Liberalising Dutch Energy Markets

Champions and governance, rules and regulations: The 1995-2005 stories

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Executive Summary

Liberalisation of Dutch energy markets was not a sudden change of policy direction, but rather the result of policy evaluations and discussions which had already been going on for quite some time when Minister of Economic Affairs, Hans Wijers, issued an Energy White Paper in early 1996, and the EU Directives for the electricity market (1996) and the gas market (1998) were introduced. The Dutch followed a two-way track, aiming at a phased market liberalisation for gas and electricity with full legal electricity network unbundling and a merger of the four large power generators into a national champion. For gas, the Dutch position as a major natural gas producer led to the proposition of a structure that was much more careful, following the EU Directive to the millimetre.

The legislative process was relatively fast, producing the Electricity Act 1998 and the Gas Act 2000. The following years, however, saw many amendments due to relatively detailed parliamentary involvement and MEZ¹ proposals. Many policy issues conflicted, such as acceleration of the market opening and stranded costs issues as a consequence of failing restructuring in the power sector. Most political energy was directed toward issues of ownership and privatisation, creating much tension between public owners in provinces and cities, which were largely supported by their energy company management boards, and by reluctant national parliamentarians who were increasingly sensitive to public interests regarding supply security and network reliability. From 2002 onwards, the restructuring of the *gasgebouw* (the institutional structure governing Dutch gas exploitation) was also put on the agenda with the aim of achieving more competition in the gas sector but in the end this appeared to be too hot to handle. Discussions concluded that for gas markets, by nature much more international in scope than electricity markets, different industry structures would be required.

By 2006, the national electricity transmission system operator (TSO) was nationalised and taken over by the state via a new grid company, TenneT. The state had bought the shares of private oil majors Shell and ExxonMobil in the gas transmission grid, leading to the new company, Gasunie, whereas the state kept its 50% share in the gas trade and supply business, recently renamed GasTerra, together with the two oil majors. Primarily to secure public interests by keeping networks in public ownership while allowing for privatisation of commercial energy activities, networks for energy distribution probably will be legally required to unbundle ownership, leaving the energy industry in some disarray and with an uncertain future, as they were strongly resisting the unbundling legislation.

Energy markets have been high on policy agendas, not only with respect to issues around overall energy supply security, but also in relation to other energy policy objectives such as energy efficiency and energy renewables. Market-based instruments have been generally preferred over other, more conventional ones, and quite innovative schemes were introduced. Cross-border energy market integration also became a policy issue, as a further means to promote supply security and competition.

The implementation challenge was considerable, and included the creation of a new and independent regulatory body (DTe), closely related to the new Competition Authority (NMa). Both institutions were fully merged in 2005, their combined mandates spanning both the energy and competition acts. Phased in market openings confronted DTe with a number of complex issues and occasionally huge confrontations with the network sector, and sometimes even with MEZ. Such issues included interconnector allocation and preferential treatment for long-term contracts, establishing network codes (first for electricity and later for gas), with many complex transitions regarding network access and connection. Issues around network tariffs, their structures, their separation from supply, and notably their efficiency targets, however, were the most controversial. Many court proceedings followed, leading to unexpected outcomes for all concerned. Laws had to be changed again and further specifications were required. Implementation turned out to be more complicated and time-consuming than anticipated and is now, in 2006, for the most part established in the national market. The whole process highlighted very much the importance of the timely availability of a satisfactory database to inform decisions as well as the need to unambiguously formulate laws and decisions.

¹ Acronym for Ministry of Economic Affairs (Ministerie van Economische Zaken)

Some ten years since the White Paper was issued, Dutch decision-making, legislation and regulation of the energy market has gone through a fascinating, burdensome and complex, and sometimes chaotic and frustrating process. Looking back now, a number of points could be raised. Although the picture is not yet complete and lessons are not yet fully learned and digested, it is useful to sketch some observations about the process as such – which was complex, time consuming, and more complicated then originally anticipated. Also important are observations around market dynamics and the almost unbearable and unsolvable balance between policy, legislation and regulation; and about the role of DTe and its evolving process into a full merger with the NMa. Further assessment concerns the ownership trap, the privatisation project, and the EU – in terms of national markets versus European ones.

Overall, it seems too early to tell whether we delivered the expected results in either quantitative or monetary terms. What we did deliver, however, was a lot of turbulence and dynamics, a boost for innovation in marketing and technology drives, and increased awareness about consumer power in which the threat to switch in itself produces results of improved service, more transparency and increased accountability.

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Introduction

The introduction of energy liberalisation in the Netherlands is sometimes presented as a suddenly decided upon set of events, with the 1995 presentation of the Ministry of Economic Affairs (MEZ) White Paper, by the then Minister Hans Wijers, identified as a key moment. This account of Dutch energy history is wrong. By 1995, developments toward introducing market forces in the Dutch energy markets had already been underway for quite some time, with intensive discussions taking place within the Ministry and its Energy Department and the energy sector. The EU Commission also had been strongly advancing this issue since the late 1980s, and generally, the prevailing political atmosphere was one of preparing for reconsideration of government roles and for allowing market forces to work wherever possible. Thus, it is important to begin with an understanding of the processes leading to the 1995 White Paper, before considering the paper itself and the ensuing reactions from the Dutch Parliament and industry.

Policy development and working towards political and societal acceptance is one thing, actual policy implementation is yet another. The White Paper called for a wide program of policy implementation, especially for the gas and electricity sectors. Discussions around legislation and industry structures, in terms of storms, flows and currents through all sorts of networks, illustrated the very difficult and farreaching consequences in a dynamic political and administrative setting. This dynamic process became all the more apparent when markets began the step-by-step process of liberalisation, for which nice political concepts had to be translated into real world terms. This paper also discusses this implementation process and the challenge for regulators having to establish their new roles and regulations for the new environment. Market liberalisation and industry restructuring were selfenforcing processes, especially for electricity. Many stranded cost issues, largely due to historic and politically inspired investment decisions were complicating a smooth transition process. Emotional discussions occurred around privatisation of utilities that were largely owned by provincial governments and bigger cities, about the (not always well-defined) public interest and the potential forthcoming billions of euros and their spending. All these issues and developments became difficult policy and political issues for quite some time, accompanied by a continuous flow of proposals and amendments with further complications for the legal and regulatory frameworks. Discussions ensued around timing and implementation, accelerating market opening, network unbundling and ownership. Dutch energy market liberalisation increasingly became a process of learning-by-doing.

The introduction of market forces in the energy sector also impacted other elements of energy policy, energy conservation and promotion of renewable energy sources. Market-based instruments were used in support of policy goals. Market failures, however, also became apparent, as evidenced by power shortages and black-outs in the US and in Italy from 2000 onwards, adding to increased attention to supply security. For these and other issues, the European dimension and its direct and indirect involvements became increasingly relevant in terms of defining a global framework for rules and regulations, but also with respect to energy industry structures and strategies. Pricing impacts and instances of manipulative market behaviour required policy reaction as well new rules or amendments to existing ones.

² The Dutch acronym for *Ministerie van Economische Zaken* (MEZ), is used throughout the paper to refer both to the Ministry of Economic Affairs or its Minister.

The road towards the Energy White Paper

2.1. The Ministry's general policy approach

Within the Ministry of Economic Affairs, views on the role of market forces and a policy to widen their applications in all sectors of the economy attained new momentum during the Lubbers-III government (1990-1994). With Koos Andriessen as Minister, with many years of experience in international business sectors, supported by Yvonne van Rooy as an active Junior Minister, and even more so by Ad Geelhoed as Secretary-General, who developed himself as the global brain of introducing market forces wherever possible, MEZ became a focal point for rethinking and reformulating wider economic policy agendas. Geelhoed and his staff were also strongly influenced by angry noises coming from Brussels about the 'cartel paradise' in the Netherlands. Various generic measures were prepared, prohibiting market sharing and other non-competitive practices such as horizontal price agreements. However, without much discussion, the energy sector was still excluded. The new belief in market forces was widely shared within MEZ and resulted in a variety of specific sector projects. Hence, it became natural to consider also the energy sector, not only with respect to gas, but also electricity. All the more so as the existing Electricity Act, only entered into force in 1989, had already begun to frustrate interesting developments and initiatives in the electricity market. Further, a project was undertaken to modernise Dutch Competition Law, from which the gas market was no longer excluded by definition.

The MEZ energy department, however, was still sceptical and reluctant, in particular because of potential impacts on the gas market. External influences were also increasingly important, notably EU initiatives and its wider 1992 agenda. This agenda resulted from the political initiatives of Jacques Delors, then president of the EU Commission. In order to overcome large political crises in the 1980s, Delors proposed to focus again on the EU's core business, the completion of the internal market. An ambitious programme was undertaken to complete, by 1992, integration in those markets where intracommunity trade barriers still existed. In general terms, this program was widely endorsed by MEZ. However, in the proposals the energy sectors were also included and it became increasingly a question as to why gas and power should be excluded and treated differently from oil products and coal. The Dutch utility sector and MEZ energy department could no longer escape participation in these discussions, and from 1991-92 onwards, energy market liberalisation and the resulting industry restructuring became part of the energy policy.

2.2. Developments in the energy sector

The energy utility sector was in deep and turbulent waters during most of the 1990s. There were three key areas at issue: concentration and horizontal integration in energy distribution; implementation of the Electricity Act 1989; and Brussels and the EU proposals.

Distribution companies for gas and electricity were manifold in the Netherlands. In the late 1980s, MEZ effected a MoU with the sector to limit the existing number of some 50 companies to fewer than 50 within a period of ten years. In addition, electricity distribution should be largely integrated with gas distribution. The idea behind all this was to achieve more economies of scale and to increase efficiency. The distribution sector reacted quickly and around 1995 there were about 30 companies left, some of them very large and covering more provincial regions. The larger companies, with their extended management and governance functions, started also to explore other areas beyond energy supply and distribution. They also became more vocal in addressing energy policies, notably with respect to energy efficiency and renewables. This engendered their active promotion of small-scale cogeneration and combined heat and power (CHP) schemes, but also their entering competitive non-

energy markets, such as for installations, environmental activities and telecom. This development was not always applauded in political terms and brought new rules for avoiding anti-competitive behaviour via legal separation of non-energy activities. Market forces and energy markets were gradually entering policy and political agendas.

The second issue was full of tension and concerned the Electricity Act 1989. Resulting from more than five years of discussion, the Act was basically about responsibilities for electricity planning and pricing, and was a compromise between MEZ and its drive for an effective energy supply and the provincial governments and their electricity managers. The Act provided for a new structure in power generation via a system of central planning and coordination and four remaining large generators with overall pooling of production costs. Sep (the already existing coordination company, operating the national grid with the balancing responsibility) became the central institution, jointly owned by the four generators. MEZ had a final say in the planning process via the biannual Electricity Plan and in annually setting maximum national end use tariffs. In order to assure the planning function, Sep received a legal monopoly for import and export and final say in all new generation capacity beyond 25 MWe. However, large consumers were allowed to pursue their own imports (which was never attractive for them), and new generation capacity under a joint venture between an industrial user and a distribution company was not subject to Sep approval. This last rule became increasingly an opportunity for larger distributors and their industrial customers and resulted into a further boost for cogeneration. Cogeneration was also heavily supported with investment subsidies and assured feed-in tariffs and off-take. These almost risk-free projects gave the distribution sector (that could barely influence Sep planning and policies) increasing leverage under the Act. From the early 1990s onwards, it became clear that the 1989 Act was not a stable one, with electricity suppliers and consumers loudly calling for increased competition and more market forces.

The third issue hailed from Brussels. In general, all EU initiatives were approached with scepticism, if not negativity. Strong lobbies from the sector, with Sep in a leading role, argued with the Commission that, "electricity is not like sugar." MEZ also supported the lobby, largely because the 1989 Act was being challenged in the EU Court of Justice. But the real concern in this area of contention was gas. Liberalisation of the energy market was a threat to Gasunie and its monopoly function in marketing the huge Dutch gas resources, including the successful Dutch policy for developing the small gas fields. MEZ Minister Koos Andriessen was very clear on this point in a discussion with EU Commissioner Cardoso, stating: "I am and will continue to be a monopolist."

Energy Director-General, Stan Dessens, during 1992 began a series of informal discussions with energy CEOs. It became increasingly apparent that existing structures would not last and perhaps were no longer even allowed. In these talks, the wider European perspective was the leading concern and strategies discussed involved not only how to deal with Brussels, but more to the point, how to turn this threat into an opportunity. Reports were written on this perspective, but ultimately in 1994, there was no agreement possible between Sep with its generators and the larger distribution companies. Gasunie, also participating in the exercise, could thus lean back. The final report was sent to Minister Andriessen, but being at the end of his term he left it for his successor. For Hans Wijers, the new Minister, this was fun, he liked this kind of issue. Keen as he was on restructuring the economy and relying on market forces wherever possible, he took up this challenge and was prepared to chair a steering group of the major stakeholders and to hammer out a solution. Within six months he succeeded in arriving at a new model for power generation: a single company, the GPB, a merger of the four generators and Sep, owned by the distribution companies. This model became an important element for the new White Paper, which was under preparation.

2.3. Internal MEZ energy policy developments

When Hans Wijers entered MEZ in the summer of 1994, he was immediately faced with three difficult and politically sensitive energy issues: a new gas storage capacity project in Langelo; modification of

³ The import ban for distribution companies (necessary for insuring the Sep planning function) was challenged by the small distributor of the city of Almelo. It issued a complaint to the Commission, which many years later resulted in the verdict of the Almelo case. The state won the case, but plans to change the Act were by then already in an advanced stage.

the Borssele NPP; and cutting government spending for energy research and energy efficiency. These three issues were incidental by themselves, but they all had some kind of connection with the wider drive toward energy market liberalisation that was underway. It became evident to the new Minister that he lacked an overall framework to assess these issues and decide upon them in a consistent manner. Filling this lack was a strong driver for a new Energy White Paper.

Internal advice was somewhat negative. There was no need for such a paper; there were no immediate concerns for energy supply or environmental issues related to energy policy. A new paper brings a risk: it calls for new policy. Furthermore, the department had already issued two White Papers on energy policy during the last 20 years, which in actual fact had produced only paper with little result. New policy comes as it is needed and could be developed and implemented more effectively on a case-by-case basis. Parliament, however, in discussion with Wijers on the three issues mentioned above, caught a whiff of opportunity with this new Minister and he went along with them. By the end of 1994, a new and integral vision of energy policy was promised and a third White Paper on energy was announced. Internally, it was decided to follow a two-pronged approach, i.e., a focus on conservation and renewables, and another on dealing with market forces.

Within the energy department, a special high level and internal Task Force (TF) had been already established during the summer of 1994. It was mandated to review overall energy policy from the perspective of strengthening market forces. Before the end of 1994, the TF reported there was no need to adapt policies for oil and coal, since (international) markets were already in place. But for electricity, gas and energy distribution there was both opportunity and need to change policies. Functional unbundling with public oversight for the network function, with continuing policy involvement securing energy policy objectives via a system of concessions and licenses, were among the key recommendations of the TF. Policy goals and objectives could still be met, but at a lower economic cost. Prices, however, would be based on competitive markets structures. Positive effects were expected for electricity and for energy distribution, therefore warranting definite steps towards the introduction of market forces. The TF was less certain and more prudent about gas, because of wider impacts due to international market circumstances. This last point was widely accepted within MEZ, as it was clear that the national interest would be best served by the continuation of Andriessen's 'monopolist' approach. The TF's report turned out to be a major input into the forthcoming new White Paper.

The 1996 Energy White Paper: breaking a trend

3.1. The White Paper's content

Earlier White Papers⁴ were inspired primarily by developments in global oil markets, such as increasing price volatility and concerns about supply security. This time the reasoning was different. A major driver was concern with the overall balance between the economy and the environment leading to broad political needs to make concrete steps towards a sustainable energy economy. In addition, given international developments in the globalising world economy there was a need for a thorough review of the role of government, including in the energy market. The White Paper concluded that energy supply seemed to be rather secure, albeit with an increasing importance of geopolitical factors, but issues around climate change were considered to be much more uncertain, and would become increasingly so over time. The paper therefore developed two tracks: one towards a more sustainable energy economy and the other concerned with the introduction of more market forces.

The first track came with concrete targets and objectives. Energy efficiency would be increased by a third during the next 25 years, whereas the share of renewable energy in the overall energy mix would have to reach 10% by 2020. New power generation would largely come from gas-based CHP systems, leaving room, however, for coal. Nuclear was not considered to be an option, but research was continued to keep it open for the future. This policy was expected to contribute effectively to overall stabilisation of carbon emissions, but a concrete target was not considered to be necessary. Incentives to promote renewable energy would largely come from fiscal schemes and tariffs, but a more concrete action plan would come later. For energy efficiency, numerous instruments were proposed, with expectations from EU actions, including a strengthening of efficiency norms and standards and more energy taxation. Further efforts were also announced for technology development and the successful multi-year agreements with industry sectors would be continued and further expanded.

The second track was build around the philosophy of "markets wherever possible, government wherever needed." The government role would change, however, to make room for market forces. The supply-oriented structures would have to be exchanged for much more demand-side orientation and management. Existing central planning schemes for power generation and gas supply would be terminated and investment planning and decision-making would increasingly be left to market parties. Every four years, overall energy developments and energy balances would be monitored and assessed in a separate government Energy Report. This assessment could result in new policy formulation and instrumentation where necessary. It was stressed that this would probably require EU action, as in the globalising world energy supply security concerns or climate change issues would become increasingly international. This Energy Report would be further formalised by giving it a legal status.

The TF recommendations were followed in terms of opting for a market structure with functional unbundling with fully liberalised production, imports and exports, supply and trade for gas and electricity with non-discriminatory access arrangements for the networks. Independent oversight would prevent abuse of this monopoly function. Market opening would be effected in three tranches, with the larger industrial users first, followed by the business sector and finally by households. Until consumers were free to choose their supplier, they would continue to be protected by government regulation assuring supplies at affordable prices. The energy sector itself would become a normal business sector, for which private ownership would be a logical step (although not so much the case

⁴ The first Energy White Paper (MEZ 1974) was issued by the then MEZ Minister Ruud Lubbers, dealing with the impact of the 1973/1974 oil shocks. The second White Paper came in a series of three instalments during 1980/1981, covering respectively the general energy issue, a new coal policy and nuclear energy policy.

for networks, this would not be prohibited). The general rule was that proper liberalisation should come before privatisation. Business normalisation also included the normal profit taxation schemes. Liberalisation also meant to be that the energy companies would not be subjected to specific licensing requirements, except for their regulated activities in networks and supply to captive consumers.

Although the basic philosophy was the same for gas and electricity, in terms of more specific designs and timing, there were some marked differences. For electricity, the GPB model, as mentioned in section 2.2., was accepted as government policy. This was not self-evident, however, as especially within MEZ the pro-market wing saw serious flaws in this model. This resulted in emotional debates between the energy and market departments, with some additional external legal advice. It forced Minister Wijers to come up with some amendments to his scheme, especially in terms of weakening the vertical integration between generation and supply. These amendments were subsequently used in arguments by some energy CEOs for withdrawing their support. The gas approach was more prudent, with emphasis on ongoing uncertainties in the international gas market and the resulting position of the Gasunie. For gas, the national approach would not go beyond the outcome of the EU negotiations, especially concerning network unbundling and access. However, imports and exports would become more liberal and government regulation would be limited to domestic gas production.

3.2. Reactions to the White Paper

Reactions to the White Paper were generally amenable, but numerous questions were raised around details and implementation. The choice for 'more market' was supported, but there was a widespread hesitation about the proposed short timeframe. The GPB model was generally applauded, but question marks were put around the proposed structure for ownership and governance. The government's main advisory body for energy policy (the Energy Advisory Board), supported the short-term focus on cost and organisation of the energy supply system, but expressed concern about the longer-term impacts on investments and the relation with developments in other EU countries. The objectives for efficiency and renewables were also supported, but there was too much focus on the longer run, thus missing intermediate steps. From the industry and business communities, sustainability objectives were considered overly ambitious and expensive, whereas the environmental movement expressed strong disappointment, pleading for stronger and more concrete targets especially for limiting CO₂ emissions. The International Energy Agency (IEA) commented positively, but warned about discrepancies between the Dutch policy and those of other IEA countries, with a specific focus on the involved costs of the efficiency and renewable energy targets. Political reactions largely echoed the messages from society, leading to a very informed and high quality political debate in Parliament. The changing role of government was generally supported, but where still needed, the role of government should be stronger than proposed in the White Paper: no market without a strong government, no deregulation but re-regulation. There was wide agreement on the GPB model, although implementation was an issue for the sector, but not for MEZ. The issue of ownership did not figure in the discussion, but was more apparent in discussions at the EU level on market opening schedules and level playing fields. Energy efficiency and renewables were only at issue in terms of timing (more ambition) and instrumentation. In conclusion, Hans Wijers could be satisfied with the overall support, as the resolutions passed were largely in favour of his proposed policies. Implementation and the legislative process could therefore begin.

New laws and market structures

Implementation of the White Paper's 'market track' focused on preparing new legislation for electricity and gas, and on discussions with the sector about industry structures and ownership. Issues on stranded costs and industry structures complicated discussions around electricity. It became clear that redefining the role of government would not be easy, particularly in terms of public interests and governance structures. Ownership issues became increasingly important, leading to strong differences between members of the national Parliament and their direct stake-holding provincial and local colleagues. Parliamentary involvement increased further when market opening modalities resulted in many technical and administrative issues. Electricity black-outs and concerns about system adequacy and reliability were at issue, and there was resistance from the network sector to the sometimes bold decisions from the newly established energy regulator. All these developments resulted in increasingly detailed interventions from Parliament resulting in additional and sometimes very specific rules. There was also mounting interference in terms of developments in Brussels and the way in which other EU countries were implementing EU rules, resulting in strong concerns about a level playing field for the EU's internal energy market.

As noted above, the legislative process for electricity did not wait for EU outcomes, whereas for gas it was fully determined by them. MEZ did not want to lose momentum in the electricity sector and the GPB project. Discussions had been already too long and drawn-out and the new political momentum provided an opportunity for moving ahead. Thus, there were no lengthy hearings or discussions about draft proposals and legislation, but instead a short discussion paper with the general modalities of the new structure and a two to three month consultation process as a basis for a full draft new legislation immediately to be sent to Parliament, with the aim of an entry into force in early 1998. The Stroomlijnen discussion paper was delivered during the summer of 1996.⁵ Simultaneously, Brussels was also fast tracking, arriving at a political compromise in the same month and a final decision before the end of 1996, requiring national implementation within two years. 6 Gas processes were also moving along, with a political agreement being reached one year later, allowing MEZ to present its comparable discussion paper for a Gas Act by the end of 1997, and the draft Gas Act a year later. It is important to note that the perception of the process of liberalisation being speeded up across the EU influenced new MEZ Annemarie Jorritsma's decision, in late 1999, to accelerate market opening and agree to early privatisations. This influenced the legislative process, with the necessary amendments of the already in effect Electricity Act 1998. Subsequent discussions about ownership and liberalisation, market forces and privatisation, market opening and market regulation were combined, influencing and interfering with each other, and resulting in a lack of transparency and complexity. Both energy industries, market parties and the newly established energy regulator DTe, had difficulties in applying and implementing the new rules. This created quite some legal challenges and frustrations as the legal system for some of the basic issues was either vague or unclear. Law firms and consultants became therefore major winners, with energy consumers as major losers.

4.1. The 1998 Electricity Act

The Stroomlijnen discussion paper continued where the White Paper had ended, considering a marketoriented structure with free competition and network access, protection for market parties without

⁵ 'Stroomlijnen' refers both to streamlining and to electricity grids (MEZ 1996).

⁶ EC 1997.

⁷ This resulted in Directive 98/30/EG (EC 1998).

⁸ This discussion was named 'Gasstromen' (with a comparable reference to electricity) (MEZ 1997).

choice, effective network oversight and sufficient incentives for energy conservation and renewable energy, and a separate market for green power. The timing for market opening was still cautious, with lengthy contract cancellation clauses. Large electricity users would get freedom of choice as of early 2002, other commercial users by 2004, and households in 2008. Attention was paid to the supply function for captive consumers, with obligatory supply plans, tariff oversight and a (national) maximum tariff and obligatory take-backs of decentralised green power. Lessons learned from other countries were seriously considered. The paper mandated a full unbundling of networks (except for ownership) with complete transparency with regards to technical conditions and network tariffs. Network and captive consumer oversight was to be arranged by a new office under MEZ, subject to the anticipated model of the new Competition Act. Finally, it was suggested to work towards an overall Energy Act, combining, electricity, gas and district heating and some other still existing legal requirements for energy distribution companies.

The consultation process was deemed a success and MEZ could present its conclusions to Parliament by November 1996. It contained already a number of interesting changes to the original ideas. Market opening would be simplified by offering choice of supplier to large consumers directly after the entry into force of the new legislation, the middle group would be liberalised by 2002, but the household sector remained captive until 2007. For network tariffs some principles were already outlined, such as that 1996 levels would be used as starting levels for the new system, ¹⁰ and the tariff structure would be based on a postage-stamp system. For network unbundling it was further specified that the rule would be full legal unbundling, with network assets on the balance sheet of the network company. Furthermore, the idea of a power exchange was announced as well as a system for tradable green certificates. The notion of liberalisation before privatisation was again reiterated.

Parliament, eager to participate did not want to wait for the legislative proposal. It discussed MEZ's conclusions in February 1997 and largely agreed with them. During the discussion the unbundling issue was strongly stressed, especially by Ferd Crone, a leading member of the PvdA (Dutch labour party), which was a member of the government coalition. Crone proposed the introduction of an efficiency target system, referring to the RPI-x price cap regulation, as practiced in the UK. Parliament underlined again the relation with energy conservation and renewables and also asked for an early view about the modalities for keeping privatisation off until liberalisation has sufficiently occurred. MEZ maintained momentum and a new draft Electricity Act was introduced in late 1997. There were no big surprises, but the draft did contain some important stipulations, such as the explicit choice of ex ante regulated third party access (RTPA). An independent regulatory authority would be established (DTe), mandated to establish technical and financial access conditions based on proposals from the network sector. DTe would also set network tariffs, based on some further implementing modalities in secondary legislation. Supply tariffs for captive consumers would legally remain the mandate of MEZ, but in practice, DTe would be delegated this task. Privatisation of the regulated parts of the sector would not be allowed unless under explicit ministerial approval, and the Act set out additional incentives for decentralised small scale CHP and renewable systems. Although Parliament requested a number of amendments, 11 triggering seven additional MEZ proposals, the legislative process progressed with the Second Chamber of Parliament agreeing to the Act by spring 1998, paving the way for its discussion in the senate, and entering into force by August 1998.

⁹ MEZ sent missions to the UK, Scandinavia and California. The UK example of phased market opening was compared to the unprepared Swedish market opening in a single step. The German model of a single step was also considered, but it had no impact, as network access was not organised.

¹⁰ The idea behind this was that as of 1996, liberalisation and unbundling was announced, but the legal framework would still take some years, allowing the network sector formally to maximise their tariffs under the prevailing system. Of course this was not the objective, hence the notion that starting levels for the new tariffs (anticipated for 2000) would be equal to their 1996 levels. It should be noted that the 1996 tariffs were integrated tariffs, combining networks and supply. These levels still had to be split into network and supply components.

¹¹ Some were triggered by the energy sector, asking for less stringent unbundling provisions and for a limitation of MEZ involvement in tariff setting. All these proposals were rejected in the final voting. The business sector asked for an earlier market opening than 2002, but this was also rejected.

But not everything went so smoothly. Although Parliament accepted that some important implementing modalities would be set under secondary regulation in a separate AmvB (*Algemene Maatregel van Bestuur* – a decree as executive part of a Dutch law), it insisted on seeing this beforehand and discussing it as necessary before it was vetted by MEZ. Parliament was especially interested in modalities for network tariffs. This AmvB was sent to Parliament in May 1998, ¹² triggering immediate reactions, especially with regard to the consequences for existing cogeneration. Strong lobbying from that sector brought two government parties to the view that the AmvB should be amended, which in practice would mean that MEZ was invited to come already with an Amendment Act. If not, the senate would stall its procedure. And so it happened, with an outraged Minister Wijers, unable to finalise the legislation before his leaving government (general elections took place in May 1998 and Wijers already had announced that he would not continue). The new Act was published in the *Staatscourant* as the Electricity Act 1998 and did enter into force – the market opened for large consumers, networks had to be unbundled, and the DTe was formally established. But all material articles, especially concerning tariffs and access conditions, had to wait for another year, until the Amendment Act was approved.

A particular consequence of this unanticipated intervention by Parliament was that MEZ became increasingly reluctant to use the AmvB instrument. As a result, many secondary and tertiary issues, including various interpretations were left to the new regulator, DTe. Its implicit and explicit regulatory task became more important, because many of these bedevilling details were crucial for the sector and the market. In the early years, MEZ respected DTe's de facto independence¹³ allowing DTe to gain experience in a rather turbulent process of learning-by-doing. This process also led to a number of additional amendments in the Act (further discussed in section 7).

The Amendment Act, introduced in November 1998, brought about intense discussions, negotiations, lobbying and amendments, before entering into force in the summer of 1999. Many of the amendments concerned the separate process of restructuring the electricity sector via the GPB model and the resulting stranded cost issues. The parallel process of establishing a new Gas Act in 1999/2000 introduced another round of amendments for electricity, especially for Annemarie Jorritsma's (succeeding Wijers as the new Minister for Economic Affairs) decision to accelerate opening of the market. Originally, both laws set final dates at 2007, with an intermediate step in 2002. The first MEZ Energy Report in 1999, however, opted for a faster track. Market parties had asked for this and the whole of the EU seemed to go for it. Final market opening was brought forward to 2004 and a separate organisation was set up to prepare necessary technical and administrative arrangements (this is further discussed in sections 7.4. - 7.6.).

From 2000, the Electricity Act 1998 was in a constant process of review and amendment. Preparations for market opening and the ensuing practical problems and failures afforded opportunities for parliamentary intervention to request further detailed rules in the Act. Industry restructuring and stranded costs issues also demanded separate legislation. From the late 1990s there was a growing EU uneasiness about the liberalisation process. New directives for electricity (and gas) were negotiated and agreed upon in 2003, Frequiring further national implementation. This legislation was introduced in 2004 with the so-called I&I Act (intervention and implementation). Implementation concerned the new directives, both for gas and electricity; whereas intervention was about further refining and arranging independence of the network operator. This was largely related to already ongoing discussions about privatisation (discussed in section 5). But from 2000, issues such as electricity black-outs and brown-outs, network failures, network quality and system reliability began to reach the media and became the subject of increased public awareness. Again, politicians requested

¹² Draft AmvB network access and captive consumer supply; sent to Parliament by MEZ on 29 May 1998.

¹³ Although MEZ had decided already in 1999 to formalise DTe's independence, along with the same for NMa, the Competition Authority, the respective laws were not amended before mid-2004 and implementation, together with merging DTe and NMa, was arranged in 2005.

 $^{^{14}}$ This was the so called *OEPS-wet* – the OEPS Act (MEZ 2002a), for the transition process of the electricity generation sector, requiring a procedure of two tranches in 2000 and 2001.

¹⁵ EU Directives 2003/54/EC (EC 2003a) and 2003/55/EC (EC 2003b).

additional action, arrangements and necessary refinements of the legal basis. Similar developments occurred in terms of promoting renewable green energy and their sometimes detailed implementation schemes, and again, the legal basis became dynamic, incurring amendments and refinements of the Electricity Act. These issues are still ongoing today. Network ownership unbundling and privatisation legally are still pending, the EU framework may also require further legislation and the increasing focus on regional market integration may also result in additional legal actions.

4.2. The GPB

Subsequent to Wijers' steering group agreement on the merger model for electricity generation, the GPB model was accepted in the White Paper, with some small but important amendments. Further discussion on modalities and implementation of the model was basically left to the sector itself. That turned out to be a painful and difficult process, for which MEZ was involved in all steps and milestones. 16 The major distribution companies had no common ground, at executive or non-executive board levels, and some of them had severe doubts about the project altogether, as they did not believe in national blueprints. Within MEZ this resulted in a serious consideration of enforcing the merger by law, or by intervening in provincial decision-making. The legal and political risks involved in such an approach were considered too great, thus the voluntary route prevailed. This was also underlined by Parliament. During 1996, further stalled and under pressure from MEZ, two very experienced mediators were asked to facilitate the process. Early 1997 brought further agreement, for which specialisation and functionality were key words. The GPB, for example, would only generate within the Netherlands, but would be free to supply from the Netherlands to final consumers in external markets. The Dutch retail market, including industrial consumers, was left to the distribution companies. They would also be allowed to process their own gas in GPB units and sell the electricity. GPB ownership would go fully to the distributors (rather than directly to their public owners – this was one of the White Paper amendments to the original Wijers proposal).

Agreement on a Business Plan was hammered out, after intervention by MEZ securing a decent fiscal starting balance sheet. The Business Plan required a contribution from MEZ to resolve outstanding issues of stranded cost, notably by arranging a legally binding continuation of a four-year wholesale contract between Sep and all distributors (see also section 7.4.). Parliament caught whiff of this and also was becoming nervous about the lengthy and slow process. State involvement, including state ownership was suggested as a solution, however, without serious consideration.

Governance issues remained on the table and discussions around the Business Plan stalled. Basic trust between all relevant players and stakeholders was simply lacking. By the summer of 1997, it was becoming apparent that the GPB project might be inconsistent with the new Competition Act and its provisions for ex ante merger control. The Act entered into force on 1 January 1998, requiring a licensing procedure for the GPB merger, providing a nice case for the newly established NMa, the competition watchdog. An in-depth enquiry became unavoidable and began in April 1998. This increased nervousness by all concerned, because an NMa rejection of the merger (its first merger case) could force Minister Wijers to overrun the finding. Luckily for all, this was not necessary, as the merger parties concluded in the same month that they were unable to find a sound basis for the merger and thus the whole project collapsed.

With this conclusion, about half of the market vision from the White Paper disappeared ("competitive markets and strong Dutch companies on the European market"). In fact, it was the end of about 20 years of MEZ efforts to build strong Dutch energy companies in a European setting, a view that Wijers had stressed before Parliament: "it's all about the European market and the European market only, as the new EU directives began an irreversible process, the energy market will become a reality." Wijers' successors were confronted with all sorts of bits and pieces, stranded costs and once again, difficult ownership issues.

¹⁶ The most comprehensive description of the whole process is found in *Tegenpolen* (Köper 2003). It should be noted that provincial governments and/or the four large cities owned all distribution companies. The generators were owned by either provincial governments or by their distribution companies.

4.3. Heavy stranded cost issues

Difficulties in the transition from a system based on public utilities to a market-based structure were recognised in the EU Directives, especially with regard to stranded costs, such as costs deriving from public commitments that could not be covered in a market environment. In Dutch jargon these costs were referred to as 'barges'; in more official language as 'non-market based costs'. Barges carry on old commitments accepted under political or public request, sometimes under pressure. In a market situation these costs can no longer be covered and the question of who will pay for them arises – industry, government or consumers? These so-called barges influenced difficult electricity structure discussions between MEZ and the generation sector on issues of definition, size, responsibilities, and legalities during 1995-2002. Both parties had to take their respective stakeholders, such as Parliament, consumers and citizens, public shareholders and local and provincial governments into account. And in the end, there was the EU Commission that had to confer its final approval.

When GPB discussions started, it was logical, to all concerned, that past public commitments, deriving from political and energy policy requirements, had to be reviewed in the new setting. MEZ had been leading the requirement of these commitments, and accepted this responsibility under conditions to be negotiated. In developing the GPB model, the barge issue became a nice carrot and in that context it was agreed to define stranded costs as ones coming from a number of specifically defined district heating projects and the Buggenum demo IGCC plant.¹¹ Total costs to be covered were set at around €1 billion. It was agreed to cover these costs via a surcharge on network tariffs and via the still remaining €200 million special Sep fund.¹¹8

When the GPB model failed, due to the generators' inability to reach agreement, the logic for the carrot disappeared. It was up to the generators to negotiate their own unwinding of all the cooperative financial arrangements under the Sep structure. In the new competitive terrain they would become competitors and all cartel-like arrangements would not be permitted under the new Competition Act. This was the message that Wijers sent to Parliament in April 1998.¹¹ But the story did not follow that line. The new MEZ Minister, Annemarie Jorritsma, apparently accepted new legal arguments from the generators and restarted negotiations. It is not quite clear what happened, but MEZ accepted even more claims from the barges. In a new letter sent to Parliament, in autumn of 1998,²⁰ not only Buggenum and district-heating had to be considered, but also Sep's long-term import contracts, the so-called Statoil gas contract supplying the new Eems units and the interconnector contract with Norway.²¹ There was even a claim for compensation on losses from the existing generation units due to the anticipated decrease in power prices and efficiency losses due to the GPB failure. All together, stranded costs were now assessed at around €7.5 billion.

Jorritsma could not agree and the MEZ team was beefed-up for the next round of negotiation under the newly appointed Secretary-General Sweder van Wijnbergen. A new Heads of Agreement (HoA) was developed in which Buggenum and the heat contracts were still accepted, but also part of the power

²⁰ MEZ 1998c.

¹⁷ Many district heating projects were started during the 1980-90s, based on large heat supply contracts from the generators. Investment decisions were made on the basis of oil/gas price assumptions that turned out to be fully flawed. During that period the government had to put additional money on the table several times. Sep and its partners contributed heavily via their heat contracts. The 250 MWe Buggenum plant was a demo based on Shell's coal gasification technology. The idea was that several more Integrated Gasification in Combined Cycle (IGCC) plants would follow, but that did not occur. Buggenum was in itself not viable and became a stranded cost for the Sep.

¹⁸ This fund was created in the early 1980s to compensate large industrial users for high electricity prices due to oil/gas price increases. Funding was based on a separate contract between Sep and Gasunie at a special rate, the compensation would only be given if Dutch power prices were unable to follow international power prices. This did not occur, so the money was kept in the fund, whereby MEZ obtained authority to determine the spending.

¹⁹ MEZ 1998b.

MEZ 19980

²¹ Due to political difficulties during the 1980s around building large new (nuclear) generation capacity, Sep concluded a number of long-term import contracts with French and German utilities. At the end of the 1980s, MEZ approved the building of a new large plant in Eems, to be supplied via a take-or-pay gas contract with Norwegian Statoil, with prices based on coal parity. In the early 1990s, MEZ approved an import contract for Norwegian hydropower on the basis of an interconnector with Norway. All contracts were considered to be unviable in the new market environment and the four Sep partners were unwilling to assume any burden in the unwinding process.

import contracts. The generators would get preferential access rights on the new Norwegian interconnector, but no compensation for the other claims. Cost would again be covered by the Sep fund and surcharges on the network tariffs. But van Wijnbergen wanted a quid pro quo and demanded a 51% share for the state in TenneT, the new company owning and operating the Dutch transmission grid. This was a big surprise for the generation bosses, but not a worry as shareholders, despite reluctant acceptance by Parliament, rejected this HoA. History repeated again, but even more so, as the four generators were unable to present a common counter-offer. What to do next? When voluntary approaches fail, one has to do it by law. Jorritsma installed a weighty advisory group (chaired by former Shell CEO, Cornelius Herkströter), indicating that its advice could be translated into a binding legal arrangement. The group took a year and finally produced an outcome with again only compensation for Buggenum and the heat contracts, with a total value of some €700 million. No quid pro quo, if the state wanted to have TenneT, it should buy it at market value. The power import-contracts should be auctioned²² and all remaining costs for generators should be shared according to their original Sep arrangements. MEZ accepted the full advice as did Parliament, adding however its wish to buy TenneT, which was done.

A new element emerged that determined final arrangements. During 1999, three of the four generators were sold to foreign market parties. UNA was sold to Texan utility Reliant at a surprising high price of about €2 billion. These were big fish for the public shareholders, so others were quick to follow. EZH went to Eon and Epon to Electrabel. With the amounts of money at issue, the whole stranded cost issue could be viewed in a different perspective. Privatisation triggered the further process of ownership discussions (discussed in section 5). The whole arrangement was put into a new law, ²³ including coverage via network tariffs. The EU Commission accepted the outcome, except for the network surcharge. Compensation had to be paid via the state budget. The four generators, however, for many years continued their internal legal battles about cost allocation and unravelling Sep contracts.

4.4. The 2000 Gas Act

The Gas Act is a different story, but also full of complex assessments and crucial, sometimes conflicting, interests. It is a story in which the successful Dutch *gasgebouw* (the institutional structure governing gas exploitation) played a major role. The White Paper had already concluded that national implementation would not go one step further then the EU Directive's minimum requirements. Unlike electricity, the gas market is international and national interests in preserving the huge national gas resources largely determines Dutch positions. Andriessen's monopolist stance and the Dutch position generally were often compared with the former Stalinist GDR stance of the 1980s. By late 1997, however, political compromise was found in Brussels, and MEZ was able to move, publishing a discussion note (*Gasstromen*) on the forthcoming Gas Act.

Gasstromen had a very prudent tone. The electricity note, Stroomlijnen, had been almost euphoric about the new market philosophy, but Gasstromen was full of warnings and disclaimers. Not so much as to the ultimate goal of full market opening in 2007 (later changed to 2004) and a similar captive consumer protection as electricity,²⁴ but in terms of network access and unbundling provisions. Network unbundling would be limited to administrative requirements and third party access (TPA) on the basis of negotiation of ex post complaints under the new Competition Act. DTe should, however, help MEZ in setting consumer tariffs, but would have no role in the gas market. The inconsistency (also compared to other networks) was remarkable and brought a leading opposition Member of Parliament to reflect that, "You can use all kinds of nice words, but in essence, it's a mess. I would not call that transparency."²⁵ Understandably, the market reaction was also highly critical. The distribution

²² There is more to be said about the import contracts, especially regarding their preferential arrangements for interconnector access. See section 7.4.

²³ The OEPS Act (MEZ 2002a). This legislative parliamentary process was again full of amendments and changed major articles in the Electricity Act 1998 (MEZ 1998a).

²⁴ It should be noted that there was no formal, legal arrangement with respect gas prices for end-consumers. Based on contractual arrangements, MEZ had to give its consent about the outcome of the price negotiations between Gasunie and EnergieNed (the organisation of the distribution companies). That consent, however, was focused on market value and income. EnergieNed then gave its members advice on final consumer prices, which had to be reported to MEZ as a formality.

²⁵ Statement by CDA's Ad Lansink in an interview for *Gas* magazine (van Gelder 1998).

companies complained that the electricity arrangements went too far as compared to gas and the industrial gas users (including the large power generators) pleaded strongly for regulated access. It took more than a year for MEZ to produce a draft act, waiting for the final outcome of the EU Directive. The draft did not go beyond the minimum except for timing of market opening. Access would be based on negotiated third party access and non-discrimination, with network operators presenting indicative tariffs on a yearly basis. Oversight and dispute settlement would go to NMa, and captive consumer protection would be regulated.

The parliamentary process began in early 1999 and concentrated on modalities of liberalisation. This was remarkable, as Parliament did not use the opportunity to start a fundamental debate about Dutch gas market policies in general. Debate in this vein, had thus far hardly taken place at all, despite some prudent attempts on specific issues. There was only a warning from the Dutch Accounting Office that liberalisation might have negative impacts, in the neighbourhood of €1 billion, on the state's gas income. MEZ reacted that indeed more could have been said, but that other studies showed lower figures. The debate focused on balance on network access issues. Strong lobbying by the business sectors brought MEZ in the first instance to strengthen the role of the NMa by indicating binding modalities for complaints and dispute settlement procedures. This was not accepted by the group of large industrial energy users, which then helped the opposition draft a number of rather far reaching amendments. These were rejected by MEZ, but ultimately were accepted in a somewhat chaotic voting procedure at the end of the process. Access would be based on a hybrid system with negotiations to be based on ex ante binding guidelines set by DTe. Network unbundling requirements were also expanded, bringing gas more in line with the requirements of the Electricity Act.

Parliamentary procedures took more than a year for gas. The Gas Act 2000 entered into force during the summer of 2000, and was by no means comparable to the original proposals from MEZ. As noted, fierce lobbying had taken place. The important horticulture/greenhouse sector even succeeded in maintaining additional protection by continuing their lucrative contract with Gasunie and postponing their own market opening. When the Gas Act 2000 was published, including some last minute changes by the OEPS Act, the overall result was a somewhat shaky act with a number of detailed internal inconsistencies, and also in relation to the Electricity Act. There were interpretation difficulties for industry, the networks and DTe. It brought parties to explore the legal boundaries with all emerging difficulties and legal procedures. The new EU Directives from 2003 and the implementation with the I&I Act in 2004/2005 finally resulted in a more coherent and consistent system. In this system, all gas and electricity networks are fully unbundled, except for ownership; network access is ex ante regulated, both in technical and in financial terms; and all consumers are free, with additional protective rules for the household sector. But, as for electricity, new legislative amendments for the gas sector were also forthcoming.

4.5. The Gasgebouw

The gas industry and gas market actors were not only confronted with complicated legislative and regulatory processes, but they were also keenly following discussions about the industry structure, i.e. Gasunie. During 1999, MEZ initiated discussions about the *gasgebouw*, and the fully integrated Gasunie. Gasunie is the 50/50 private/public owned company that is the only buyer and seller of Groningen gas, it has a dominant position on the Dutch gas market and strong positions on other European markets, it owns and operates the gas transmission network and the gas infrastructure system. The new EU market environment called for reflection upon and adjustment where necessary of Gasunie's structure. MEZ undertook a complex review and discussion process with its private partners, Shell and ExxonMobil. EBN (*Energie Beheer Nederland*, a fully state-owned entity managing the 40% share in Gasunie) also participated, being MEZ's financial and technical advisor. A

²⁶ EU Directive 98/30/EG (EC 1998).

²⁷ Generally speaking, gas income issues were discussed in context of the budget. Sometimes gas prices for households were discussed with quarrelling about speed and timing of adjusting prices to market values. Gas production was heavily discussed when Waddenzee exploration was proposed, for which attempts were made by the PvdA faction to start a more global discussion about gas policy.

²⁸ A more detailed account of the Dutch *gasgebouw* is found in *Natural Gas in the Netherlands* (Correljé et al. 2003).

first outcome of the review became evident with Gasunie's announcement, in early 2001, to legally unbundle its network on a voluntarily basis. It had already unbundled the network administratively, introducing Chinese walls, but ongoing critical remarks from DTe and market parties brought Gasunie CEO George Verberg to make the decision himself, before being forced to do so by others.

At the end of 2001, MEZ announced having made EBN into a fully independent, 100% state owned entity.²⁹ This enabled MEZ to concentrate fully on negotiations with the two major oil companies. April 2002 brought broad agreement³⁰ indicating a full unbundling of the transmission grid via a new company GTS, 100% state-owned, and a state withdrawal from all commercial activities, which would be equally split between Shell and ExxonMobil. The public function with respect to the small fields policy, securing for their producers a market-based outlet, would shift from Gasunie to the Maatschap Groningen,³¹ with EBN as the market agent for that gas. All public tasks and functions would require a legal basis. Full and final agreement was expected by the end of 2002. It appeared that DTe had played a crucial role in clarifying its economic regulatory principles with respect to the transmission grid and its asset base.³²

The agreement fuelled speculation about a forthcoming merger between GTS and TenneT. Many questions remained unanswered, such as the role of the Groningen field and its balancing characteristics, and the division modalities of Gasunie's supply and import contracts. Generally speaking, the EU Commission and the Dutch market proponents welcomed the agreement and especially the Gasunie split. Demons in the details persisted, however, with the oil majors, especially ExxonMobil, evidencing strong hesitations, and doubts also being expressed in the political arena.

Elections in 2002 resulted in a new coalition government and new MEZ personnel, headed by the experienced and strongly pro-European, Laurens Jan Brinkhorst. He informed Parliament in July 2003³³ that agreement had been reached on the full unbundling of GTS by January 2004, but that agreement was still not reached regarding the commercial part of the gasgebouw. Gasunie would therefore continue to function under the existing arrangements and ownership. Brinkhorst however had to inform Parliament later that year that the GTS deal was not yet on³⁴ due to "ongoing uncertainties about price developments and other market conditions in European markets, that are still in a full process of transition...". Conforming to the EU Directive, GTS was legally unbundled by July 2004, but further steps were not made. Public and political concern increased about the idea to limit the state role to gas infrastructure only, concerns fuelled by various statements from MEZ's main advisory council on energy policy. 35 In 2004, it became clear that the state would become 100% owner of GTS, buying the 50% Shell/ExxonMobil share. A new company, NV Gasunie, was created in 2005, with GTS as the subsidiary transmission system operator and with other projects and activities (such as the BBL, the LNG-terminal project, Gasunie engineering) in separate subsidiary companies. The commercial trade and supply activities would continue unchanged in the company owned 50/50 by the State and Shell/ExxonMobil. That company was renamed in 2006 as GasTerra, maintaining the function with respect to the small fields.

One might wonder, however, whether the present Dutch structure is still a stable one. Industry restructuring at EU level is very much alive, resulting in large European energy companies, dealing with gas and electricity alike. State ownership is not directly at stake, although declining. New

³³ Parliamentary document 28109 nr. 4 (MEZ 2003).

²⁹ This included a severing of ties also from Dutch State Mines (DSM – formerly *Staatsmijnen*) which from early on had supported and advised the state on technical and financial issues regarding oil and gas exploration and production. Originally, DSM held for the state 40% of the shares in Gasunie. When DSM was privatised in the 1980s, EBN was created to assume that function, leaving DSM with some rights on dividends and technical and managerial support. This was all terminated in 2001.

³⁰ Parliamentary documents 28109, nr. 1 and nr. 2 (MEZ 2002d).

³¹ The Maatschap Groningen is the 50/50 public/private entity that is the sole concessionary for all Groningen gas.

³² DTe 2001a; and DTe 2002.

³⁴ MEZ letter to Parliament 15 October 2003, ME/EP/3058313.

³⁵ General Energy Council 2005.

governance models are emerging in which national states are redefining their stakes and control mechanisms focusing on energy infrastructure. The Dutch government, fully owning the two electricity and gas infrastructure companies, might re-consider merging the two as has been done in the UK. Partial privatisation might even still be in the books, although political support for this seems barely present. Whether GasTerra will be able to maintain its position in the further developing EU gas market is another question. Increasing political focus in a number of EU capitals on external gas supply security and the role of major gas suppliers such as Russian Gazprom might further influence the map of the EU gas industry. Discussions about the other Dutch energy companies and their options to further concentrate or even sell their commercial functions could also play a strong role in this context. In section 5 we discuss these issues further in the wider context of liberalisation and privatisation as it occurred over the last years.

Liberalisation and privatisation

The subject that has dominated all discussions on legislation and industry structures during the 1995-2005 period is ownership. Public ownership – yes or no, and if so, how and why? As for many other European countries, the Dutch energy industry was originally private initiatives, but from the 1920s, electricity and gas supply were seen as public tasks. Provincial governments and cities started their own services and companies, either or both dealing with electricity generation and distribution and (city) gas production and distribution. When the large Groningen gas field was discovered, local/provincial gas companies were restricted to distribution activities. During the 1980s, policy was formulated and gradually implemented to split large-scale electricity generation and distribution, which should be further concentrated and integrated wherever possible with gas distribution. This process was very successful, leading to four large generators and about 30 integrated energy distribution companies by 1995. In parliamentary discussions, the possibility of legally securing public ownership of energy distribution companies was raised, however, without further action.

Public ownership was widely supported, not only in political circles but also within the sector itself, in order to secure public interests and to prevent widespread external oversight functions. Within MEZ the issue of legally securing public ownership was seriously considered, for instance via existing concessions or community or provincial legislation. Overall conclusions, however, were that this kind of ownership limitation would probably not stand under EU law. Developments around further concentration and distribution companies' drive to enter non-energy markets influenced further thinking within MEZ. Internally, word was spreading that private ownership, if public owners so wished, was a logical next step in these processes. In preparatory work for the White Paper, and its philosophy of more market and less government, the private ownership question was also further studied. This the more so as distribution companies were expanding their commercial activities, including via joint ventures with the private sector. Liberalisation as a first step would logically be followed by privatisation. In the Dutch post and telecom sector this was already the case, so why not for energy? There was, however, a strong disclaimer: gas and Gasunie, with its almost non-debatable public ownership construction. The 1995 White Paper provided a very clear statement:

Almost all energy companies in the public sector are owned by provinces and communities. The question is asked whether that has to stay so. Possible transfers of ownership are primarily the responsibility of the shareholders concerned. They are in general at present of the opinion to continue this ownership, but do seem to recognise that ongoing developments would not require maintaining full ownership. The government sees no reason to take a position in principle on this issue. It seems more evident to consider privatisation in markets where competition is emerging, such as in electricity generation, then in transmission and network operation. Experience in other sectors and in other countries is also learning that when liberalisation and privatisation are following parallel tracks, private monopolies could emerge instead of public ones. It is therefore preferable to follow successive tracks.

Reference to the UK experience, where privatisation came before liberalisation, engendered the conclusion that there be serious progress in liberalisation before privatisation could be considered. Making a public monopoly into a private one would risk further market distortion. By putting liberalisation first, the regulator would have time to adequately prepare his tasks and establish himself in the market. A strong regulatory and oversight function is necessary, not only under public ownership, but all the more so under private ownership. Ownership choice is, however, for the present shareholders. As mentioned earlier, this issue was not further raised in political debates, although

some of the smaller shareholding communities (that had lost all control and influence in their energy utility) were not very pleased with this approach.

As a follow up, MEZ sought contact with a number of public owners. Given their numbers, however, it was decided to concentrate on the organisation of provinces (IPO) and of communities (VNG), together with the trade organisation of the distribution sector, EnergieNed. The idea was to conclude a memorandum of understanding (MoU), in which the owners would agree to not consider privatisation until the intermediate segment of the market was liberalised, originally planned for 2004, but later set at 2002. MEZ stressed the importance of good and secure timing as also in the interest of the owners. Further, it was argued that when a company was well-prepared for the market, its market value would only increase. There was also a social aspect, as the anticipated decrease in employment could better be managed under public rather than private ownership. Thus, prudent and careful planning, no rushing and no eagerness. The owner's representatives listened, but did not react. Neither IPO, VNG nor EnergieNed were prepared to discuss the MoU approach and suggested to talk this through with the owners concerned, a non-starter for MEZ. So, the legal option came back again, but now the other way around. Ownership transfers of the monopolistic activities (networks and captive supplies) were prohibited unless explicitly allowed by MEZ or unless the transfer was between existing owners.

The draft law for electricity introduced during 1997 was met with immediate and severe criticism on the ownership articles. "How dare MEZ intervene in our ownership," was one of the main company reactions. The city of Kerkrade in Limburg was the first to move and announced the selling of its shares in the provincial energy company. MEZ reacted immediately and arranged for a settlement with the company. The city of Hilversum, the major owner of a smaller regional company, hired a merchant banker and announced a public auction for its shares. Again, there was action by MEZ, although the company concerned was basically a gas distribution company and the draft gas act was not yet there. The question was settled when Nuon bought this company. The next case was 'bingo'. Almost before it became known in The Hague, the city of Haarlemmermeer sold its fully-owned mono-gas distribution company to RWE, the large German energy company. The draft gas law was on its way, but it turned out to be legally impossible to block this transaction, resulting in the first successful privatisation.

Public and political emotions were put into gear when three of the four electricity generators were sold to US, German and Belgian companies. The Electricity Act 1998 did not contain provisions on ownership transfers in generation, and was quickly amended to introduce an approval requirement by MEZ, because of the still unsettled issues of stranded costs (section 4.3.). As substantial sums were being paid for the generators, the gate was opening further. Medium-sized and even somewhat larger distribution companies (Obragas, Intergas, NRE-Eindhoven, REMU) became available for sale, with serious bidding from US, German and even Spanish companies. MEZ applauded, viewing this as an acceleration of the liberalisation process. But it also resulted in MEZ giving quick and sound guidance of its conditions and modalities for approval. A draft ministerial ruling was sent to Parliament in early 2000, clearly stating that commercial activities would remain free to be privatised, but regulated monopoly activities still required ministerial approval. Approval would be given once assurance and guarantees were provided that public tasks would not be put at risk. This requirement was later sharpened via additional conditions with respect to the independence of the network operator.

A period of difficult and complicated discussions in Parliament followed. Members of Parliament, officials, the Minister, advisors, consultants, energy company officials – all were trapped in the tangled differences between notions of 'economic' versus 'legal' ownership. This became especially heightened when it became clear that almost all Dutch networks had been sold in the 1990s to US investors and leased back under long-term arrangements (Cross Border Leases – CBLs). This brought fiscal advantages under US law, and also profited Dutch energy companies – advantages that have never been translated, however, into lower consumer tariffs. Debates were further complicated by all the issues around liberalisation itself. Privatisation became synonymous with liberalisation and vice versa. Administrative problems during the second phase of market opening (section 7.5.), issues around sudden price spikes in the spot market (section 7.9.), the Californian and other black-outs, stranded costs, DTe actions to set efficiency targets, and every small network disturbance – these were

all brought to bear in the debate on the liberalisation question per se. It was also politically relevant that the largest opposition party (CDA), that had previously backed the liberalisation process, was becoming increasingly critical, forcing the major government party, the PvdA, to redefine its position. In this political climate the CDA succeeded in forcing the government to nationalise TenneT, the national grid company.

April 2001 brought a detailed and lengthy negotiated resolution by Parliament specifying a number of conditions.³⁶ This resolution was then fully translated with the necessary details and modalities into a new, but provisional, ministerial ruling, in June 2001.³⁷ The intention was to further establish rules for dealing with complicated legal issues of economic and legal property rights, into law by amending the two energy acts. That draft law was introduced early 2002, but what might have been seen as a formality turned out again into another round of debates and discussions, in which all the same issues were raised time and again. These debates were still ongoing in the spring of 2002, when elections took place and a new government was formed. Jorritsma was succeeded by Herman Heinsbroek from the new Fortuyn Party. That government was very unstable, Heinsbroek stepped down and new elections were held. In the new coalition government Laurens Jan Brinkhorst emerged as the very experienced new MEZ Minister, and ordered a period of reflection about this emotional and complicated dossier. That period lasted for almost two years, but due to some legal flaws, the selling of two gas companies, Haarlemmermeer and Obragas, could no longer be blocked. Other concrete privatisation projects (Intergas, REMU and Eindhoven) could not be pursued, to the deep regret of their public owners.

During the reflection period, expert discussions continued, especially about modalities for securing public interests in the distribution network functions. It became increasingly clear that the required assurances would lead to very complicated models for the networks under privately owned energy companies. Like a Gordian knot, disentanglement could only be achieved by cutting through it. This was Brinkorst's radical conclusion, he informed Parliament in March 2004 of the decision to pursue full ownership unbundling of all networks.³⁸ Network ownership would have to be transferred from the energy company to its public owner directly. The energy company could then be privatised without any restrictions, as the networks were not involved. Public owners of the networks might also privatise them by transferring ownership rights to institutional funds under a specific arrangement requiring ex ante ministerial approval. Brinkhorst announced intention to put these proposals into law.

A majority in Parliament agreed to this policy during the summer of 2004, despite loud outcries and resistance from the energy industry and (some of) their shareholders. They feared severe losses if their networks were unbundled and further that they would become easy targets for foreign takeovers. They also feared forthcoming financing problems for their new investments, especially in new generation plant. They therefore warned of decreasing supply security. The Energy Advisory Board (AER) expressed other concerns, such as the risk of there being no Dutch energy companies left supplying the Dutch market. This was for the AER an unwelcome perspective from a national energy and industry policy point of view. Existing Dutch companies such as Essent, Nuon and Eneco should therefore be allowed to join forces and –as a national champion– face competition on the European market. Arguments were reminiscent of the 1996 GPB discussions, the project that was blocked by the now loudly crying energy company directors. MEZ and most Members of Parliament did not change their stance, however, and continued working on implementation schemes. Much attention went to the issues of cross-border leases (CBLs) and discussion on these complex issues continued to be both lively and weighty. Legislation was introduced in August 2005, and after more sometimes emotional debates in Parliament, the Second Chamber voted largely in favour in the spring of 2006. It

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³⁶ Resolution from Members of Parilament Crone, Voute and van Walsum. Parliamentary document 27250 nr. 38 (MEZ 2001).

³⁷ Ministerial ruling concerning privatisation energy distribution companies (*Beleidsregels privatisering energiedistributiebedrijven, Staatscourant* 2001, nr. 31).

³⁸ Parliamentary document 28982 nr. 18 (MEZ 2004b).

³⁹ See for example the discussion organised by the Clingendael International Energy Programme (CIEP 2005).

⁴⁰ Parliamentary documents, series 28982 (MEZ 2004b).

is expected that the Dutch senate will also accept the proposed legislation before the end of 2006. Further legal action by some companies and their shareholders has already been announced, but this is to be considered as a post-war fight. It will take another two years or so before full unbundling and divestiture is established.

Further shakeouts, mergers and/or takeovers will not wait that long, as the entire discussion period on the ownership issue has also included discussion on industry structures. Time and again the position of the Dutch energy industry was at issue. Questions were raised and suggestions were made for combining or merging the three large energy companies into a single one, creating a Dutch energy champion that could face outside European competition. Concerns were also strongly expressed that ownership unbundling would make commercial energy activity an easy target for foreign takeovers, which could further distort competition in the Dutch market and could even put supply security at risk. Part of the political process for gaining acceptance of the unbundling proposals was to consider further concentration on the Dutch market, which would implicate NMa and its merger control activities. Assessing mergers requires views about the 'relevant market'. Does it make sense to continue to view the Dutch energy market as the relevant one in the merger control context? Would it not be more appropriate to consider the European market or, even better perhaps, the North-West European market? Although NMa made various attempts to escape this question referring to concrete proposals, it had to ultimately present its views on the matter. In early 2002, during a first consultation with market parties, NMa explained why it had used the Dutch national market as the relevant market for energy when assessing a number of mergers and concentrations in the past and why it saw no reason to change that position for the future. 41 In 2006, however, when final political debates on unbundling were approaching and many stakeholders, including MEZ, were referring to the North-West European energy market as the market to concentrate on, NMa came out with a new and more extensive consultation paper. 42

Based on an extensive external analysis, NMa's findings were essentially that the relevant market from the perspective of applying competition law would still be the national Dutch market. This would not only be the case for the retail and balancing markets, but also for the generation and wholesale markets. Further analysis was effected on the impacts of potential mergers of two large Dutch companies and takeovers by large foreign firms. Only a takeover from a large German firm was likely to stand under the competition rules, whereas for the Dutch mergers a number of hypothetical remedies were indicated. Additional analysis considered conditions that would alter these conclusions, such as increase in interconnector capacity and/or more effectively usage of existing capacity by expanding TSO cooperation. From the perspective of industry structures, the discussion of creating a Dutch champion received further attention, including assessment of the potential remedies. From a policy perspective, analysis supported further market integration of the North-West European electricity and gas markets. MEZ is strongly promoting this policy and has taken the lead in starting a regional forum in which policymakers and regulators of the respective countries are discussing conditions for further market integration with TSOs. Concrete projects are also in place to increase interconnector capacity, including building sub-sea cables between the Netherlands and Norway, and the Netherlands and the UK, the latter one for both gas and electricity. These developments suggest that discussions for restructuring the Dutch energy sector are not yet complete.

⁴¹ Note on concentration in the energy sector (NMa 2002a).

⁴² Consultation document on mergers in the energy markets (NMa 2006b).

Emerging energy markets and some policy consequences

The dynamics of the energy market, once the liberalisation process had begun in 1998, created its own momentum in other energy policy issues, notably in relation to environmental policy objectives, but also in relation to the wider issues of energy supply security. Momentum was also seen in the power and gas markets and in projects to establish cross-border European markets. Below, we discuss environmental policy, followed by supply security and finally some comments on gas and power market issues in and of themselves.

MEZ policy for energy efficiency and energy renewables was quite successful during the 1980s and 1990s. Multi-annual voluntary agreements with efficiency commitments from industrial sectors, backed by government support schemes were very instrumental. Similar arrangements were made with the energy distribution companies with their MAP (Environmental Action Plans) for which MEZ allowed them to add a surcharge on energy tariffs for funding numerous and effective programs. Transition from a supply-oriented structure to a much more market-based demand-orientation made these policy approaches less appropriate and adequate. The Electricity Act 1998 contained a number of instruments, such as obligatory shares for renewable energy supply and/or take back assurances for decentralised power generated by captive consumers. MEZ was reluctant to introduce obligatory schemes, but decided instead for an early full opening of the market for green power. Demand was further promoted by exempting green power from energy taxation and supply was facilitated by the introduction of a system for tradable green certificates. TenneT got the legal monopoly to issue these certificates and control compliance.

Despite initial administrative problems, the market boosted and within a year or so more then a million households opted for specifically green energy supply. Most of the green power, however, had to be imported and this created two problems. Demand for scarce interconnector capacity increased, leading to high bidding for capacity in the auctions. Even more serious, due to differences in various subsidy schemes, Dutch taxpayer money leaked to foreign green power producers, who received additional income as they were also subsidized by their own national governments. This double incentive did not lead to additional green production. The arrangement was therefore terminated in 2003 and replaced by a more direct production subsidy scheme. The tax exemption was replaced by a surcharge on network tariffs (the MEP system), to be paid on all electricity connections. The proceeds were channelled to the green producers and TenneT got additional public tasks for running this scheme. In order to confer political stability and investment assurances, the whole financial scheme was run by TenneT, and kept outside the MEZ budget. This again required amending the Electricity Act.

More generally speaking, market-based instruments received increased attention in energy policy. A major step was made with the introduction of the EU Emission Trade System for CO₂, a system that was extended also to NOx in the Netherlands. Building new energy infrastructures in new suburbs was also facilitated via a competitive bidding system, which turned out to be less successful. Strategic oil stocks based on obligations from the IEA were another area for which tradable certificates were introduced. Competition in the market for gasoline and automotives should also be mentioned, for which new concessions for highway gas stations were auctioned and NMa began specific investigations on potential competition distortions. No conclusions were drawn however. On the other hand, the 2000-01 California power crises and consequent high prices, black-outs and market manipulation, raised concerns and nervousness for politicians and policymakers alike. Could that

⁴³ The interconnector capacity is discussed further in section 7.4.

happen in Europe, or in the Netherlands and if not, why not? Are we sure we are on the right track? MEZ reacted with a thorough analysis entitled, "California dreaming, it's such a sunny day?" DTe was also involved. These events were increasing public awareness about power cuts, which were occurring also in other European countries during the 2001-03 period, with the large black-outs in the northeastern US and Italy. The 2003 summer heat wave contributed to this awareness with Dutch power plants facing cooling problems. Earlier 2001 summer price peaks on the Amsterdam Power Exchange (APX)⁴⁵ added to this public concern, as did also numerous small-scale power breaks in the distribution networks. All these stories with their widening media coverage increased perception that there could be a relation between power cuts and liberalisation.

From mid-2001 onwards, policy attention for supply security increased in general and for electricity in particular. MEZ issued its second Energy Report, ⁴⁶ announcing more and better market-monitoring, including the investment climate for new generation, increasing DTe's remit and staff, ⁴⁷ resulting in decisions to increase market transparency and incentives for market actors to participate more actively in power markets. MEZ announced a further analysis of the power supply security situation. ⁴⁸ Discussions ensued with market actors and TenneT, in which various schemes were assessed, such as capacity markets. In the end, it was decided to take relatively minor steps with some concrete measures for TenneT to develop a safety net for periods of unusually high peak loads. In addition, it was also concluded that supply security was not solely a national issue, but that further cross-border market integration should be promoted, including agreements to respect import and export contracts in times of supply emergencies. Interacting with DTe, MEZ became increasingly aware that markets do not open by law and that additional market designs may be necessary. Early MEZ action in 1999 resulted already in the foundation of APX, which was later sold to TenneT, with additional legal backing.

Increasing interest from policymakers and the energy industry to focus on European market integration became more and more apparent. Cross-border trade issues, which had been discussed since 2000 in the context of the Florence and Madrid fora, did not receive much attention. But when concerns increased about national supply security and competition on the national market, also in relation to interconnector issues, MEZ became more active in examining cross-border issues. Especially under Brinkhorst, political contacts with Belgium and Germany were increased, resulting in political agreements to create in 2004 a Pentalateral Energy Forum. In the Forum, policy discussions are organised to promote market integration between the Benelux, France and Germany. Concrete agendas are drafted, as well as aimed at strengthening cooperation between TSOs and national regulators. During 2006 it was agreed to extend this Forum also to the gas market, possibly involving the UK and Norway.

⁴⁴ MEZ response to Parliamentary questions (MEZ 2000).

⁴⁵ See the Dutch Market Surveillance Committee report (2001).

⁴⁶ Energy Report 2002, Parliamentary document 28241 (MEZ 2002b).

⁴⁷ DTe staff increased from 15 full time equivalent (fte) in 1998 to 25 fte in 1999 (price regulation networks), to 33 fte in 2000 (Gas Act) and to its current 55 fte in 2001 (more oversight and more market monitoring).

⁴⁸ Parliamentary Documents 29023 (MEZ 2005) and MEZ website under supply security <www.ez.nl>.

The implementation challenge

Markets do not open by law, policy declaration or parliamentary resolution. Policy development, such as the new energy market paradigm formulated in the government's 1996 Energy White Paper, requires proper implementation frameworks. Such frameworks have concrete and sometimes detailed rules and procedures, sound and efficient business models and practices, competitive market designs, coherent and consistent stable legal frameworks and an effective and fair function for arbitrage, compliance and oversight. This would involve a massive operation in preparing and managing the transition from the supply-oriented centrally planned industry structures in gas and electricity to much more market-oriented, demand-steered and decentralised manifold decision structures. Such a transition implied detailed technical and economic assessments and decisions, for which new roles and responsibilities had to be defined, prepared, developed and applied. In this transition, the existing balance between the government and the market, between MEZ, the energy sector and the consuming industries had to be redefined. Further, for the transition a new public player – the regulator – had to be created, established and respected.

En route towards the Electricity Act 1998, the regulatory function was considered, although with some reluctance. During initial phases of market opening, the relation between the MEZ and DTe and the definition of their respective responsibilities was further developed and refined. The same applied with respect to NMa, based on the 1998 Competition Act. Both acts and both functions emerged from MEZ that had formulated the view to create a consistent and over time jointly operating functionality of two independent market authorities. By the end of 1998, MEZ had already decided that both should receive independent administrative body status (ZBO status)⁴⁹ and be merged into one organisation implementing both the Competition Act and the two energy Acts. Legislation to formalise this did not enter into force before 2004, resulting in a somewhat hybrid institutional arrangement for DTe during its first and determining years of operation. The story of these first years is told in this section.

7.1. Where and how to position DTe

In the early days of the preparatory process, the regulatory function was rejected. A UK-modelled regulatory authority was considered to be a superfluous bureaucracy, not fitting in the Dutch models of organising markets and business practices. The mere need of having a regulator was even seen as one of the strongest arguments against privatisation. It could not be denied, however, that a strong and independent authority would be necessary to check compliance by the network sector regarding arrangements for third party access and suppliers of captive consumers. This became all the more apparent when ex ante regulation was decided upon, and energy sector demands to set their own tariffs were rejected, and access conditions were set as subject to ex post government approval. The necessary division between policy and regulation made it logical to separate this new function from MEZ itself, which was in line with similar developments in other network sectors and the preparation of the new Competition Act and its new independent Competition Authority.

The preparatory documents for the new Electricity Act increasingly provided information about the new regulatory role.⁵⁰ Under MEZ, an office would be created with its major tasks being to set ex ante

⁴⁹ The ZBO status (*Zelfstandig bestuursorgaan* – Independent Administrative Body status) creates by law a de jure independent technical executive organisation implementing specific legislation; it has a specific and well-defined mandate and financing structure, with only limited and global ministerial intervention; periodical reporting to government about the execution and effectiveness of its tasks is required. Both NMa and DTe started as separate services of MEZ, with de facto but not de jure independence. Responsibilities were not shared, but for practical purposes, operational overhead was.

⁵⁰ MEZ 1996.

access conditions for the networks and to verify their compliance. Responsibility for captive consumer tariffs remained with MEZ, but it should delegate these tasks to the new office. Licensing of the networks would also remain with MEZ, but license preparation would go to the new office, which was first called *Dienst uitvoering en toezicht elektriciteit*, and later changed to *Dienst Toezicht energie* (DTe),⁵¹ when it also received tasks under the Gas Act. From the beginning it was clear that there would be a close relation with NMa, the Competition Authority. Although combining the two functions had been considered, this was not done to reduce complication during the initiating phases of the two organisations. Separate functions would also better serve the relation between the regulator and the energy market. For practical purposes, however, most of the overhead and administrative functions were merged between NMa and DTe. From 1999, preparations were made to merge more fully and to create an 'energy chamber' within NMa. One consideration was that in monitoring very complex and partly regulated electricity and gas markets, effective decisions could be made in applying either regulatory or competition instruments or even combined. It took until mid-2005 before this merger was effectuated. NMa is now a full ZBO, with DTe as the directorate responsible for the sector specific energy acts.

DTe's new office had to be created from scratch, building-up its own technical, but independent expertise. It was a policy choice to put a heavy preparatory emphasis on the energy sector itself, requiring by law that all network access conditions had to be proposed by the network sector. The law also required an extensive public hearing process, during the sector preparation process. As this would facilitate the necessary checks and balances, it also was assumed that this would limit the need for specialised technical expertise at DTe. It was further assumed that the independent network operators and their new trade organisation would make independent and unbiased assessments in the preparatory process. DTe's decisions could then be fully based on the proposals from the network operators. A small staff of some 15 full time employees was considered sufficient. A nice theory, but practice was different. Network operators were unable to arrive with those unbiased independent views, market participants and MEZ expected DTe's own assessments and legal timeframes for the decision-making procedures were short. Expertise was therefore hired from external consultants and joint teams were created with DTe staff. DTe went through a forced and turbulent learning curve on many regulatory issues. MEZ and Parliament, market actors and network operators all formulated their expectations and exerted pressure on DTe to deliver strong and sound decisions, with wherever possible tough efficiency targets. Complaints by market actors about incumbents and network operator behaviour were also sent to DTe, in addition to public concerns about the California black-outs. This brought Parliament to the quite uncommon step of passing a unanimous resolution to "..strengthen in the shortterm in qualitative and in quantitative terms DTe staff."52 From 2002, DTe staff was increased to 55 full time equivalents.

The relation with MEZ was formalised in a separate protocol, defining modalities about mutual information sharing and mandating and delegating a number of MEZ tasks to DTe. Some of the MEZ decisions under the Act were fully delegated to DTe, such as captive consumer tariffs and supply licenses, whereas other decisions were fully prepared by DTe, but as an advice sent to the Minister (for example, the licensing of the network operator). A politically important issue was how and when DTe should give information to the Minister, when he or she had to give its policy justification to Parliament. A comparable protocol was concluded also between MEZ and NMa.

7.2. The first steps: electricity

As discussed in section 4.1., the Electricity Act entered partially into force in August 1998, with only the institutional articles.⁵³ DTe was formally launched and the energy companies had to legally unbundle their networks and apply for ministerial consent. Additionally, supply licenses had to be applied for. MEZ was to issue these licenses and confer consent, but all preparatory work was

⁵¹ Internationally, DTe used the name 'Office for Energy Regulation,' which is still used, but goes somewhat beyond the Dutch name as the regulatory function has gradually been taken back by MEZ.

⁵² The OEPS Act (MEZ 2002a).

⁵³ It should be noted that by August 1998, the market for large industrial consumers was also formally opened, but this required no further implementing or regulatory action. Some interesting consequences are discussed in section 7.4.

undertaken by DTe. Within a month DTe issued detailed formats for the required information to assess the proposed network unbundling modalities. This engendered many detailed discussions right from the start about the legal interpretation of the Act; the organisational, financial, administrative and legal tasks of the network operator; its strategic activities and the activities that could be outsourced; what should go to the unbundled network operator and what could stay with the energy company.

A key factor in the whole process was the difference between 'meagre' and 'fat' operators, for which both models were basically allowed under the Act. A meagre network operator had a very limited staff, with all the necessary network services hired from the energy company. This model was not considered to be in line with the spirit of the Act. The fat operator was the one with all the necessary network staff and resources, although with company statutes limiting the powers of the management. Another element was that network assets were never put on the network operator's balance sheet, although part of the MEZ briefing, this was never put into law. Discussions on network financing brought the issue of sale and leaseback arrangements to the table. All these aspects, that later became the core of the heated privatisation debates (section 5), gave DTe a quick start in seeking its position vis-à-vis the network sector. The sector was itself divided, as no proposed network operator model was alike. Looking back, the unlucky wording in the Act of 'network operator' instead of 'network company', was at the root of many of the misfirings.

In March 1999, DTe sent its opinion and advice to MEZ, indicating a large number of flaws.⁵⁵ DTe wanted to continue the necessary preparatory work for implementing the material articles of the Act, which required formally established network operators. DTe therefore suggested that MEZ issue consents, but under a number of strict conditions. MEZ opted differently, allowing the energy companies to amend their applications on the basis of a new separate ministerial ruling.⁵⁶ The ruling largely followed DTe advice, specifying the basis for the contract to manage the relation between the network operator and the network owning energy company. That contract would cover issues such as compensation paid to the owner, subcontracting modalities, physical positioning of technical systems and control rooms, and rules for the network operator's financial independence. Because most energy companies were horizontally integrated, covering electricity, gas and heat networks, this created difficult choices as the proposed Gas Act did not require strict network unbundling as for electricity, and whereas for heat networks, no rules at all were announced.

The new ruling received partly positive reactions, but for a number of cases, discussions continued. When the second part of the Electricity Act entered into force (July 1999) no MEZ network operator consent had yet been issued and even at the end of that year, MEZ had to confirm to Parliament that only one large energy company (the Nuon group) had received consent. Most of the rest followed on short notice, but some, including TenneT were still withstanding. The TenneT issue was related to the stranded cost issues (section 4.3.), and was finally resolved in 2000 when the issue was put into law and the state had bought TenneT.⁵⁷ At that time, the Gas Act was amended with identical network unbundling requirements. During these preparations Dutch energy companies did not deny their basic public utility role. The lack of a formal status did not prevent them from constructively working with DTe, albeit with many differences of opinion.

The administrative process of issuing supply licenses was relatively speaking an easy one. The only issue at stake was the legally required supply plan, in which the licensee had to demonstrate how it would cover its supply needs for the next four years. As a safeguard for captive consumer supplies, this issue had received much attention in the parliamentary process. However, all of the proposed supply plans were very poor, indicating only supply coverage under the existing protocol contract until

⁵⁴ The *Stroomlijnen* paper (MEZ 1996) indicates clearly that : "...networks, including relevant assets, must be be transferred to separate legal entities...".

⁵⁵ DTe advice to MEZ on approval with the notification of network operators (letter 3 March 1999).

⁵⁶ Published in *Staatscourant* nr.161. See also MEZ letter to Parliament, 7 December 1999, nr. E/EE/AE/99078730.

⁵⁷ The OEPS Act (MEZ 2002a) as discussed in section 4.3.

2000,⁵⁸ with a mere reference to the (spot) market for the subsequent period. DTe brought this issue to MEZ attention, but the reaction was that a more strict approach could prevent further spot market maturity. Licensing thus became a formality.

7.3. The first steps: gas

The implementation of the Gas Act was also subject to some commotion. This was not only due to the large interests of many stakeholders, but also to last minute amendments of the Act and the resulting somewhat shaky formulations and interpretations. The amendments were controversial, as they created a hybrid access system for third parties, for which negotiations were based on indicative tariffs and conditions, pursuant to guidelines set by DTe. DTe's tasks were thus extended to gas, much to the dismay of the gas industry and notably Gasunie. The organisation of large industrial energy users, VEMW (*de Vereniging voor Energie, Milieu en Water*), initiated the relevant amendments to the proposed law, and expected results from DTe for finally setting out steps to open up the Dutch gas market. Timing also became an issue when MEZ chose to bring the new law into force by August 2000, for requiring DTe, by law, to issue its first guideline during that same month in order to set the scene for 2001.

DTe succeeded in issuing its Guidelines 2001⁶¹ before the end of the month. These were very clear in their objectives, i.e. a market-oriented approach with respect to the primary transportation services and cost-orientation based on efficient network operation for the transport tariffs. There had been no time for an adequate consultation process, however, so many industry and market players were taken by surprise. DTe announced that it would stick to its principles but would be reasonable and case-oriented in its compliance policy. It also made clear that the guidelines would only be applicable for 2001 and that guidelines for 2002 would be based on an extensive consultation process with ample opportunity for information provision and further analysis. The first step was set, however, with cheers from VEMW, but very negative reactions from the gas industry and Gasunie, the latter threatening to ignore DTe's guidelines. The risk of an escalating confrontation made MEZ very nervous. Fearing political setbacks in the ongoing liberalisation process, MEZ strongly called upon both parties to manage the situation and apply the necessary reason and wisdom.

In early 2001, DTe announced⁶² that it had reached agreement with Gasunie, and that Gasunie would lower its transport tariffs for 2001 by 6.5% and would also split its tariff into a transport component and commodity one. In addition, Gasunie announced preparations to begin legally unbundling its network. Gasunie was also ready to cooperate with DTe in preparations for the 2002 guidelines, whereas DTe announced withdrawal of its compliance actions. The analytical preparations focused on balancing issues, such as the hourly balancing rule, and other operational modalities of the gas grid. Work also started on cost-orientation in Gasunie's transport tariffs and the technical aspects around third party access for storage.

7.4. Market opening: the first phase, 1998-2002

Formally, the market for large industrial users⁶³ and wholesale trading opened 1 August 1998. In actual practice, however, there was no market infrastructure. Developing this infrastructure with all the necessary business rules and procedures was seen as a market responsibility. Both MEZ and DTe were confronted with many questions about implementing interpretations and details. It became clear that many arrangements from the past were still ongoing and could not be easily abandoned. This was especially the case with the unbundling of Sep and the four generators, still jointly bound under their

⁵⁸ See section 7.5.

⁵⁹ See Correljé et al. (2003) for a more extensive description of the history of Dutch gas policy and the resulting considerations about gas market liberalisation.

⁶⁰ As with the Electricity Act, the Gas Act also could be put partially into force by Royal Decree. In order to meet the EU Directive's implementation deadline, MEZ pushed for the mid-August date, especially putting the access articles into force.

⁶¹ DTe press notice (DTe 2000).

⁶² DTe press notice (DTe 2001b).

⁶³ Users with a connection > 2 MW; their market share was about 33%.

Cooperation Agreement.⁶⁴ The still unresolved issues of stranded costs hindered the unbundling, as discussed in section 4.3. and forced MEZ to give a legal waiver for this agreement under the Competition Act. Even more frustrating was the still ongoing four-year electricity contract between Sep and the distribution sector. This 'protocol' was a de facto take-or-pay contract between the generators and the distributors for the 1997-2000 period. The protocol set total central production costs for that period, including an amount of some €200 million covering stranded costs, and a planning procedure for the distributors for their yearly load, to be nominated on an ex ante basis. The planning procedures placed risks fully with the distributors, limiting their market flexibility. It is interesting to note that the protocol was concluded with MEZ approval, as under the Electricity Act 1989, maximum end use tariffs were still applicable until 2000. The protocol also had to be legally waived under the Competition Act. As a result, the generators were unable to compete and the distributors were barely able to trade when a third of the market opened in August 1998.

The wholesale market thus remained largely closed for 1999. Electricity suppliers had already committed to their load under the protocol and generators were contractually prohibited from taking up new supplies. New entrants and traders were exploring their opportunities and the large industrial users were very interested. As the German market had already been opened up and seen a lowering of wholesale prices due to spare brown coal based generation capacity, all attention now turned eastward. The National Dutch Railways (NS), took the lead in concluding a large import contract. Others followed and there was a rush on import capacity. Interconnection capacity was not unlimited, but allocation was handled by TenneT, which at the time was still owned by the four generators who had no interest whatsoever in allocating capacity to the market. A large share of this capacity had to be allocated to the still ongoing long-term import contracts from Sep. TenneT was faced with difficult decisions and many market actors, including also the distributors looking for imports to compete in the market for new industrial customers, complained loudly about TenneT's policy and turned to DTe. Allocation for 1999, however, was already set and could not be changed. DTe had no legal mandate, as the relevant part of the Act had not yet entered into force.

The next year brought new opportunities for market actors and for DTe. Once the Act was further applicable, by 1 July 1999, DTe issued a consultation document on interconnector allocation⁶⁷ and its first formal decision was about import capacity. During consultations, it had become clear that DTe would not accept preferential treatment for Sep contracts. Market actors requested maximum import capacity. Also, the concept of market-based allocation, such as capacity auctioning, was discussed. Although DTe was very receptive to this idea, it conceded that preparations would require more time. Before the end of 1999, DTe decided⁶⁹ to order TenneT to allocate import capacity on a pro rata basis, in accordance with the capacity requested by market actors, without preferential access for Sep contracts. It also ordered TenneT to propose by 1 July 2000 an auction system for 2001. TenneT undertook this very effectively, concluded a cooperation agreement with German and Belgian TSOs, and from 2001, a successful auction system was applied, serving as an example to other EU countries.

⁶⁴ This contractual agreement was based on the Electricity Act 1998 and arranged for the generators UNA, EPON, EPZ and EZH their joint relationship and the role they delegated to Sep, their joint offspring, in running the national electricity supply system.

⁶⁵ In hindsight, it is difficult to understand why MEZ continued to accept the protocol. When it was discussed in 1996, the idea was that final market opening would take place in 2007 and that the GPB would follow shortly. Especially to help the GPB establish a sound financial basis, the protocol concept was a logical one. But when the GPB failed early 1998 and market opening was accelerated, the 1998 situation was totally different and a continued operation of the protocol was completely illogical.

⁶⁶ This legal waiver brought the private contract into the public domain. Parliament was not amused, as it was badly informed about the commercially confidential contract and only after pressure on MEZ, was Parliament further informed.

⁶⁷ DTe 1999a

⁶⁸ DTe decision granting 250 MWe preferential import capacity to APX, triggering an immediate appeal from Sep, which DTe rejected in late 1999; Sep did not continue its procedure.

⁶⁹ DTe decision nr. 005, 12.11.1999 (see DTe 2000b).

The pro rata allocation and especially the refusal to abandon the Sep contracts created many rows in the market and in the industry. Some large distributors had expected more import capacity and had anticipated this in their nominations under the protocol. They were now facing a shortage and had to buy additional electricity, either on the APX or with a high penalty under the fall back arrangements of the protocol. Media concerns about price explosions triggered political and MEZ attention. The distributors tried to pass on the extra costs to captive consumers, but both DTe and MEZ heavily opposed this. Subtle MEZ intervention brought about a solution under the terms of the protocol itself. But the Sep contracts⁷⁰ issue could not be resolved by subtle interventions. MEZ was not amused by this part of the DTe decision, as it was of the opinion that as part of the TenneT set-up, unbundling from Sep, capacity allocation of the Sep contracts was properly arranged for. DTe, however, concluded that without an explicit legal rule, the general principles of the Competition Act would prohibit preferential treatment. As many appeals were already underway, DTe had to review its decision. Because the issue of Sep imports was complicating the stranded cost negotiations, MEZ took the strong measure of ordering DTe in a generic rule⁷¹ to give these contracts preferential access. DTe had no other choice than to follow the order. With the help of NMa⁷² MEZ was forced to arrange the issue in law. This was done in the OEPS Act, but not before difficult discussions with a non-receptive Parliament, that further limited the access rule.⁷³ Subsequent DTe decisions on the Sep contracts continued to be legally challenged by large industrial users and some electricity suppliers, finally resulting in a ruling from the European Court of Justice, rejecting the preferential arrangements as being noncompliant with EU law. 74 This brought TenneT to terminate by 1 September 2005 the still ongoing but more limited Sep allocations, it also resulted in a number of financial claims from industrial users and suppliers to MEZ, which are still pending.

Transition issues occurred also in the opening of the gas wholesale market. Analogous to the electricity protocol, the Gas Act accepted continuation of the Gasunie contract with the distribution companies supplying captive consumers. Although these suppliers were allowed to buy gas from other wholesale suppliers, including imports, this never happened, continuing the gas protocol until 1 July 2004. During 2003, DTe commented that household users would be totally dependent on the low calorific quality gas from the Groningen field, which would limit competition. Competitive quality conversion services would solve this limitation, as competing gas from other sources would always have higher calorific values. DTe therefore suggested making these conversion services (where Gasunie was their sole supplier) part of the regulated system and wrote this into the Guidelines 2005.⁷⁵

7.5. Market opening: the second phase, beyond 2002

The 1996 Energy White Paper gave no date for full market opening, but did mention dates for the first and second phases, 2002 and 2004 respectively. In the following years, a number of accelerated dates were given, almost before the first phase had even started. MEZ's Jorritsma decided, in 1999, on moving the second phase to 2002 from 2004, and a third phase to 2004 from 2007, when technically feasible. It was clear that opening the market for such large groups of consumers would require much practical and technical preparation and the indispensable involvement of the energy industry and other

⁷⁰ Large scale import contracts between Sep and EdF, and with Germany's VEW and RWE. The contracts were concluded with explicit MEZ approval and were seen as part of the stranded cost issues described in section 4.3.

⁷¹ MEZ decision 11.07.2000 (*Staatscourant* Nr. 134, 14-07-2000), implemented in DTe-decision 2000-016, 17.07.2000 (see DTe 2001c).

⁷² The Electricity Act 1998 specifies that the NMa Directorate-General has to give its opinion when MEZ is giving the DTe Director a general order (*Electriciteitswet 1998* – MEZ 1998a).

⁷³ Parliament amended the preference by limiting the MEZ proposal from 1500 MWe to 1000 MWe.

⁷⁴ ECJ decision C-17/03 of 7 June (EC 2005c), with an interesting Commission Staff Working Document from 26 April (EC 2006).

⁷⁵ DTe Information & Consultation Document: Analysis and Development of the Gas Market (DTe 2004); and its resulting translation into Guidelines Gas Transport (DTe 2005).

⁷⁶ The middle segment of the market to be opened – for electricity consumers with connections between 2 MW and 3x80 A, covering another third of the market and representing some 50,000 consumers. For gas, the range was an annual consumption between 1 and 10 million cubic metres.

market actors. MEZ hired an external consultant⁷⁷ and also asked DTe for advice on implementing modalities. It was widely accepted that technical issues would be critical. DTe, for example, said in its advice: "all necessary technical provisions to facilitate market forces will have to be available. Failing, customers would be worse off, as they will not be able to rely anymore on the protective devices from regulated supply tariffs en licensing conditions."⁷⁸

To ensure the timely conclusion of all preparatory work, DTe called for a process organisation with coordinating, directing, controlling and informing functions and mandate, falling under direct MEZ responsibility. This advice was based on UK experience and supported by the MEZ consultant. In the UK experience, the first phases of market opening had to be postponed as the energy industry failed to deliver. The choice was thus made to opt for a much more binding approach under the leadership of Ofgem, the regulator. All necessary system and procedural adaptations were inventoried and programmed, for which Ofgem would have the final say if parties did not come to an agreement. An incentive based approach with 'sticks & carrots' was also introduced.

MEZ did not follow DTe's advice, because it had agreed already with EnergieNed to opt for the 'millennium model,' which had been successfully applied in preparation for the millennium bug, when industry and MEZ had jointly assessed and prepared necessary actions in the event of computer system failures on 1 January 2000. There was also a policy aspect, however, as MEZ was preparing its ministerial rulings on privatisation and would prefer no immediate rushing into privatisation before the ruling was set (section 5). EnergieNed was only prepared to do so if the market-opening project would be run by a common platform representing all stakeholders. And so it was decided, establishing the PVE (Platform for Accelerating Energy) chaired by Wim Dik, former CEO of KPN (the national telecom incumbent). All existing stakeholders were there, MEZ, Gasunie, TenneT, EnergieNed, VEMW and other business groups; newcomers were excluded; and the position of *Consumentenbond*, the national consumer organisation, was unclear. DTe was not and had no intention of being involved. One of the things that had to be amended related to network access rules, set by DTe. During the summer of 2000, DTe issued a framework for assessing proposed amendments to these rules, stressing that a timely amendment would require a correspondingly timely procedure. ⁷⁹ Further, DTe suggested qualitative and quantitative conditions for switching procedures, using the slogan "no barriers to trade or switching". PVE rejected the framework, stating that agreement within the Platform, including MEZ, would bypass DTe's involvement, but had to accept DTe's role later on.

Tensions increased as 2002 approached. There were frequent complaints about delays, efforts to keep customers beyond the opening date, and DTe was approached many times to give its public views. It finally did so in September 2001, with statements on contract cancellation, meters and metering and cost coverage. DTe stated that preparatory costs for market opening would not be covered under network tariffs as market opening had already been announced in 1996. The Electricity Act stated clearly that launching tariffs would start as of 2000 and would be based on 1996 levels, unless there were clear unambiguous and extraordinary circumstances to increase tariffs. All preparatory costs for market opening could have been planned, except for the costs related to the acceleration per se. DTe was prepared to accept these costs, when demonstrated, but despite loud outcries of anger from the sector, they never used this opportunity. The situation with gas complicated the issue, as the Gas Act was still unclear regarding connection rules and metering. This almost brought preparations to a complete standstill. EnergieNed, fully aware of the critical paths looming closer and closer, issued several statements to the effect that all was going according to schedule. DTe undertook an inquiry with individual network operators with the same conclusion. EnergieNed assured that from January 2002 almost all 60,000 free consumers could switch supplier without delay.

⁷⁷ PA Consulting, a company that had consulted for the UK market opening programme.

⁷⁸ DTe advice to MEZ on accelerated liberalisation of the electricity market (21 February 2000).

⁷⁹ DTe advice to MEZ on accelerated energy market liberalisation (summer 2000).

⁸⁰ Open letter from DTe, with the eye on 2002 (see DTe 2001d).

The first weeks of January 2002 instead brought a number of problems and complaints about switching. Systems were not adapted, metering was not settled, network operators reacted too slowly and management failed to take action, as relations with the mother company were still very strong. DTe changed its Grid Code requiring switching requests to be notified within a working day and to be handled within five working days. DTe had no adequate means for effectively enforcing compliance due to complicated procedures. It therefore decided not to act in individual cases, but only if there was a demonstrable trend in non-compliant behaviour. On that basis large companies as Nuon and Essent got binding directives, with resulting public naming and shaming.

In retrospect, it can be concluded that the preparatory process was grossly underestimated, for instance the customer switching rate was double the numbers anticipated. PVE-agreed procedures, unless translated into DTe rules, were not always followed or uniformly applied. An 'independent' operating clearing house, established by the major energy companies, failed to deliver properly. Regulation of the meter market was legally biased, especially for gas, leading to many frustrations. Network operators, in practice, were unable to act independently with middle management levels still feeling family relations with their parent energy company. This all did, however, increase pressures around preparations for the final phase.

7.6. Market opening: the final phase, beyond 2004

By mid-2003, there were still numerous delays and unresolved issues. Doubts were growing as to whether the January 2004 target could be met. MEZ organised a second opinion study using an independent high-level review group, headed by former MEZ Junior Minister Yvonne van Rooy. The group issued various reports on technical preparations and modalities for continuing consumer protection for the household sector. This last issue was new, because the original plans had not foreseen additional protective devices other then the continued price monitoring and ex post DTe intervention when needed. The van Rooy group especially mentioned good information, legal protection and a safety net for supply assurances should the supplier fail to deliver. This increasing attention was due to many complaints and questions about energy billing, and when switching failed to take place. The early and full opening of the green power market was already of concern to small consumers when confronted with sometimes aggressive and direct selling practices. In addition, the new EU Directives made explicit references to household consumer protection devices. Another element was the bankruptcy of medium size supplier Energy-XS, with some 60,000 customers, leading to strong calls for safety nets and securing deliveries for households. This all resulted in further detailed legislative requirements, further complicating both the Electricity Act and the Gas Act.

The new MEZ Minister, Brinkhorst, arriving in early 2003, decided to postpone the final phase to July 2004, bypassing advice both from the van Rooy group and from PVE, the latter having even bullishly suggested to go for October 2003. PVE chair Dik angry left his position after the Brinkhorst decision. Brinkhorst also began meeting with energy CEOs on a regular basis, discussing the state of the preparations and also making them personally and morally liable for failure to deliver. EnergieNed came with additional system tests; DTe improved many of its codes, strengthened supply licenses, started additional arrangements for dispute settlements, opened consumer help and complaints desks and started to report on them. The detailed arrangements in the two energy acts were further implemented in secondary rules and regulations, including the earlier mentioned safety delivery nets and the modalities for price monitoring. Large information campaigns were started by MEZ and by the energy sector and when the final hour passed on 1 July 2004, all went smoothly. The fact of being able to switch energy suppliers is now largely accepted as a normal practice, with very efficient and effective administrative procedures.

At the end of the day one could conclude that it was wise to introduce market opening step-by-step. But each step had required proper preparation that was underestimated by all concerned, leading to numerous transitional administrative and technical problems. What did fail was the lack of a well-defined master plan and an organisational set-up to run it and to make binding decisions, using incentives and penalties when appropriate. Panicky political reactions sometimes brought additional detailed and complicated legal requirements. Finally, one could question whether the acceleration of market opening, as announced in 1999, was a wise and sensible move.

7.7. Network access and tariffs: electricity

Once the Electricity Act had fully entered into force in July 1999, the Technical Conditions for network access, the Tariff Code and the network tariffs could formally be prepared. These decisions had to be taken before the end of 1999, enabling their application by 1 January 2000. This required timely proposals by the network operators, taking into account the formal procedures that had to be applied. In accordance with the Act, MEZ expected that the network operators would take due account of the views of all stakeholders in preparing their proposals, but it became quite clear from the outset that this assumption was wrong. Thus, DTe had to organise full and extensive public hearings, both written and oral. By November 1999, the Technical Codes, covering a grid code, a system code and a metering code, were established.⁸¹ It was expected that these codes would be stable, but that was another naive assumption. Market dynamics, reactions from market actors and network operators, necessary amendments due to market opening, appeals and procedures – all worked to transform the codes into living documents. These events brought DTe during its first years to really act as a regulator, developing regulatory policy and even operating as a competition engineer, as in the case of interconnector allocation procedures. These in turn gave rise to increasing tensions in the balance between policymaking by MEZ and its political relation with Parliament and the DTe role as an implementing body, including its compliance and inspection functions. This balance was redefined with the 2004 I&I Act, that afforded a wider role for MEZ (and Parliament), with the re-introduction of ministerial rulings to be set by MEZ, as a further policy guidance for the codes.

Crucial elements for access conditions were the financial conditions, i.e. the network tariffs. This turned out to be a very particular and controversial issue. As indicated earlier, the Act was very clear. Existing integrated electricity tariffs had to be split into a network component and a supply one, as of 1 January 2000, with the integrated 1996 levels used as their reference. Furthermore, network tariffs had to be based on a tariff structure, requiring a separate decision in a Tariff Code. This should then be translated into yearly network tariff decisions for the individual network operators, requiring furthermore the application by law of an efficiency factor. The Act stated that this had to be calculated using the RPI-x methodology, for which the yearly increase would be determined by the inflation factor (RPI) minus the efficiency factor (the 'x'). DTe would set 'x' for a three-to-five year period, but the Act was not precise in determining the procedure for setting the methodology. A similar approach had to be followed for the captive consumer supply tariffs, for which MEZ would use the fully DTe-prepared decisions.⁸²

7.7.1. The Tariff Code

The Act contained some principles for the Tariff Code. A system for integrated network costs via a cascade model, where transmission costs were passed to the distribution grids and then onto network users. A postage stamp system would equally be applied, with transport distance independent tariffs, and furthermore a cost causality principle. During the political discussions much attention was given to the position of cogeneration. Dutch energy policy had heavily and successfully promoted decentralised cogeneration, a policy that had to be gradually terminated with the introduction of the new market system. MEZ, supported by Parliament, wanted to maintain the market position for cogenerators without distorting the European market position for the large generators. DTe strongly promoted non-discrimination in network access, treating all generators alike and therefore not accepting different network tariffs for different generation technologies. It adopted as a slogan: "no energy policy on the network." During the debates in the legislative process, it was accepted, however, that decentralised generation would lead to lower network costs and that these generators should receive a fee for that. In order to give them a competitive advantage, the Act required a so-called Gtariff for large-scale generators that were connected to the higher grids. This rule made discussions about the Tariff Code exciting ones.

In their proposal, network operators arrived at the G-tariff in the form of LUP (a national uniform producer tariff). They proposed to give this G-tariff a zero value, as there was no European policy on

⁸¹ DTe-decision 005, 12-11-1999, *Staatscourant* 16-11-1999, nr. 221.

⁸² DTe had also to prepare for MEZ the so-called feed-in tariffs for small scale green power production.

G-tariffication. This proposal was challenged by the cogenerators who argued that this would bypass the political discussion, for which cogeneration was promised an advantage vis-à-vis large-scale generators. DTe accepted this reasoning, offering more weight to the national level playing field for cogenerators than to the European one for generators. The Tariff Code was set in September 1999, putting the LUP-value at 25% of transmission grid costs. DTe added that there was no need to wait for a European policy, but that it would argue strongly for a European G-factor in the Florence Forum discussions. This controversy continued in courts and in Parliament, as the cogenerators were not fully satisfied. In court, DTe's position was maintained, but in the political arena further action was required, leading to additional, albeit small scale reallocations of costs between network operators and cogenerators. The European discussion on harmonisation of network tariffication principles stalled. DTe decided in 2004 to return the LUP value to zero. This policy-regulatory interaction is a good example of the difficult balance between MEZ and DTe.

7.7.2. The '2000 tariffs'

As indicated above, the 2000 tariffs had to be split, but could not go beyond the integrated 1996 levels. The Act gave some grounds for keeping this approach, such as necessary new investments or fully exogenous cost increases. In preparing for this split and the application of the 1996=2000 rule, DTe asked for input from EnergieNed. But the energy industry organisation was either unable or unwilling to offer practical input, leaving it up to DTe to develop the model. DTe opted for a practical approach: either you accept the 1996=2000 rule, or you come forward with a proposal for an extensively argued increase, for which a number of arguments however, were considered as unacceptable in advance. Most network operators and suppliers opted for the 1996=2000 route and before the end of the year all tariff levels for 2000 were set. Many practical difficulties emerged in the comparisons with the integrated 1996 levels, for which arbitrary choices had to be made resulting in mistakes and misinterpretations. Early 2000 saw a number of new tariff decisions with corrections to the earlier ones. Further difficulties emerged with tariffs for network connection, when it became apparent that network operators had used many different interpretations. This resulted in DTe postponing decisions and beginning preparation of a separate framework for setting connection tariffs. Subsequently, this had to be again amended with the emergence of special situations such as public lightning or large scale temporary connections, for example, for village fairs.

7.7.3. The efficiency target

Setting efficiency targets was another crucial element of the new system. The Act was both clear and limited, since it only mandated DTe to establish these targets for a three-to-five year period. The supporting legislative documentation indicated a number of guidelines, such as that different efficiency levels for different network companies should lead to different targets and that efficiency levels should gradually move into similar, identical levels. DTe learned that several approaches were feasible. The Ofgem approach for instance considered setting of 'x' factors to be more of an art than a science, whereas the Norwegians were using strict mathematical approaches. DTe hired mostly UK expertise, heavily drawing upon the ongoing scientific debate in the UK. 83 DTe published its first Information & Consultation document on the matter in July 1999.84 Basic philosophies were output steering, as earlier agreed upon with EnergieNed, and benchmarking, comparing network operators on their respective efficiencies and effectiveness. DTe organised several workshops with the network sector, receiving valuable inputs and reactions. A further document was issued in February 2000, with a description of the methodology and a number of implementing modalities. 85 The first regulatory period would last for three years and was to be used as a transition during which various efficiency levels would gradually merge. DTe would refrain from claw backs, when cost reductions bypassed efficiency targets. It also set rules for determining the regulatory asset base (RAB) and announced that from 2003, a system of benchmark competition would be used, whereby efficiency targets would be based on a system of best sector practice. Further scheduling the process, DTE announced that within

⁸³ For example, Dieter Helm and David Newbery, who both published various articles on the issue; Newbery became the most important external advisor to DTe.

⁸⁴ Price cap-regulation in the electricity sector; Information & Consultation Document (see DTe 200b).

⁸⁵ Guidelines for price cap-regulation in the Dutch electricity sector (see DTe 2001c).

several months industry would receive a set of data requests, draft 'x' factors would be communicated in July and final decisions would be made by September. This would conform with legal obligations for the operators to propose their network tariffs before October and allow DTe's tariff setting for the next year by the end of November. DTe called the schedule very ambitious, but not impossible.

7.7.4. The 'x' factors and their impact

Calculating and setting the efficiency target was both complex and difficult for all concerned. 86 The first step was for DTe defining the data sets and their consequent assessments and processing. Data definition and interpretation together with all sorts of inconsistencies between individual network companies, were combined with cumbersome discussions and pressure to meet scheduled draft decisions during the summer of 2000. Many companies were shocked by the draft outcomes and EnergieNed proposed to start with a pragmatic generic cut, taking more time to sort out all the issues. They also argued that individual company situations should be taken more into account and that the companies were already in a hectic process of organising their new network operators, and rushing to prepare for the accelerated market opening schedules. The whole set-up for the gas networks, mostly integrated with electricity operations, was still unclear. But DTe stood firm and argued formally that the Act did not allow for a slow start; nor was DTe prepared to resort to the polder model (the Dutch manner of wheeling and dealing to achieve consensus). The energy industry had known for years that they would face efficiency targets for their networks and could have been prepared. A further determining factor was the lack of trust and confidence between DTe and the network operators. From DTe's perspective they were monopolists that would try to cheat anyway; conversely, the operators felt that the regulator lacked adequate knowledge and expertise to regulate them.

DTe issued a series of 'x' decisions by September 2000, followed by network tariff decisions before the end of the year. As expected, this brought heavy criticism and a storm of appeals. The Dutch system provides for a two-track appeal. The first round consists of administrative appeals, requiring a review by the decision-making body, DTe, resulting in secondary decisions. The second round is at the independent CBb (College van Beroep voor het bedrijfsleven), a court specialising in economic juridical cases, which confers a final decision that is not open to further appeal. DTe faced the problem of its internal administrative organisation being unable to handle so many appeals, further it had delegated the process to the NMa's legal service, for which capacity was not directly available to handle the complex legal and economic issues. It took almost a year before a new round of decisions was taken. DTe issued this second round in September 2001, adjusting the asset valuations and correcting a number of failures in the benchmarking process. Asset valuation during the first round had to be undertaken without full information from the network operators on their historic cost base. They were simply not prepared to submit this, forcing DTe to make its own calculations. During the second round this situation changed, but when DTe began requests for data as agreed, heavy public criticism was expressed, complaining that the regulator had gone too far in requesting too much detail from the past. When the datasets arrived, again, they were not always consistent and comparable.

As expected, this second round of decisions was also appealed, this time at the CBb. The grounds for appeal basically centred around DTe's benchmark methodology. There were also a number of detailed data issues, again due to numerous mistakes, which were recognised by DTe. In addition, there were a number of practical and legal complications. The tariff structure for the cascade model required that 'x' factors for the higher voltage levels be translated into the lower ones. And legally, the *reformatio in peius* principle had to be applied, meaning that an appeal decision cannot leave the appeal-maker worse off as compared to the original decision. The situation was further complicated by the introduction of a similar process for the gas grids. DTe and the companies agreed that data issues should not be brought to the CBb, and jointly decided early 2002 to undertake a large-scale correction round that was finalised during August 2002. This third round of decisions was never implemented as the CBb ultimately decided that the whole system was not in conformity with the Act.

⁸⁶ See Nillesen and Pollitt 2004.

During that same period, not only 'x' factors for the networks were set, but a similar process also was taking place with respect to the supply tariffs. As with the networks, DTe had set 'x' factors for individual regulated supply companies. And, similarly, all decisions were appealed. These decisions were less complicated, with CBb ruling on a decision in February 2002. It was a concise decision, in which CBb only stated that DTe had not complied with the Electricity Act, as the Act did not explicitly mention the possibility of setting efficiency targets for individual companies. 87 According to CBb, only generic efficiency targets could be set, covering all companies alike. It was a shock for DTe, MEZ and most companies. No appeal had used this argument, focusing instead on the methodology and sometimes procedural issues. With this literal interpretation of the Act, CBb escaped having to assess the real and complex issues, and whether DTe had exceeded its discretionary authority under the Act. In order to salvage the network decisions, only one solution was possible: amend the Electricity and Gas Acts. Within a couple of weeks MEZ introduced legislation to allow explicitly individual efficiency targets. However, these were part of a wider package and interfered with other legal discussions. Due to the complicated political situation emerging in the spring of 2002, parliamentary discussions stalled for most of that year. CBb not taking into account the already ongoing parliamentary procedures to change the Act, ruled similarly on network tariffs in November 2002. 88 It was not until mid-2003 that the energy Acts would allow for individual 'x' factors.

DTe had entered into discussions with the energy companies, in 2002, about options for resolving the first regulatory period. This resulted in lengthy negotiations in the good old *poldermodel* tradition, during which the second regulatory period also was included. In May 2003, an agreement was reached between DTe and all individual companies. For the first period, a generic 'x' factor was set at 3.2 %, with agreed individual targets for the second period. As a consequence, all legal procedures were terminated, both for the network and for the supply tariffs. Table 1 provides an overview of this four-year process of efficiency target-setting and lowering network tariffs.

Table 1: Efficiency factors and their effects

	Sector average (% per year, first period: 2001-03)	Total Cost Saving (€ million)	Savings per connection (€ per year)
Decision 2000	5.1	511	70
Decision 2001	4.4	376	52
Decision 2002	5.1	384	53
Decision 2003	3.2	349	48
Decision 2003	16.7 ^a	1900 ^a	

Source: NMa and DTe Annual Report 2003 (NMa 2004).

7.7.5. Quality regulation

DTe concentrated during the first regulatory period on cost-efficiency, and did not consider network quality issues. It did note that it would take up the latter issue during the second round, as network users have the right of getting best value for their money. By the end of 2002, DTe published another consultation document. Quality was basically contextualised in terms of reliability, with a system of norms and standards and financial sticks and carrots. For further preparations for the system, DTe and the network sector worked closely and effectively together. The results of this process could be fully

88 CBb 2002b.

^a Total aggregated effects first and second periods (2001-06), gas inclusive.

⁸⁷ CBb 2002a.

⁸⁹ DTe 2002c.

brought into the negotiations on the efficiency factors. From May 2003, a number of decisions were made, fully integrating the quality regulations. The second regulatory period would also be limited to three years, allowing for a learning process, with a full system implementation from 2007. Gas networks also were fully included, with respect to both cost efficiency and quality. The 2003/2004 amendments to the energy acts allowed identical approaches, for which the legislator was very explicit and straightforward, having learned from the lessons of the CBb 2002 decisions.

7.8. Network access and tariffs: gas

The main stories about network access for gas centre around Gasunie, and that company's role and position. The first phase of gas market opening had little impact on the distribution grids, but more so on transmission. (See section 7.3. for the prior to 2001, beginning of this story.) In-depth analysis and detailed discussions between Gasunie and DTe continued during 2001. Other market parties also frequented DTe offices, including NAM, the main gas storage operator. In September 2001, DTe issued new guidelines for gas transport and storage, 90 with new conditions for Gasunie with the aim of developing a competitive gas market. These conditions included specific criteria for transport services, more flexibility for shippers and further amendments to tariff structures and tariff levels. Gasunie was requested to develop an entry-exit type of tariff structure, following the UK's NBP-model. Tariff levels had be cost-oriented, based on efficient economic costs with asset depreciation on historic values. Storage capacity had to be made partially available to third parties, with strong suggestions that auctions be used for capacity allocation.

Gastransport companies and especially Gasunie totally disagreed with the new guidelines. Legally however, there was no provision for appeal, except via a civil procedure. Further, Gasunie could wait for possible compliance action from DTe. The main concern, on top of a number of specific issues, was DTe's role per se. Gasunie strongly opposed DTe's intention to promote market development, and in particular its negation of the wider European market and lack of progress in market opening. The regulator had to take action when it became clear that both Gasunie and the regional companies were refusing to accept the guidelines, and by the end of 2001, DTe had issued a number of binding directives, forcing both Gasunie and the other companies to take the guidelines into account.⁹¹

The binding directive for Gasunie held some surprises. It appeared to have a clear connection with the ongoing discussion about the restructuring of the gasgebouw (section 4.5.). All binding directives were prepared in an ex ante process of public consultation. During that process, discussions between DTe and the Gasunie continued, bringing Gasunie to accept the outline of a new tariff structure. Gasunie agreed to develop a concrete proposal for an entry-exit based system by the summer of 2002, providing further incentives for the development of the gas market. This change of position was also initiated by the discussions in the Madrid Forum. The EU Commission had created this Forum in 1999, to bring regulators and market actors together to discuss and cooperate on the establishment of the EU gas market. DTe played a leading role, strongly beseeching an entry-exit type of arrangement. This was gradually accepted by the Forum participants. The binding directive for Gasunie could thus take these developments into account. DTe also was prepared to take into account the risks of rerouting transit flows through the Netherlands when Dutch transport tariffs were too low in relation to neighbouring countries, leading to potential risks of supply security. DTe accepted therefore a more modest decrease in Gasunie's tariff levels, i.e. an annual decrease of 5% for the period 2002-05. Gasunie was prepared to accept the directive and withdrew all of its legal procedures against DTe. Also of relevance was NMa's refraining from further action regarding Gasunie in an ongoing lengthy complaint procedure that had started just before the Gas Act had entered into force. 92 NAM, as the gas storage operator, did not get a binding directive, because it had no major problems with the guidelines and therefore more-or-less already had complied with them. The regional Gastransport companies, however, all received one, basically maintaining their position to refuse application of concepts for gastransport that they had already accepted for electricity. Legal procedures therefore continued until

⁹⁰ DTe 2001a.

⁹¹ DTe-decision 100554/15, 20.12.2001 (NMa 2001).

⁹² NMa 2002b.

2003 when the overall regulatory agreement was concluded with DTe. Some of the market actors were disgruntled because they had expected more from DTe, so a number of ongoing procedures continued. This also led to a CBb-verdict⁹³ in which the legal position of the guidelines was further clarified by ruling that DTe was wrong in giving the guidelines a non-appeal status.

The network access for gas story has to be completed by an account of the Technical Conditions (TCs), which are of particular interest for grid connections. Originally the Gas Act only provided for light DTe involvement, i.e., checking criteria for objectivity and non-discrimination, with a subsequent procedure by the EU. Market actors had different expectations, referencing the Electricity Act and its concrete rights and responsibilities for users and grid companies. These companies held strict views, not exceeding legal requirements that were also based on the concept of negotiated access. DTe did try to go further by including regulated third party access (RTPA) for TCs in its first set of guidelines, but refrained from pushing it through as the grid companies pledged to take up the issue in the PVE (the Acceleration Platform; section 7.5.). It took until well into 2002 before the grid companies developed a workable solution, which added to the many metering and meter problems in opening the gas market. A full solution only occurred after the Gas Act was changed in 2004 and the TCs received identical procedures as for electricity grid codes. With those 2004 amendments, gas access and network issues were finally settled and the gas and electricity markets received identical sets of rules for their respective infrastructure. The Guidelines for Transport and Storage had lost their significance and were fully translated into the Gas Codes by July 2006.

7.9. Supply tariffs: gas and electricity

Setting supply tariffs for gas and electricity, relatively speaking, was an easy job. Complexity was reduced as the major part of the tariff consisted of the price paid on the wholesale market; and it was less determining as consumers would gradually have free choice of supplier. The political aspect however, originally underestimated, resulted in a more direct role for MEZ, charged with setting the tariffs based on DTe advice. Later on this function was fully delegated to DTe. During the parliamentary discussions, both the electricity and gas acts were amended to include a continuing DTe role for households once they were liberalised. DTe got the task to monitor household prices and verifying that they were sufficiently in line with market prices. If not, DTe could correct these prices ex post. As long as there were captive consumers, their tariffs would also be set via the RPI-x formula established by DTe. DTe would also set feed-in tariffs for small-decentralised green power production.

DTe applied the RPI-x formula for captive consumers by making a distinction between the supplyfunction and the wholesale one. The first was easily resolved by applying a fixed cut for increasing efficiency in the supply cost function. The latter was more complicated, especially for electricity. For gas there was no problem whatsoever as the law stipulated that all gas for captive consumers should come from the prevailing contracts with Gasunie. So there were no incentives for smart buying on the gas market and relatively easy supply tariff decisions. For electricity, smart buying was the game to play, especially after 2000 when the protocol contract was terminated (section 7.4.). DTe loved benchmark competition and introduced a system with quarterly average purchase costs as the benchmark. The suppliers, failing a good and reliable spot market index, supported the idea. But the administrative burden was enormous, both for suppliers and DTe, the more so as the implementation of the purchase cost idea brought numerous differences in definition, including incomparable supply and load patterns for individual suppliers. Various cost interpretations in the decisions resulted again in appeals and legal procedures, sometimes based on the cost splitting that was used in applying the 1996=2000 rule. The small supply company Rendo especially continued to resist DTe on the splitting issue, appealing all supply tariff decisions and therefore its 'x' methodology. It was this appeal that first arrived at CBb, leading to the unfortunate decision on individual 'x' factors. As explained in section 7.7.4., this decision had dramatic consequences for the networks, but not so much for supply tariffs. During 2002, based on extensive consultations with the suppliers, DTe had already introduced a moderate generic cut, which was accepted by all concerned and all remaining procedures were withdrawn. After 2004, DTe started the monitoring exercise and applied its safety nets for household

⁹³ CBb (2004).

prices, using market-based shadow prices as a reference for assessing actual household prices. So far, this has not led to any DTe intervention.

7.10. Compliance, monitoring, enforcement, information

Two other subjects are worth mentioning as relevant to DTe activities during its first couple of years: compliance and enforcement, and market monitoring and information. The first had a direct legal basis, but the second was more policy-oriented, with DTe itself as the main driver, albeit with strong MEZ support.

As DTe attention was foremost focused on establishing its regulatory system, the supervisory function of checking compliance and enforcing where necessary was not developed before 2002. From 2002 onwards these activities were explicitly embedded in the DTe organisation within a separate division. A supervisory philosophy was formulated using experience notably from the AFM (the Dutch Financial Markets Authority). Supervision was approached pro-actively by developing a number of instruments with predefined norms and standards to be applied by the regulated entities. These norms and standards were put into a Charter of Accountability, with a corresponding information system, to be used by DTe. In addition, DTe would be indicating ex ante how to apply the supervisory function, using audits and inspections. DTe also established a consumer helpdesk, where reports and complaints could be put to DTe about behaviour of energy market actors. Beginning in 2003, DTe is furthermore legally required to submit an annual compliance plan, not only indicating which instruments and procedures it will use, but also its key priorities and themes. Enforcement examples are its binding directives, charges under penalty payment, and as of 2004, its direct penalty instrument. Other means include formal and binding dispute settlement procedures and the more informal arbitrage function.

In addition to the compliance and enforcement function, DTe started also to monitor the markets. This function was not clear from the outset, as it could also be viewed as belonging to MEZ's brief. Another aspect was the relation with NMa with its mandate for overseeing and correcting where necessary the competitive energy market. The watershed between the regulated and competitive markets in energy were not quite clear, as the regulatory conditions for the infrastructure directly impact the competitive environments. DTe recognised this and established in early 2001, in agreement with NMa, an independent Market Surveillance Committee (MSC), including a support staff. ⁹⁵ The MSC was mandated to advise both DTe and NMa, either upon request or not. The direct reason for establishing the MSC were the 2001 price peaks on the APX spot market. There was suspicion that these were caused by market manipulation or tacit collision by large generators. The MSC began an extensive analysis, and although the MSC and DTe learned much about both the working of the market and about the boundaries of DTe's mandate and authority, ultimately there was no conclusion of misbehaviour in the market. The MSC report did result in a number of DTe decisions and more generic actions, especially with regard to increasing market transparency and market liquidity. The MSC was also instrumental in DTe's actions toward MEZ and Parliament on issues around supply security and system reliability, based on the large black-outs in the US and Europe. The MSC has issued quite a number of reports, 96 but due to the further integration of NMa and DTe, the MSC as such was gradually considered as unnecessary. DTe, now as part of NMa took over the monitoring function, now with a legal basis. Since 2004, NMa/DTe regularly reports on the "state of the energy market". 97 Discussions and concerns about market opening, especially for the household sector, have also firmly entrenched DTe's role in consumer protection and information. Information about markets, price comparisons, licensing and conditions, complaints, disputes and settlements, and arbitrage

⁹⁴ All enforcement instruments have been applied so far, including the penalty one. In 2005, for instance, several companies were fined for cases such as aggressive and misleading sales methods and for offending rules for obligatory offering import capacity rights on the spot market.

⁹⁵ Professor David Newbery, University of Cambridge (UK), became chairman, with prof. Eric van Damme (KUB) and prof. Niels von der Fehr (Oslo) as further members. During the first years, Wim Naeye (former Eneco CEO) was also a member.

⁹⁶ MSC reports were issued about spot market developments, the position of cogeneration in the market, green power imports and plans for a single Benelux market.

⁹⁷ DTe has developed a market monitor and is annually reporting both about the wholesale and retail markets for gas and electricity.

procedures, with frequent reporting on DTe's website and an active consumer helpdesk, have all increased DTe's high profile in consumer markets. Naming and shaming, and benchmarking are part of that general process, using balance scorecards for energy suppliers and regular ratings of various price comparing websites for household consumers.

Finally, on the issue of compliance and monitoring, it is worth noting that since the full merger of NMa and DTe took place in July 2005, a single authority has become responsible for the generic Competition Act 1998 and the sector specific Electricity Act 1998 and Gas Act 2000. This bundling of tasks and duties with respect to both the competitive and regulated gas and electricity markets have allowed NMa to make full use of the synergies in terms of knowledge, information and instruments. Using its regulatory and competition knowledge and expertise and the information that is assembled on the three acts, assessing what instrument or instrument-mix is most effective in either ex post or ex ante, assuring or promoting competitive energy markets – has made NMa a rather unique authority in the European energy scene.

⁹⁸ For the sake of completeness, NMa also has tasks based on the Public Transport Acts of 2000 and 2005.

8

Some concluding remarks

Some ten years since the White Paper was issued, Dutch decision-making, legislation and regulation of the energy market has gone through a fascinating, burdensome, complex and sometimes chaotic and frustrating process. In hindsight, a number of points could be raised. Although the picture is not yet complete and lessons are not yet fully learned and digested, it is useful to sketch some observations about the process as such, which was complex, time consuming, and more complicated then originally anticipated. Also important are observations around market dynamics and the almost unbearable and unsolvable balance between policy, legislation and regulation; and about the role of DTe and its evolving process into a full merger with the NMa. We also offer some comments on the ownership trap, the privatisation project, and on the EU, national markets versus European ones. And, finally, there is the question of whether it all was worth the effort, did it 'deliver' and are consumers better off?

The process

Development of a self-regulating market as the coordinating mechanism often evokes Adam Smith's invisible hand. In the context of the Dutch energy system increasing needs for market and system information resulted in further regulatory devices. The system developed therefore into a visible and explicit hand. Market actors, regulators and policymakers, originally based creation of these devices on very different perceptions and expectations. This resulted in numerous controversies, both in the policy arena and the courts. This transition and learning-by-doing process altered the challenges. The challenge is not so much establishing an ex ante design for a market and regulatory structure, as it is not the structure that determines conduct and thus the performance of all involved parties. It neglects the learning processes, mistakes, adjustments, failures, improvements, and regulatory experiments that must take place and ultimately be accepted. The challenge therefore is much more to accept, to use and to manage this process. Market actors that are best suited to learn, interpret, adjust and influence this dynamic environment will profit most. Consumers must learn to choose and investigate their preferences. Politicians and policymakers will have to reformulate public values and public interests and to translate these into relevant policies and legislation. Regulators must develop effective regulatory systems and communicate them. The process does not result in stable legal and regulatory systems, but becomes dynamic in a constant process of balancing market and political needs.

Two further specific remarks should be made in relation to the Dutch situation concerning relations between gas and electricity, and the government's own stakes. When the EU Directives were issued in 1996 and 1998, there were large inconsistencies between gas and power, resulting in very different proposed laws in the Netherlands. Not only in The Hague and Brussels was this an issue, but also in London. Yes, there are logical differences between the two sectors, especially when viewed from the supply side. From the demand side, however, there are many comparisons that beseech similar treatment. In the EU context, but also in the UK and Dutch cases, the 'demand school' prevailed and legislative and regulatory systems became almost identical. This discussion was part of the learning curve. More recent policy considerations are again re-emphasising the supply side, pleading for a reconsideration of the regulatory model for the gas market. 100

⁹⁹ There are many publications about this kind of transition processes. For example, see Correljé's (2005) overview.

¹⁰⁰ For example, see van der Linde et al. 2006.

The second remark is about the role of the state itself. The Dutch state created a perfect public-private partnership in 1962 for exploitation of the huge Groningen field. It was and still is very successful, but in the transition to liberalised markets it became very apparent how difficult it is for the state and its two major oil company partners to find a suitable model. The full unbundling of the infrastructure in a wholly state-owned company was one step, but continuation of commercial trade and supply activities created difficult assessments for the state as to if and how to continue its involvement. For the time being this appears to remain unsettled. A similar, but less controversial issue appeared with the full state involvement in the electricity grid, in TenneT. To organise the TSO function is one thing, but to add all sorts of policy considerations for more-or-less commercial activities, such as the APX group and specific implementing arrangements regarding the green power market, is another thing. State ownership in the gas industry and in the electricity grid was not always helpful in establishing clear and effective responsibilities in the shareholder, policymaking and regulatory functions.

Ten years of Dutch experience in energy market liberalisation have indeed led us to the conclusion that the introduction of market forces, the adjusting of industry structures and repositioning of government was more complex and took more time then anticipated at the time of writing the 1995 Energy White Paper. One must seriously question whether regulation and legislation will ever be completed. Legislators and regulators will always be too late, as is shown also in the Dutch process of energy market legislation. Since the two acts were first passed in 1998 and 2000, they have been subject to a constant flow of amendments and reviews, with sometimes too detailed and even chaotic and flawed results. Also the relation and interaction between the regulator DTe and policymaker MEZ changed during that period. We still don't see an end to this process, as discussions and resulting legislation on industry structures and on further cross-border market integration are not yet completed.

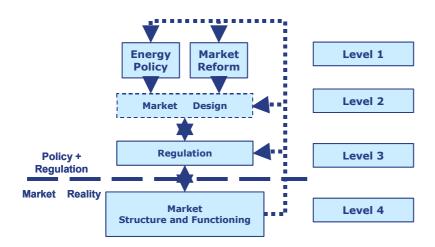
Market dynamics; policy, regulatory oversight and legislative processes

Markets are not designed by policy, law or regulation. Nor are markets designed by market actors. Markets are the product of a process with interacting waves and developments. This is a process in which market actors, policymakers and politicians, lawmakers and regulators all play a role and sing their song. These songs may have differing timing and tenor, but are combined in a fully intertwined piece of work. We noted in the beginning of this section, the dynamics of policy, regulatory, and industry interactions. These have resulted, for instance, in sometimes shifting responsibilities between MEZ and DTe, when the various network codes were originally fully and extensively developed solely by DTe, but more recently under more detailed ministerial rulings. DTe was faced with difficulties in defining the level playing field between large power generators and small scale cogenerators. Another example was the politically sensitive issue of preparing for market opening and its administrative fallouts. Here again, the regulator and MEZ had to tango to music composed by politicians and to define the sharing of their respective roles and responsibilities. ¹⁰² In all cases, legislative action was required or deemed desirable. It all proves the case that industry's call for stability in regulatory systems may not always be achievable. Markets are dynamic by definition and rules and regulations are definitely in a constant interaction with each other, with national and European dimensions further complicating this interaction. The big challenge for all stakeholders is to define the dynamics of the system in such a way that procedures for change will be in harmony. Figure 1 illustrates this process.

¹⁰¹ See also Correljé et al. 2003.

¹⁰² For example, see Correljé 2005.

Figure 1 The regulatory framework and the market 103



The role of DTe

Implementation and regulation during the early years were heavily influenced by legislative flaws and sometimes chaotic legislative processes. This was most evident in the cases of setting the 'x' factors and the gas guidelines. In a recent extensive legal study¹⁰⁴ on independent Dutch regulation and the regulatory authorities, it is concluded

As DTe would in principle function under ministerial responsibility, it was assumed by the legislator that DTe would have sufficient democratic legitimacy and that regulatory authority would be transferred to it. This assumption however failed to develop a coherent vision about the DTe role, including assurances for an adequate implementation of this authority and their proper definition. Especially during the first regulatory period, therefore, MEZ hardly cared about it [...]. DTe implemented its authority during that period independently on the basis of a limited legal framework. The 'x' factor and Gas Guideline cases were proof of DTe's dilemmas. It had to respect legal boundaries, which themselves were unclear and also had to meet legal objectives in an effective way. DTe had to promote market restructuring together with consumer interest and maintaining supply security. Thus, it opted for extensive interpretation of the Acts, both for setting 'x' factors as well as for proclaiming that the Gas Guidelines could not be appealed. Conversely, the CBb adopted a strictly limited interpretation [...]. The CBb verdicts could be seen as a clear signal that the legislator should pay more attention to an adequate mandate for DTe [...].

It is evident that many mistakes were made, by DTe and by the network companies. DTe underestimated the complexities in the network sector and did not take full account of the impact of the internal adjustment processes required by the introduction of the new system. In addition, DTe, although under pressure in meeting legal procedures and timing, did not give enough attention to organise an adequate internal administration. This led to a number of flaws in its decisions. On the other hand, most companies did not give due and timely regard to the seriousness of the liberalisation process and its new regulatory function, putting too much trust on continuing the old way of *poldering* and consulting before taking decisions. When confronted with the outcomes, a massive amount of procedures before the CBb court emerged, with surprising and unexpected results for all. ¹⁰⁵

¹⁰⁵ Nillesen and Pollitt 2004.

¹⁰³ From van der Linde et al. 2006.

¹⁰⁴ Lavrijsen-Heijmans 2006.

Ownership and privatisation

The ownership issue has been the single most issue in determining debates on the energy industry and the energy market during the last ten years. It is too early to conclude as to the winners or losers or to what extent the prime stakeholders, the energy consumers, will have benefited. The debate had a high price, in financial terms with all the high cost consultancies and mental energies by numerous competent and high-level people. But also in terms of trust and confidence, as the relationship between MEZ and the energy industry has and still is suffering deep wounds. This could have wider consequences for the effectiveness of Dutch energy policy more generally, if the relation does not become normalised in due course. The question of whether or not this whole 'crisis in energy' could have been prevented may be a merely theoretical one. The fact is that the successful conclusion of the GPB project in 1996 would have given a totally different outcome. Another fact is that a more balanced and effective political management by national and regional politicians and MEZ of the 1996 policy "first adequate liberalisation before careful privatisation" would also have led to another company landscape. Such political management would ideally have been able to rationalise the transition to competitive markets, liberalise the markets without haste and develop timely and acceptable ownership models.

National markets or European ones

As for other EU countries, the main driver for the energy liberalisation project was *Europe*. The idea of creating a single EU market for gas and electricity was the political ambition, which brought us into two EU Directives, formally setting the rules and conditions for market opening. A single market, however, requires cross-border trade and cross border market integration. The Directives did not establish an effective mechanism for accomplishing this and national governments tended to be more inward-looking in defining their own systems. The Dutch story is no exception in this regard, but market actors and the energy industry did frequently make the European case. Here again, markets were pushing and legislators had to follow. Interestingly, the idea emerged that turning 25 national markets into a single EU market was perhaps a bridge too far. Regional markets could be considered as the next best thing, eventually evolving into a single market. 106 This again needs to be backed by government action, as various cross-border arrangements would be needed. In the Dutch context this message was heard, leading to proposals and actions to work towards a North-Western European market for gas and electricity – which again is a longer-term process. Industry restructuring is already ongoing, with mergers and acquisitions not being limited to national borders. Competition authorities are put under pressure to re-evaluate the respective relevant markets, including the regional market concept. Discussions will continue, but prospects are not always very clear, which could lead to further regulatory action at EU levels.

Did we deliver?

A final question is speculation on the 'real thing'. Did we deliver? Did market liberalisation result in consumer benefits? It is a challenging question. Do consumer benefits mean lower prices for gas and electricity? Or is it more general concept, referring also to reliable, clean and effective gas and electricity system at fair and affordable prices? Energy policymakers and politicians have discussed this meaning over and again, without arriving at clear answers. The fact is that before starting the project, there were not always pre-defined political or policy criteria to assess global outcomes. There are some points to make and both the EU and the Dutch government have published various reports on this, ¹⁰⁷ but without any clear conclusions. The internal MEZ-TEN report noted that costs would probably be lower, but prices would be very much subject to prevailing market conditions. NMa is calculating overall cumulative cost benefits as a result of energy network regulation for 2000-2006 at

¹⁰⁶ For example, see de Jong 2004.

¹⁰⁷ DG TREN's Benchmarking reports on the implementation of the internal gas & electricity markets (EC 2001; EC 2002; EC 2005a; EC 2005b). A 2006 report is forthcoming. The MEZ has published in 2002 evaluation reports about the two energy acts (MEZ 2002c), with a new report forthcoming in 2006.

€1.2 billion.¹⁰⁸ Reporting on price effects is much more controversial, as reliable statistical trends are lacking. Most prices paid by consumers have quite some taxes and/or other levies added to them, which makes comparisons over time difficult. Two other criteria are usually mentioned, such as the competitive nature of the market and the amount of consumer switches. DG TREN reports are using these based on national reports. Figures are mentioned that the Dutch power market is relatively competitive due to a 70% market share of the three largest power generators, but for gas the situation is somewhat worse, as the market share of the big three in gas supply is almost 90%. As to switching, there was quite a success by mid-2004 when about 10% of all small business and household power users had switched their (green) supplier, but total switching in 2006 was limited to some 3%. ¹⁰⁹ In general, it appears too early to tell if we delivered in quantitative or money terms. What we did deliver, however, was a lot of turbulence and dynamics, a boost for innovation in marketing and technology drives, and increased awareness about consumer power in which the threat to switch in itself produces results of improved service, more transparency and increased accountability.

¹⁰⁸ NMa 2006a.

¹⁰⁹ EnergieNed 2006.

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