and some recent trends in selfregulation. However, negotiated regulation presupposes entities to safeguard procedures and the realization of the desired outcomes. There are different possibilities depending on the compulsives of the agreements and the role of public authority.

- There is no regulatory body at all. In this case realization of the expected outcomes completely relies on the voluntary actions of the regulatees.
- Private sector umbrella-organizations serve as regulatory bodies. This emphases the voluntary character of the regulatory agreements. The umbrella organization can serve as a monitor in order to avoid free rider behavior or the lack of collective action.
- There are specific contractual devices to enforce the agreed outcomes. See section two of this paper for examples.
- A governmental institution serves as legal entity for safeguarding and enforcing agreed outcomes.

With 'hypothesized' we mean that our statement about effective regulation and sector organization is pure theoretical up till now. We where not yet in a position to test this hypotheses empirically.

These four devices may serve as regulatory entities that suits well the negotiated model of regulation.

## 3.3.2 Negotiated regulation and the object of regulation

Regulating economic sectors, such as the electricity sector, basically provides for three different kinds of regulatory objects:<sup>17</sup>

- the institutional structure of economic sectors;
- the conduct of actors in economic sectors; and
- the performance of economic sectors, or of the actors within the sector.

In this paper we cannot elaborate in great detail on the object of regulation <sup>18</sup>. We restrict ourselves in only listing some examples of regulatory aspects of regulating structure, conduct and performance of economic activities. Taking structure as the object of regulation, among others, the basic co-ordination mechanisms (dominant and/or added) is the principal object of regulation. Regulating conduct in the electricity sector means regulating producing, distributing, trading and consuming activities in relation to electricity. Regulating performance, basically means defining political and/or economic goals for the electricity sector as a whole of for specific actors within the sector (e.g. defining emission standards for producers of electricity).

Sectoral change can be regulated by taking either structure, conduct or performance as the object. These three objects might be regulated at one or different points in time, or they might become the regulatory object to initiate sectoral change. The regulation at one point in time, we refer to as *static regulation* and regulating sectoral change, we indicates as *dynamic regulation*. Accounting for the static or dynamic character of regulation, we can distinguish six main objects of regulation as is illustrated in table 3.

Table 3: Different objects of static and dynamic regulation

	OBJECTS OF REGULATION				
	STRUCTURE	CONDUCT	PERFORMANCE		
static regulation	legally safeguarding dominant co- ordinating mechanism	public conditioning of production, distribution, trade and consumption of electricity	political goals and/or economic goals		
Dynamic regulation	regulating a change in co-ordinating mechanism and/or structural features of markets	regulating a change in producing, distributing, trading and consuming electricity	Optimization of the (dynamic) equilibrium between political and economic goals		

These objects are derived from the neo-classical economic paradigm of structure, conduct, performance, meaning that market structure initiates economic behavior resulting in certain economic performances.

A good overview is provided by Mitnick (1980), part III of his book.

The main difference between static and dynamic regulation is the performance variable of the model. In case of static regulation, the probability of a well defined performance in terms of political and economic goals is much higher, than in case of dynamic regulation. For static regulation it is often possible to define politically legitimized, normative points of reference. Attaining these performance goals means, finding effective ways of regulating structure or conduct. For example in The Netherlands, the public authority has ordered to reduce the CO<sub>2</sub> emissions of power stations with some 25% in 2000. The Dutch producers of electricity have to account for this goal by adjusting their production habits and technology. Here the public goal of reducing emissions, defines the adjustments in the conduct of the Dutch producers. In case of static regulation, the politically defined goals initiate regulatory needs in the structure of and/or the conduct in sectors. This is mainly the political scientist argument for regulation, i.e. the social engineering focus of regulation.

#### 3.3.3 Sectoral change and regulatory instruments

When a sector is in change, it could be argued that there are market failures, in the sense that the system is searching for new equilibria under new but different conditions. Under this surcumstances it is plausible to assume that there are uncertainties about the preferable structure, conduct and performance of the new equilibrium state of the world. As an important difference with static regulation, there is in the case of dynamic regulation no explicit point of reference, because, due to the change, the sector as a whole is uncertain about the performance to attain.

Looking to the ongoing reforms on the European continent, it could be stated that countries are trying to find new equilibria which assure the realization of certain political and economic goals. Obviously there is considerable uncertainty about the possible institutional structure, the industry conduct or the social performance of the industry, which serves these goals. This uncertainty is due to the lack of a normative point of reference for regulation, as it is available in case of static regulation.

From an empirical point of view dynamic regulation can hardly account for specific objects of regulation. Because of the changing character of all three objects of regulation, specific outcomes of regulation become highly unpredictable. However, our theoretical framework offers possibilities to identify dominant normative preferences in *direction* (not the specified content) of change of the spector as a point of reference of regulation. Among all uncertainties of a sector in change, a general conception of the preferable direction of change, is probably the least uncertain. Thus the rather vague notion of *preference in direction of sectoral change*, might be taken as the point of reference in dynamic regulation. But what does this vague notion means other that preferable performance of a

However, various types of market failures do also fit into this category of static regulation. Think for example about internalisation of external effects, which focuses on the industry conduct in a given institutional structure, and given preferences on the social performance of the system.

Governments and other actors within an economic sector most often have notions about the future of a sector without actually browing how to attain these preferences by regulation.

sector as a whole, e.g., more political goals, or more economic goals, or both? The notion preference in direction of sectoral change, can be specified as 'dominant normative preference in direction of performance'. Based on this notion we hypothesize three relationships in dynamic regulation:

- 1. When the dominant normative preference in performance inclines towards more political goals, *directives* seem to be the most effective regulation type. Here the French regulation model of the electricity industry suits well.
- 2. When the dominant normative preference in performance inclines towards economic economic goals, *incentives* seem to be the most effective regulation type. Here the British regulation model suits well.
- 3. When the dominant normative preference in performance inclines towards *finding* a trade-off between political and economic goals, *negotiation* seem to be the most effective regulation type. Here the Dutch regulation model suits well.

In this paper we restrict our argumentation mainly to the third point of negotiated regulation.

It can be argued that for regulation by directives and incentives the preference in direction of performance is clearly delineated. In the first case it appears to be socially desirable to strive towards certain public tasks, in the second case towards an enhancement of the economic performance of the sector. The necessary information flows to realize these goals have to be structured by the institutional framework of the industry. In this context regulation can be perceived as an agency problem, in which the regulatory body (the principal) tries to induce the regulatee (the agent) to perform in a certain way. Agency problems can occur basically due to two factors:

- informational differences between principal and agent. (Often the agent has more detailed information than the principal.)
- divergence of goals between principal and agent. (The regulatory body might for example strive for social acceptable electricity tariffs, where as the firms within the sector prefer high economic profits.)

In the case of politically determined public tasks, public authority takes a dominant position in the principal-agent relationship, which leads towards a hierarchy oriented coodination system, as we argued in paragraph 3.2. The vital information for the functioning of this system (i.e. the definition of the public tasks) is generated by the public authority. In order to minimize goal divergence between regulatory body and regulatee, the later is made completely subordinated by the public authority. This system is expected to perform optimal with respect to politically defined public tasks.

If there are social preferences to emphasis the economic performance of the system, the vital information for system performance is with the regulatees. As it is known from neoclassical theory, individual action leads under certain conditions to allocative efficient allocations. In a market oriented system individual actors generate all relevant information to operate efficiently, according to their economic goals. Public authority is subordinated in this case.

Negotiated regulation might be a solution for the case that there is no clear social preference towards public goals or economic performance oriented sectoral organization. The regulatory body and the regulatore enter into a bargaining process about the desired direction of performance of the new system. There are three categories of expected benefits of regulation by negotiation:

- flexibility of regulation: actors are able to influence goals and means of regulation;
- related to the first point: higher expected efficiency of regulation, because the regulated actors are able to determine the most efficient means to realize the expected goals.
- low monitoring costs, because the regulatees commit themselves towards the achievement of certain regulatory goals.

'Conventional' regulation by incentive or directive presupposes a political determination of the socially desired outcomes of regulation. There is no explicit role for the regulatees in the determination of the desired outcomes, other then using means of political lobby. Regulation by negotiation offers possibilities for the regulatee to enter into a bargaining process in which the desired outcomes and regulatory instruments are determined. This seems to be a contradiction. Regulation usually is needed because economic action does not result in acceptable allocations by autonomous action. Why should in this case the regulatee agree voluntarily to alter his economic behavior, if he didn't in advance?

The first explanation might be the lack of collective action. Economic actors might be individually aware of the fact that their behavior is not desirable for some reasons. However, changing individual behavior creates serious competitive disadvantages. Only by coordinated collective action these disadvantages can be overcome and all actors can act as they would like.

As a second reason is the possibility of free rider actions. A change of economic activities can result in positive external effects, which are born by all actors and not only those who bear the costs. A coordinated action can be a safeguard against asymmetric distribution of costs and benefits of desirable actions.

A third reason for actors to enter into negotiated regulation might be described as 'fear for worse'. There is a pressure upon actors to change behavior, and they are aware of the fact that this pressure might be legally enforced, in case they do not change behavior on a voluntary basis. Negotiation might help actors to realize a more favorable definition of the socially desired outcome, than in the case of autonomous determination by political institutions.

However, these potential advantages of regulation by negotiation can only be realized under certain condition. First, there must be an identifiable actor within the industry, which has authority to negotiate with the public authority in the above mentioned way. Often these are umbrella organizations or some big dominating firms. Second, there must

be reason to believe that actors are willing to commit themselves towards the negotiated results. As we discussed in the second paragraph of this paper, in The Netherlands there is a long tradition, that actors behave in this way. Third, the goals and mutual commitments must be measurable.

Even if these preconditions are met, there is no guarantee that regulation by negotiation is always effective. Actors are most probably only willing to commit themselves to certain forms of regulation, if they expect net benefits from this. This implies that regulation by negotiation is only a solution in two situations:

- if there is a 'win-win-situation', in which every actor has something to gain, or at least everybody contributes in the same way to the common regulatory goal;
- government can commit itself to the threat of introducing forced regulation, in case the actors cannot come by themselves with a satisfying solution.

Evidently both preconditions are not met in the restructuring of the common electricity market of the European Union. The European Commission has not sufficient political power to introduce forced regulation against the will of the actors. Additionally, there is no 'win-win-situation', because some countries have serious fears that the introduction of a more liberal electricity market will threaten the realization of specific national public goals. Regulation by negotiation leads under these conditions to very extensive bargaining procedures which to not lead to solutions of the perceived problems.

The reform of the Dutch electricity industry in the past decade is a good example for the functioning of regulation by negotiation in The Netherlands. The sector experienced a fundamental restructuring, which was thought to be impossible. This case might serve as an example for an effective form of regulation by negotiation.

# 4. The case of regulation of Dutch public electric utilities<sup>21</sup>

The reform of the Dutch electricity utility industry is a process which started out of a context of stable small-scale local organization of production and distribution before 1985, went on in a period of transition between the years 1985-1989 to continue until the mid nineties in a process of upheaval and uncertainties. Three phases of different sectoral organization will be distinguished and analyzed in terms of the theoretical notions developed in the previous section.

#### 4.1 Before 1985: Small-scale stability

The Dutch electricity sector has its origins in the municipal producers/ distributors that emerged during the change of this century. In this period governmental intervention was primary oriented towards the realization of public tasks. Electricity production and distribution have developed as a municipal task; which later became also a responsibility of the provinces. The provision of electricity was considered a public task of common economic need to be

This chapter is drawn from Arentsen, Kunneke and Moll, forthcoming.

provided by public service depending on public owned firms<sup>22</sup>. Though in principle electricity could be provided by private firms - actually common practice in the very beginning of electricity production and distribution in The Netherlands<sup>23</sup> - there were two important reasons for public provision. First the infrastructure, i.e., the grid, makes use of the municipal road network. The municipal owner of this network is thus directly involved in the development and maintenance of the electrical grid. Secondly, the electric utilities are traditionally considered as natural monopolies. To avoid destruction of capital by means of inefficient double investments in the infrastructure, it was perceived socially desirable to have one grid of which the access and use is regulated by public institutions. Regulation is necessary to protect consumers from misuse of monopolistic power, in terms of extensive pricing and/or selective provision of this essential good.

Beside these primary regulatory goals municipalities used their ownership of public utilities also for general social-economic and financial goals. For example, the city of Amsterdam had a tariff structure that favored small domestic consumers relatively to industrial consumers, related to the distribution costs of these groups of consumers. In Rotterdam a very social disconnecting policy with respect to defaulters was introduced, which led to back payments of \$ 60 mln. For the municipal owners public utilities became an important source of income, especially in the late 70's and beginning 80's in which the public budgets were cut down. Single Dutch cities introduced a system of normalized profits' that had to be paid in advance to the municipality<sup>24</sup>.

According to the growing technical need of cooperation between the local producers/ distributors and the possible cost savings because of economies of scale and scope, the number of electricity distribution companies declined quite drastically since the beginning of the century. In 1920 there were about 550 distribution companies, declining to about 200 in 1960, 100 in 1980, to 82 in 1985<sup>25</sup>. Out of these 82 companies, 64 are horizontally integrated with gas and/or water and/or central antenna. During these years, all producers are integrated vertically with transport and distribution, resulting, by the mid eighties, in some 14 main producers<sup>26</sup>, which also became the biggest distributors. 10 of these firms integrated vertically at the provincial level, the others are geographically related to the four largest cities in the urbanized western part of the Netherlands.

The first reconsideration of the role of municipalities in the electricity production and distribution started in 1958. These reconsideration's initiated a process of concentration and vertical integration, to increase the professionalism and the economic performance of the public utility sector. In 1970 this process has been picked up again by two advisory boards that

For example Simons in his dissertation on Dutch municipal services from 1939.

The first electricity producer/ distributor was a private firm in the city of Rotterdam in 1883.

Baake, H. (1988), Normalisering van bedrijfswinst, winstpunt? s' Gravenhage.

Brandsma (1985), Reorganisatic nutshedrijven, Arnhem, p. 9.

Beside these 14 companies there is a small electricity producer, called GKN, in which (mainly on a scientific basis) a small nucluar power plant is exploited. This firm is not vertically integrated.

recommended the Dutch central government on concentration and vertical integration to increase the economic performance of the public utility sector<sup>27</sup>.

The start of the public debate on the restructuring of the public utility sector that preceded the ongoing reform process, was actually given by the so called CoCoNut board. This board, installed by the minister for economic affairs, had to advise on the impact of concentrating public utilities. The CoCoNut board was strongly in favor of more concentration, because it was the only tool to realize a significant cost efficiency in the public utility sector. The Dutch government took over the recommendations of the CoCoNut board and opened the dialog with the utility sector on institutional restructuring. The utility sector, united in associations for electricity, gas and district heating, was willing to discuss the need for reconstruction, as far as the process could be governed by the sector itself, without formal intervention of the central government. The sector underlined this position by installing its own advisory board (commission Brandsma), to make an inventory of the organizational alternatives for restructuring the sector in congruence with the official governmental goals on the theme. The Dutch government agreed upon the voluntary base of the reconstruction process, but thought it wise to initiate new legislation to be sure the voluntary co-operating parties would take their job on reconstruction seriously. The Dutch government prepared a Distribution Act, to be used as a 'big stick' in case the selfregulating forces of the sector turned out to be unreliable or ineffective. The Brandsma commission started working in 1985, marking the end of an area of institutional stable, decentralized local utility structures.

During this period, the fulfillment of public tasks, as defined by local authorities, clearly dominated the performance of electric utilities. The discussion about possible reorganizations of this sector can be interpreted as first signals about an ongoing reorientation towards a more market oriented functioning of this sector.

#### 4.2 1985-1989; Transition

During this transition period, regulation by negotiation is applied to initiate a possible change of the dominant co-ordination system of the Dutch electricity sector.

In 1985 the discussion on the structure and tasks of the public utilities, was opened seriously, by the installation of the commission Brandsma. The participants concentrated on discussing several aspects of the structure of the future public utility. A very dominant aspect was the optimal scale of distribution companies. An extensive public discussion about the optimal scale of electric utilities led to different points of view. The central government was opting for a minimum scale of 100.000 consumers, a number reducing the amount of horizontally integrated distributors to 20 à 25. The sector was less in favor of concentration and defended itself by arguing efficient integration-scales for gas and electricity distribution of some 30.000, instead of 100.000 consumer as was proposed by the central government. Distributing only electricity, efficiency could be maximized at 75.000 connections and for distributing only gas,

<sup>27</sup> Commissions Hupkes 1958 and Rictycld 1970.

Commission concentration public additions. (in Dutch COmmissie COncentratie Nutsbedrijven).

efficiency could be maximized between 30.000 and 50.000 connections, according to the sector. These figures resulted in a needed amount of 60 to 70 companies, to distribute electricity and gas<sup>29</sup>.

An important milestone in the reform process was the initiation of the Electricity Act in 1989 for the production sector, which had several consequences for the distribution companies as well. In several aspects this act governed the voluntary process of restructuring by the sector itself. First, a vertical disintegration between production/transport on the one hand and distribution of electricity on the other hand was legally enacted. At the national level, this clarified the division of tasks in the utility sector. Secondly, the act prescribed a minimum scale of electricity production at 2500 MW production capacity. This minimum capacity was perceived to be necessary to achieve economies of scale. Thirdly, the act allowed production companies to optimize their production processes according to cost criteria rather than to political considerations of the public owners<sup>30</sup>. The act did not attack the public ownership of the production companies.

Between 1985 and 1989, the emerging restructuring of the utility sector was a manifestation of a reorientation on the public tasks of utilities. The main question that guided the process was, how to integrate the public tasks and responsibilities of the utility sector with an effective and efficient economic performance of that sector. The sector had to meet its public responsibilities, such as reliability and security of electricity supply<sup>31</sup>, meanwhile improving the economic performance of the sector. This was not an easy job to do, because the production and distribution conditions had changed. Due to environmental considerations, the sector was facing a new challenge: improving its economic performance under more strict environmental regulations. Actually, the environmental impact of electricity production penetrated the sector since the mid seventies and cumulated as a significant public issue by the end of the eighties.

The first oil-crisis redirected the Dutch energy policy with its annually increasing energy supply and demand scenarios. Energy conservation and the diversification of fuels became the main policy themes. For the producers of electricity, these adjustments in energy policy had significant consequences. In the short term, the producers where forced to adjust existing production units, to make them suitable for coal firing. Also the share of coal firing in the future production of electricity should increase. Simultaneously, the environmental impact of the production of electricity (especially with coal) became more manifest. The necessary technologies to limit the environmental impact, were not available, and the production sector could not wait for these new technologies. They had only one option: increasing the share of coal fired units, waiting for new technologies and, for the short term, resisting increasing environmental demands.

<sup>&</sup>lt;sup>29</sup> Brandsma, p. 14 and 15.

Out of the 15 original production companies, about 7 were organized as provincial or municipal service departments and the others as stock companies, with provinces and municipalities as the only stockholders.

See for example article 2 of the Electrity Act 1989.

The environmental issues the Dutch producers were facing concentrated on the emissions of SO<sub>2</sub> and NO<sub>x</sub>. At first, the sector resisted increasing environmental demands because this would increase the price of electricity to much. For several years the production sector could hide behind the unavailability of technology as the main defending argument. However, the environment became a main issue on the Dutch political agenda. The sector was facing an increasing front of political support for more protection measures and better technologies. For several years the sector resisted e.g., the introduction of installations for desulphurisation of stack emissions. To break the resistance of the production sector the Dutch government financially supported the research and the development of new techniques such as burning techniques with low NO<sub>x</sub>-emissions, coal gasification and the like. In the eighties, the technology for desulphurisation became available, and the production sector had no arguments to resist its introduction. Also, the Dutch government had financially supported the development and introduction of this technology.

In between, the Dutch policy on fuel diversification had been redirected again. Consequently, natural gas became available again as a major fuel for the production of electricity. Now the environmental impact of coal fired units is managed by new technologies such as coal gasification and added technologies to clean emissions for SO<sub>2</sub> and NO<sub>x</sub>. In combination with quality restrictions on the fuel, e.g., the amount of sulfur in coal and oil, these technologies limit the environmental impact of the production of electricity.

Gas became the dominant fuel for the production of electricity. The electricity sector made an agreement with the central government to prefer gas above oil. In this way the central government was able to get more extended revenues from the gas trade in The Netherlands, which eased their budgetary problems<sup>32</sup>.

So the reintroduction of natural gas as a fuel for electricity production enabled the sector to meet more restrictive environmental regulations, meanwhile improving the economic performance of the system. The Dutch electricity sector could improve the cost efficiency of the production of electricity partly because of the low price of natural gas.

The reconsideration on the public task of the utility sector concentrated on the reliability and security of supply. Security of supply had to be guaranteed by a system of central planning of

The Dutch government gets about 80% of the revenues of the gas trade from Dutch fields. The other 20% is for the exploiting oilcompanies (mainly Exxon and Shell). The main gas producer in the Netherlands is the NAM (a joint venture of Shell and Esso) e.g. responsible for the production at the big Slochteren gas reserve. All producers in the Netherlands (including offshore production at the Dutch part of the Northsea deliver their production to the Gas Unie (50% controlled by the Dutch State and 50% by Shell and Esso). The Gas Union is responsible for the distribution of gas in the Netherlands, for the gas exports to e.g. Belgium, France and Italy and for (future) gas imports e.g. from Norway. The Gas Union develops also a long term gas delivery plan, addressing the exploitation of the reserves, importation and exportation issues and development of infrastructure e.g. the building of gas storage facilities to meet peak demand in consumption. About 47% of the Dutch gas production is exported and about 5% of the Dutch gas consumption is imported.

the production capacity. The Electricity Act prescribed a planning system by the sector itself, based on a forecast of energy demand over a period of ten years in advance. The sector is legally obliged, to actualize these plans every two years. These so called electricity plans (in Dutch: electriciteitsplan) have to be approved by the minister of economic affairs<sup>33</sup>. This system of centrally approved production planning was meant to protect the consumers and to secure a reliable supply of electricity for the Dutch economy. So the security of electricity supply became supervised by the central government between the years 1985 and 1989. This governmental involvement in the utility sector can be perceived of as controlled self-regulation. The same happened with the protection of private consumers. The Dutch government agreed upon maximum tariffs with the utility sector. The production costs became pooled and, compensate, according to a certain formula, for the production costs 'of reasonable efficient' producers.

So between 1985 and 1989, the utility sector got into transformation, securing its public task by central government's supervision. Meanwhile the sector was allowed to restructure institutionally. During these years, the production sector merged into five giant production companies (after 1989 into four), united in the SEP, co-ordinating their production activities to improve the economic performance of production. After the reorganization, the four producers had all the legal form of private stock companies, allowing only public organizations as stockholders<sup>34</sup>.

The distributors also merged, a process that turned out to be very successful after a reticent and sloppy start. The process developed almost perfectly according to the scheme provided by the commission installed by the sector (Commission Brandsma). The big provincial distributors became the most important buyers of the smaller municipal utilities. These provincial distributors, which were legally separated from their production activities by the Electricity Act, got good financial positions, due the relatively high degree of accumulation of own equity. The provincial stockholders only required them to pay dividends as high as the rents on the capital market plus a few percents premium, whereas the old municipal utilities had to pay 75% tot 100% of their annual surpluses to their municipal owners. The big provincial distributors offered very interesting takeover prices to the municipal owners that many of them gladly accepted. Some municipalities also get shares of the provincial distribution company and/or seat(s) in the board of commissioners. Once the first deals were made, the followers imitated this pattern, sometimes even under better conditions, reorganizing the distribution sector towards increased concentration.

In this intermediate period between 1985 and 1989, a reorganization process was initiated that was for decennia thought to be impossible. By the end of 1989 the organization of the sector was roughly according to the agreements made between the sector and the central government. However, the process contained an internal dynamic, that surpassed the official objectives of

This right of approval was already agreed upon between the sector and the Minister of Economic Affairs in a convenant in 1975. This is another example of the Dutch consultation economy.

Stockholders are provinces, municipalities and distribution companies. Not all distribution companies are stockholders of electricity producers.

the reorganization process, initiated in 1985 by the sector itself following the objectives of the central government to improve the economic performance of the sector.

#### 4.3 Since 1990: market upheaval

After 1990, the Electric utilities developed an attitude towards self-assured business firms, trading in the special market of utility services. The Electricity Act legalized limited liberal trading and the vertical disintegration freed the distributors from the dominance of the producers. The merging and ever growing distribution companies strengthened their self-consciousness. Like private business fams they took the opportunities offered by the Electricity Act, starting to explore new markets to offer new products. However, the new institutional arrangements turned out to be in some respects destabilizing and threatening the existing economic order of the sector.

In the first half of the nineties, the distributors became the dominant actor in the Dutch electricity sector. A dominance by nobody forecasted, but embedded in the Electricity Act. Before the reorganization, the big vertically integrated producers/ distributors were the most important economic actors in the electricity market. The mostly small municipal distributors were obliged to buy all their electricity from their regional producer. These producers sometimes also decided the tariffs for consumers that 'independent' municipal distributors were allowed to charge. The reorganization changed the market position of suppliers and buyers in several respects. Due to the concentration process distributors got a significant market position because the number of actors was drastically reduced and the purchase volume of each of them grew significantly. The producers depend economically on the distributors, because they lack the legal possibility to sell electricity directly to consumers. Only very big industrial consumers are allowed to bypass the distribution companies. Due to the abolition of the regional monopolies of the producers the distributors could compare prices. Shortly after the introduction of this possibility of 'horizontal shopping', all significant price differences between the producers vanished and no distributor used this new possibility of free purchase within the Dutch territory.

The possibility of small scale electricity production that was granted to distributors by the Electricity Act was very consequently used by them and resulted in a significant competition with the big producers, united in the SEP. In the last years the distributors heavily invested in decentral electric power production with small scale cogeneration units, partly as joint ventures with private industrial firms. These activities are stimulated by the Electricity Act 1989 and got societal and political support for environmental reasons. In this way they are competing with the producers in a significant way. Meanwhile about 17% of the national electricity production<sup>35</sup> is decentrally generated.

Elektriciteitsplan 1993-2002, Arnhom, p. 14 - 18.

Distributors are allowed to install decentral small scale production units according to the Electricity Act 1989.

For environmental reasons, the distributors got strong political support for their production activities with CHP and renewables. The principle of cogeneration, generating combined heat or process steam and electric power, is well known and has been applied constantly by industrial producers in The Netherlands. In the past (until about 1986) only large industrial producers with concurrent heat and power demand and a high load factor, used cogeneration techniques. Also in some cities cogeneration is used for district or city heating. A critical factor for cogeneration was an almost complete use of the electricity generated inside the company because of the low tariffs for surplus produced electricity delivered to the electricity distributors/producers. Application of cogeneration results in substantial energy conservation. Therefore during the eighties the government and the distributors became interested in the extension of cogeneration. Also the tariff for electricity delivered to the distributors has risen (from a price based solely on avoided fuel consumption to a price based on avoided fuel consumption and diminished power demand). A subsidy program for cogeneration has been implemented. Presently distribution companies invest directly in small and medium scale (<25 MW<sub>el</sub>) cogeneration plants and participate also in joint ventures with industrial companies building bigger cogeneration plants (up to 400 MW<sub>el</sub>).

During the eighties a governmental stimulative program was developed for renewables, based on substantial investment subsidies. The objective of this program was to expand the installed power of wind turbines and to build up a cost-effective wind turbine production sector. Until recently, the distributors were reluctant to incorporate wind energy. As a part of their environmental program, they now investing in large scale wind turbine 'farms'. In the eighties the government stated the installment of 1000 MW wind power as long term objective for the year 2000. This objective is reduced to 550 MW in the year 2000. In the year 1993 about 100 MW has been already installed.

Distributors also expand in new markets. Recently, they established a telecommunication company, that has to compete the Dutch telecom (PTT).

Recently the Dutch Government is preparing a policy paper for the parliament, in which the future development of the electricity sector is discussed. Again this policy paper is prepared in cooperation with the sector. In anticipating a liberalization of the European market there seems to be a preference of a further market orientation of the electricity sector. The four big national electricity producers will be merged into one firm, with the distributors as the owners. The national grid will be accessible on the basis of negotiations. Competition in production is expected from imports an small scale CHP pants.

Concluding, it can be stated that after 1990, distributors took several opportunities to expand their position on the electricity market, partly on account of the position of the producers. They penetrated the production market, supported by environmental considerations of the government. The institutional framework that was erected by the Electricity Act turned out to be hardly suitable to cope with these unforseeable developments in the market. The central planning system of the producers was e.g., seriously tackled by the production activities of the distributors. The reorganization of the electricity market, formalized in the Electricity Act made

the distributors a dominant economic market party, a position the undermined the institutional framework and resulted in market upheaval in de nineties.

# 5. Negotiated regulation: A Dutch model?

In this paper we delineated regulation by negotiation from other more conventional forms of governmental intervention, i.e. regulation by incentives and regulation by directives. We stressed that regulation by negotiation is a very specific approach, which coincidents in The Netherlands with a long political tradition of corporatism. In this respect it is a typical model for The Netherlands, because certain national styles of policy making are involved in the application of this regulatory instrument.

On a theoretical level it is possible to distinguish regulation by negotiation from other conventional forms of regulation. It appears that regulation by negotiation can help to manage under certain conditions the process of regulatory change. In this respect some general conclusion can be drawn from the Dutch case. We were able to able to point to some conditions under which negotiated regulation can lead to acceptable social performances.

#### Literature:

Arentsen, M.J., Künneke, R.W., Economic organization and liberalization of the electricity sector: In search of conceptualization, forthcoming

Arentsen, Kunneke and Moll, forthcoming

Armstrong, M., Cowan, S., Vickers, J., Regulatory Reform, Cambridge (Mass.) 1994

Baake, H., Normering van bedrijfswinst, winstpunt?, s'Gravenhage 1988

Brandsma, Reorganisatie nutsbedrijven, Arnhem 1985

Crew, M.A. (ed), Incentive regulation for public utilities, Boston 1994

Deth, J. van, Politieke waarden. Hen onderzoek naar politieke waarde-oriëntatie in de periode 1970-1982, Amsterdam, 1985.

Doorn, J. van, De verzorgingsmaatschappij in de praktijk, in J. van Doorn and C. Schuyt, (eds.), De stagnerende verzorgingsstaat, Amsterdam, 1979, pp. 17-47.

Dutch General Account Council, Convenanten van het Rijk met bedrijven en instellingen, Tweede Kamer, 1995-1996, 24 480, nrs. 1-2.

Goor, H. van, Politieke participatie van collectiviteiten: pressiegroepen, in R. Andeweg, A. Hoogerwerf en J. Thomassen, Politiek in Nederland, Alphen aan den Rijn, 1985.

Klok, P.J., Convenanten als instrument van milieubeleid, Enschede, 1989 Lijphart, A., Verzuiling, pacificatio en kentering in de Nederlandse politiek, Amsterdam, 1976.

Künneke, Manders and Arentsen, De positie van Nederlandse nutsbedrijven in een liberale Europese energiemarkt, Enschede, 1994.

Marin, B and R. Mayntz (eds.). Policy Networks, empirical evidence and Theoretical Considerations, Frankfurt am Main. 1991.

Mitnick, B.M., The political economy of regulation, New York 1980

Scholten, I, Corporatism and the neo-liberal backlash in the Netherlands, in Scholten (ed.), Political Stability and Neo-Corporatism, London, 1987.

Schubert K and Grant Jordan, Introduction, in European Journal of Political Research, Vol. 21, Nos. 1-2, 1992, pp. 1-5.

Simons, D., Gemeentebedrijven, Dissertation Rijksuniversiteit Leiden, 1939

Smith, G, Politics in Western Europe, London, 1978.

Sudgen, R. (ed), Industrial Economic regulation, London 1993

Train, K.E., Optimal Regulation, Cambridge (Mass), 1994

Uyl, J den, En toch beweegt het, in Wiardi Beckman Stichting (ed.), Die tijd komt nooit meer terug, Kluwer, Deventer, 1977.

Waarden, F van, The historical institutionalization of typical national patterns in policy networks between state and industry. A comparison of the USA and The Netherlands, in

European Journal of Political Research, Vol. 21, Nos. 1-2, 1992, pp.131-163.

Williamson, P., Varieties in Corporatism, Cambridge, 1985.

WRR, Besluiten over grote projecten (deciding about giant projects), The Hague, 1994