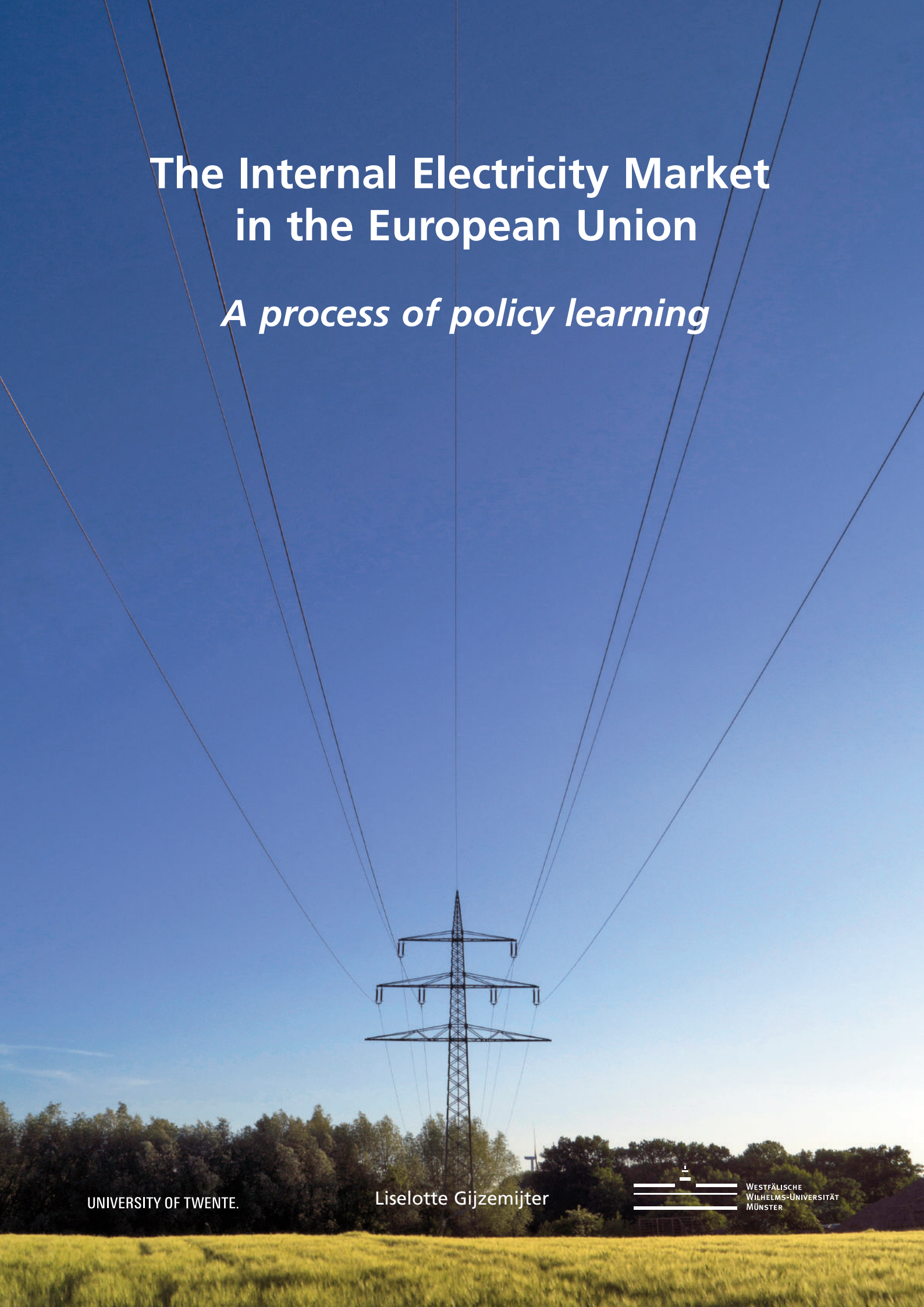
The Internal Electricity Market in the European Union

A process of policy learning



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Executive Summary

The **Internal Electricity Market** (IEM) is an EU policy area that originates from the end of the 1980s. Back then, the energy markets were primarily nationally oriented, with different energy mixes, state-owned energy companies and national grids and networks. The energy sector was left out of competitive policies since energy supply was regarded as a national matter which had significant affects on the national economy. However, the tide changed when in the mid-1980s the concepts of **market liberalisation** and a single market entered EU politics. In 1988 the Commission published an inventory of obstacles for the creation of an **Internal Energy Market** consisting of a market of gas and a market for electricity, the IEM. After years of negotiations, a first directive was adopted in 1996, known as the first legislative package. Two more legislative packages followed in 2003 and 2009. All consisting of a directive concerning the common rules for the creation of the IEM. These directives contained important rules for the restructuring of the electricity sector by liberalising it and integrating all national electricity markets into one by trying to facilitate cross-border trade. The main objective was to create a functioning internal market for electricity, which would then result in increased competition between MSs which would presumably, improve efficiency and lower energy prices for consumers.

It was a rather novel and ambitious policy field as only a few countries had started such a liberalisation project for the energy sector. To this end, the EU policymakers were committed to knowledge from other parties. Making the process of creating the IEM, and thus the liberalisation and integration of the European energy markets, most likely a process of discovery. Resulting in much interaction between the policymakers and other actors such as market actors, stakeholders and regulatory authorities. It is this interaction that may commence a process of **policy learning** in which the EU policymakers learn from other actors, their own experience or external factors. Policy learning *'refers to a "change in thinking", which is a structured, conscious change in thinking about a specific policy issue'* (Kemp & Weehuizen, 2005: 3). With this thought in mind, the research was set up and performed. **The goal of this thesis is to investigate the three directives the EU issued to guide the design of the IEM and to examine whether the similarities and differences between these directives can be explained as policy learning by the EU.**

Policy learning in this thesis has adopted the definition of Sabatier who has explained it as: *'a relatively enduring alteration of thought or behavioural intentions that are concerned with the attainment (or revision) of the precepts of a policy belief system'* (Sabatier, 1987: 672 in Bennett and Howlett, 1992: 277). He created a theoretical framework, the **Advocacy Coalition Framework**, which is focussed on instrumental learning in the policymaking process. As a result, his type of learning is called **policy-oriented learning**. The ACF claims that policies are created through the interaction between actors from multiple levels of government in the policy specific policy subsystem. The process of policymaking in the EU is similar to this belief due to its **multi-level governance system** in which actors from supranational, national and subnational or regional are involved in the making of policies. In some cases also non-governmental actors are able to influence the policymaking. For the IEM, the Commission established the **Florence Forum**. This forum was a way to create a place or informal discussion and cooperation between the market actors, the stakeholders and national regulators. Such a forum could stimulate a policy learning process according to Sabatier.

This interaction between all the involved actors from a various levels of government may influence policy change and may start a policy learning process. Because when the policymakers

actively reflect upon new knowledge, own experience or the effects of external factors in the stage of evaluating existing policies, they may change their beliefs and through that change their desired policy. However, policy learning and change in the ACF is not straightforward as it can occur at three hierarchical levels of the **belief system**. This refers to the shared normative and causal beliefs of the actors in the policy subsystem. Actors with the same beliefs may group together to strengthen their position in the policy subsystem. The highest level, the **Deep Core beliefs**, concern the fundamental normative and ontological principles which are very hard to change. Secondly, the **Policy Core beliefs** are focusing on the fundamental policy positions concerning the basic strategies for achieving or values within the subsystem which are still difficult to change but it is possible. And finally, the **Secondary Aspects of the belief system** focus on the instrumental decisions and information searches necessary to implement policy core which are the easiest to change. Therefore, policy learning will most likely affect the secondary aspects of the belief system. Though, in some cases the policymakers consciously or unconsciously decide not to address the policy problem which results in an unchanged policy or policies with simple incremental adjustments. In these cases, **non-learning** might be the situation. Meaning that something prevented the policymakers from entering a policy learning process.

This research is purely based on natural occurring data which are openly available online. The unit of analysis is the three main directives on the common rules for the creation of the IEM. These all focus on the same goal and are therefore good for comparison. This historical research on these directives will be executed with the use of a **document analysis** and in specific a **literature content analysis**, in order to *'describe a phenomenon in a conceptual form'* (Elo & Kyngäs, 2008: 107). To strengthen the research outcomes and the limit the risk of subjectivity, the analysis will *quantize* some elements and the findings and decisions made will be justified and defended by the researcher which increases the credibility of the analysis. This has resulted in several detections of a policy learning process within the differences and similarities between the directives on the common rules for the internal electricity market.

Through extracting the theories and thoughts on policy learning in policymaking from the main literature (Sabatier: 1988; 1998 & Rietig: 2013) specific types of policy-oriented learning have been defined in order to make a clear analysis and get trustworthy research outcomes. These types have distinctive criteria to help to detect policy learning in the three directives on the common rules of the IEM. These three types can be summarized as follows: *a policy change can be defined as policy-oriented learning when the change adjusts the secondary aspects of the belief system (type 1) and the causal relationships within the three levels of the belief system (type 2) or when external factors have influenced the belief system (type 3)*. In turn, these types are connected to specific policy changes. When one of these changes is detected in a specific article, the analysis will defend whether or not it can be characterised as policy learning. On the contrary, cases without visible policy change or merely incremental change such as small changes in language are defined as non-learning in this thesis.

The analysis starts by presenting the cases in which no level of policy learning could be detected. The policy or policy instruments did not change at all, or it only changed slightly in an incremental manner. For instance merely changes in language as was the case in the articles on the designation of the TSO and DSO. Therefore, these are cases of non-learning.

In other articles some policy change has been observed. The cases discussed here are displaying either policy-oriented learning type 1 or 2. Thus, concerning learning about the secondary aspects or the causal relationships within the belief systems. Some articles showed instrumental changes in existing policy measures, such as the changed rules for the tendering procedure from 1996 to 2003. Also additional tasks for existing actors can be characterised as policy learning type 2, which has been the case for the tasks created for the TSO and DSO in the second and third directive. Many more policy changes occurred in the rules concerning unbundling, both for the transmission and distribution system operators. Through unbundling, the policymakers wish to separate the companies' functions of having control on the transport or distribution network and generating or supplying electricity at the same time. The final examples of policy learning that has been defined as the second type of policy learning, are the new actors that have been created throughout the three directives. Such as the national regulatory authorities and the Agency. The adjustments, even though sometimes rather substantial, still comply with the policy goal of the IEM, namely market liberalisation. Therefore, these changes are defined as *learning a little*. They are simply improvements of the existing policy instruments in order to effectively achieve the functioning IEM, no major change in the belief systems was necessary.

On the other hand, also a few policy changes that do not directly correspond to the goal of market liberalisation have been identified. These changes have therefore been characterised as policy-oriented learning type 3and described as *learning a lot*. The newly introduced topics that fall under this type are consumer protection and the highly increased mentioning of RES. Consumer protection entered the IEM policy in 2003, however only becoming a legitimate part of the scope of the directive in 2009. Nonetheless, due to external factors, for instance new actors entering the policymaking process, the policymakers realized that the customers had to have some sort of protection against the open market for electricity. Additionally, the policymakers also adjusted their policy beliefs concerning RES and environmental protection in the IEM. RES have been mentioned more frequently in the second and especially third directive, when it was also added to several articles. This suggests that the EU is acknowledging the increased legitimacy of this industry and actors from this industry. It also suggests that renewables are now considered a part of the solution for energy production, delivery, and security in Europe. These two topics show learning through external factors and are measures to adopt to new challenges.

In the end, the results of this research claim that in specific articles some degree of policy learning can be detected. The most policy changes that occurred fall in the category of learning a little, reflecting policy-oriented learning type 1 or 2. Suggesting that the main goal is still market liberalisation. However, due to the detected learning types 3, this goal has been recalibrated towards a liberalised electricity market that is also fair and sustainable. Nonetheless, this research claims the EU policymakers are able to initiate a policy learning process as they have done so in several parts in the IEM policies. The current IEM still has several challenges to deal with and policies will be more successful when policy learning is happening, so this research may be very useful for the future IEM policies, other research and policymakers.

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List of Acronyms

ACER	Agency for Cooperation of Energy Regulators
ACF	Advocacy Coalition Framework
DSO	Distribution System Operator
ECSC	European Coal and Steel Community
EESC	European Economic and Social Committee
ENTSO	European Network of Transmission System Operators
ENTSO-E	European Network of Transmission System Operators for Electricity
EP	European Parliament
ERA	European Research Area
EU	European Union
IEA	International Energy Agency
IEM	Internal Electricity Market
ISO	Independent System Operator
ITO	Independent Transmission Operator
MS	Member State
MSs	Member States
NER	Named Entity Recognition
R&D	Research and Development
RES	Renewable Energy Source(s)
SEA	Single European Act
TEU	Treaty on European Union
TFEU	Treaty on the Functioning of the European Union
TPA	Third Party Access
TSO	Transmission System Operator

1. Introduction

Market liberalisation has become the driving force of European integration and the dominant principle for economic policy. The European Commission (Commission) was driven by the belief, that a liberalised market would benefit all Member States (MSs), optimizing their efficiency, and would increase the competitiveness level of the European Union (EU). For this reason, EU institutions have strived for the creation of the European single market, including sectors that were previously exempted from competition such as transport and energy. Besides the plans for an internal market for goods and services, separate plans for market liberalisation and the energy sector were made.

The focus of this thesis will be on the **Internal Electricity Market** (IEM), which was conceived as a solution for all major energy challenges. Integrating European energy markets may bring about a number of improvements. An internal energy market may increase competition between MSs and, presumably, improve efficiency and lower energy prices for consumers. Suppliers of energy will be free to deliver energy to any European customer and these customers are free to choose their supplier. Another advantage of the internal energy market is that it would diversify the supply of energy and reduce the need for capacity margins[1] for MSs. As it would be easier to transport energy from a MS with an energy surplus, to a MS with an energy deficit due to more interconnectedness of the energy grid infrastructure (Helm, 2013: 30). Finally, an internal market should also lead to significant incentives for producers of energy to invest in new power generation including from renewable energy sources (RES). Thus, the internal energy market could also move the EU's climate change objectives forward (Commission, 1996). The motivation for liberalised energy markets in the EU were not only economic, this reform also had strategic and political goals such as the improvement of the security of supply (Karan & Kazdağli , 2011: 11-12). Despite these benefits, the IEM met widespread opposition from MSs and long-term negotiations about this internal market between the EU, MSs, and market stakeholders on reforms in the electricity and gas industries took place (Eising, 2002: 92-102).

The benefits of the IEM seem numerous. However, the creation of this market is not as straightforward as one might think. In the next chapter the process of the creation of the IEM will therefore be discussed in more detail. This chapter proceeds by defining the research question and the methodology of this thesis. It concludes with an outline of the whole thesis.

1.1. Research Question

The purpose of this research is to understand how the EU designed the IEM at three moments in time through new legislative packages. The views of the EU will be defined according to the three directives concerning the common rules on the internal electricity market. These directives focus on the same goal, therefore are favourable for comparison.

The process of creating the IEM appears to be a policy learning process for the EU. This *'refers to a 'change in thinking', which is a structured, conscious change in thinking about a specific policy issue'* (Kemp & Weehuizen, 2005: 3). The policy field of the IEM was new and ambitious. This and its complexity did not make it not easy to quickly design and immediately implement the right policy to achieve the objective. All governments in the world make regulations and policies for many sectors, which in turn have significant impacts on other sectors. Therefore, the pressure

[1] The term capacity margins refers to the level by which the available amount of generated electricity exceeds the maximum expected level of demand.

is on for 'good' regulation (Rietig, 2013: 1-3). Governments can learn, but the way they learn is not always straightforward.

The need for ‘good’ regulation makes it important to evaluate policies and examine policymaking processes in order to avoid policy failure (Matland, 1995: 154-155). Policy failures could have severe political consequences for instance, the policymakers or politicians may lose face and consequently voters or the policy problem blows up. Therefore, the policymakers are trying to avoid the blame of failures by learning from their experience or newly acquired knowledge. Policies must be evaluated carefully in order to detect the causes of policy success or failure, otherwise success will be limited (Howlett, 2012: 541-50). In specific, the policy on the internal energy market has a high degree of uncertainty which increases the risk of being held responsible for possible policy failures (Eberlein, 2008: 73). This combination of the IEM with the theoretical framework of policy learning makes this study very interesting, as policies are thought to improve when a learning process is in place and thus failures can be avoided. In theory, policy learning is able to amend any type of policy failure. Decisive evaluation of the existing policy is crucial for policymakers to initiate a learning process (Howlett, 2012: 541-50). Therefore, the research goal is extended to also being able to evaluate if the EU policymakers learned from the previous legislative steps. In other words, whether the process of the IEM can be defined as a policy learning process as it appears to be.

The puzzle for this research is therefore *to establish if a policy learning process in the policy area of the IEM took place by applying a document analysis to the three succeeding directives concerning the common rules for the IEM*. This puzzle leads to the following research question:

How did the EU design the IEM between 1996 and 2009 in three directives and can the similarities and differences between these directives be explained as policy learning by the EU?

The internal energy market and in specific the IEM appeared to be existing policies dating back to the 1990s which have not been accomplished yet. For many years now, the European Energy Commissioners (Piebalgs, 2006; Oettinger,2011; Cañete, 2016) and European Commissioner for the Energy Union (Šefčovič, 2015) have stated the importance of completing the IEM. Accordingly, the IEM is a socially relevant topic for a scientific research, as it is an ongoing case and part of the in 2015 proposed Energy Union. The EU wants to finally complete the IEM after almost two decades of policies. Yet, new challenges are already lying ahead as the IEM policies have to adjust to the EU's decarbonising path, as mentioned by Commissioner Arias Cañete at the 30th meeting of the European Electricity Regulatory Forum in Florence in March 2016 (Commission, 2016). New knowledge generated through this research may potentially benefit the policymaking community, they could understand the EU's actions on the IEM better and use it to improve this policy. A well-functioning IEM has the potential to benefit all members of the EU: all citizens of the EU are affected by the IEM since it should result in more choice in energy and lower energy prices, thus we may all benefit from this research. Finally, the implications of this research may go beyond energy regulation: it is also important for future EU policies in general as it gives a glimpse on the way the EU can 'learn'.

1.2. Methodology

This historical research on the three directives will be executed with the use of a qualitative research method. The EU directives will be the focus of this research and serve as the main evidence to answer the research question. Therefore, the appropriate research method is a document analysis, in specific, a *qualitative literature content analysis* will be conducted with the use of analysis software.

The theory of policy learning has one major methodological problem, it is difficult to find solid empirical work that proves that the policy change would not have happened when 'learning' was not occurring. It is almost impossible to purely see learning from any explanation for change. *'We may only know that learning is taking place because policy change is taking place'* (Bennett & Howlett, 1992: 290). In order to be able to study policy learning in the IEM in a solid manner, a few steps have been constructed which will be followed in this research. First, a clear distinction between the types of policy learning has to be made. The next step is to try to point out what is learned by the policymakers. In the most favourable situation this is done by generating data through simply asking the policymakers themselves. However, the number of policymakers that ought to be interviewed would be too extensive as many policymakers in the EU have come and go. Therefore, this is a too time consuming and complex option. Another reliable approach is analysing the EU documents in which the policy outcome is presented. To follow this approach, the three directives on the common rules for the IEM will be analysed, after which the exact policy change or innovation will be clear (Kemp & Weehuizen, 2005: 16-18). Which in turn could potentially be characterised as policy learning by applying certain theoretical criteria.

This research will not be able to state with complete certainty that policy learning has taken place. The policy change may also have been influenced by multiple external factors. Also, policy learning may have happened when no policy change is visible. However, in the end this research could by itself still add new knowledge and interesting clues about the way the EU can learn to the existing literature and may serve as a starting point for further research.

1.3. Outline of the Thesis

After this introduction in which the concept of the IEM and the focus of this research are briefly discussed, including the research question and the methodology, the next chapter will explain the IEM is more detail to get a concrete idea of this policy. Starting with the background, followed by explaining the current status and concluding with a review of the academic literature on the IEM. The following third chapter concerns the theoretical framework of the research. First, a more general view on policy change will be given, after which the policy learning theory will be explained more extensively. Subsequently, the methodology is discussed in chapter four. It starts by stating the way data was collected and is followed by the research methods. The next part of the research consists of the analysis of the collected data, the three IEM directives. This fifth chapter is divided into subsections in order to analyse the policy change and possible learning process more structurally. First, several criteria will be given on how to detect policy learning, resulting in three specific types of learning including a type of non-learning. The IEM directives will then be analysed according to these types. The thesis ends with concluding remarks on the performed research and its outcome, besides also discussing the limitations of this research and giving an outlook for further research. The final two chapters contain the reference list and the appendix in which the data for the analysis can be found.

2. The Internal Electricity Market

Despite the European Union being based on energy cooperation (the European Coal and Steal Community established in 1951), the EU institutions played a narrow role in the energy industry of its Member States (MSs). The energy sector was left out of competitive policies since energy supply was regarded as a national matter. Back in the 1980s, the energy markets were primarily nationally oriented, with different energy mixes, state-owned energy companies and national grids and networks. Energy supply was regarded as a natural monopoly. Finally, each country had their own system for regulating the energy sector containing subsidies and taxes for different energy sources. The main experienced energy challenges were related to the security of supply and EU's competitiveness level compared to other regions in the world. Though, security of supply and liberalisation are usually seen as rivals, when the former enters the policy field, the legislation that follows will less likely pursue competition rules. However, the tide changed when in the mid-1980s the concepts of market liberalisation and a single market entered EU politics. Resulting in the Single European Act (SEA), focussing on completing the single European market through market reforms (Karan & Kazdağli, 2011: 11-28). In 1988 the Commission also published an inventory of obstacles for the creation of an **Internal Energy Market**. This market would consists of two markets, one for gas and the other for electricity, the **Internal Electricity Market** (IEM).

2.1. Background

The policy process of the IEM may be broken down into three main periods which are demarcated by policy change. The first negotiations starting in the late 1980s when still many MSs were heavily against liberalising and integrating their national energy markets, fearing that these reforms could negatively affect their economic situation. Countries such as France, Germany, Italy, Belgium and the Netherlands were sceptical about the IEM proposals. The only MS supporting the IEM from the start was the United Kingdom, primarily because it had already liberalised its own energy market and saw many benefits (Eising, 2002: 91-95). Many of the MSs that were not keen in liberalising the energy markets saw energy security as a major barrier. As energy is so important for the national economic development of almost all sectors, the MSs wished to keep control by keeping their mainly national energy companies (Karan & Kazdağli, 2011: 22). In turn, the IEM was seen as a measure to limit the control of the often state-owned energy monopolies. However, after several amendments in the original proposal, the MSs were convinced which resulted in what has become known as the **first legislative package** with the *directive 96/92/EC*[2] of 1996 that set the first common rules for a European electricity market. This directive only contained soft market reform for which all MSs were able to agree with, reflecting the EU and its MSs' low experience in market liberalisation at that time (Kanellakis et al., 2013: 1024). Therefore, the main goal of this directive was to set several rules on how to eventually achieve an internal market for electricity, by for instance stating the need for such a market, by introducing only two allowed methods to generate new capacity and by setting the responsibilities of the MSs and the companies involved. Also the transmission and distribution systems were required to appoint a system operator, resulting in Transmission System Operator (TSO) and Distribution System Operator (DSO). Transmission refers to transporting electricity on (extra) high-voltage networks to deliver the electricity to either the distributors or sometimes to the end consumer. The distributor then operates the distribution network of medium-voltage or low-voltage grids and delivers the electricity always to the end consumer (Commission, 1996; 2003; 2009).

2 Directive 96/92/EC can be found at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31996L0092:EN:HTML.

In response to the flaws and challenges of the original approach, a **second legislative package** was adopted in 2003 after two years of negotiations. These negotiations took place between the Commission, the Council of the European Union (Council), the European Parliament (EP) and the European Economic and Social Committee (EESC)[3] which was also able to give its opinion on the matter. This package included the main *directive 2003/54/EC*[4] on the common rules for the internal electricity market, repealing the 1996 directive. The second legislative package contained an important set of policy innovations with the primary focus of removing barriers to fair competition and trade at the internal market for energy (Fiedler, 2015: 5). For one, the *unbundling* of transmission and distribution networks entered the legislation. Meaning that when companies owned both networks and also had control on the generation of new electricity, then they are obliged to separate the executive and decision-making authorities and create separate accounts (Karan & Kazdağli, 2011: 25). In addition, access of new electricity suppliers to the energy markets in the MSs became an obligation, also known as third party access (TPA). MSs also had to enable the free choice of electricity supplier for all consumers by opening up their energy markets (Kanellakis et al., 2013: 1025). However, the enclosure of TPA resulted in a heated debate between the MSs and the EU (Helm, 2013: 30-1). Mainly because in many MSs large energy companies were still perceived as natural monopolies, both these companies and the national government were not immediately keen in opening their markets to third parties. Through the adoption of this directive the Commission won this battle, however, the MSs were reluctant to fully implement the directives and some even tried to construct barriers. These actions show that energy was still perceived as a vital and strategic measure for the national economy and national security (Westphal, 2006: 52). The main points of difference between the first and second legislative package were the introduction of TPA, but also making unbundling of the transmission and distribution system operators legally binding. In general, the second package described the articles in much more detail as has been done before.

Flaws were the result of the reluctant mode of the MSs towards the implementation of these policy measures. For instance, the unbundling had not been carried out to satisfaction, resulting in an unnecessary increase in energy prices and less opportunities for consumers according to the Commission (Eikeland, 2011: 250-1). In 2004 the Eastern Enlargement resulted in more actors with different views on energy policy and liberalisation in the policy sector for the IEM, also increasing the EU's import dependency on natural gas from Russia (Fiedler, 2015: 5-6). Therefore, yet another, more radical, legislative package was prepared.

The **third legislative package** was introduced by the Commission in 2007. The package was adopted in 2009 and entered into force two years later. In this policy-making process also the Committee of the Regions[5] rendered its opinion alongside all parties involved in the previous package. This additional institution stressed *'that all discussions on the liberalisation of energy*

3 The European Economic and Social Committee (EESC) is a consultative body that gives representatives of Europe's socio-occupational interest groups and others, a formal platform to express their points of views on EU issues. Its opinions are forwarded to the Council, the European Commission and the European Parliament. It thus has a key role to play in the Union's decision-making process. Source: http://www.eesc.europa.eu/?i=portal.en.about-the-committee.

4 Directive 2003/54/EC can be found at: http://eur-lex.europa.eu/resource.html?uri=cellar:caeb5f68-61fd-4ea8-b3b5-00e692b1013c.0004.02/DOC_1&format=PDF.

5 Created in 1994, the European Committee of the Regions (CoR) is the European Union's assembly of regional and local representatives. It is composed of 350 members – regional presidents, mayors or elected representatives of regions and cities – from the 28 EU countries. Members must be democratically elected and/or hold a political mandate in their home country. Through the CoR, EU local and regional authorities can have a say on the development of EU laws that impact regions and cities - http://cor.europa.eu/en/about/Pages/key-facts.aspx.

should centre around the consumer' (Committee of the Regions, 2008). The main legislation of this package was the directive 2009/72/EC[6], concerning the completion of the IEM. Several regulations were also adopted following the rules mentioned in the directive, for instance on cross-border trade of electricity and electricity exchanges. The directive stated that MSs had to create a national regulatory authority which ought to be independent from other entities and has to monitor the electricity market. This also led to the establishment of the Agency for Cooperation of Energy Regulators *(ACER)* consisting of all national regulators. They ought to promote regional cooperation as a first step towards total EU electricity market integration (Commission, 2009).

It became clear that a separation of the transmission network ownership was crucial, because several undertakings misused the network ownership to create barriers for fair competition. By using their control of the whole electricity network these large companies hindered access of other suppliers or consumers. Therefore, another measure of this third package was to make sure no undertaking would both produce the electricity and control the transmission or distribution networks (Eikeland, 2011: 244). Resulting in the stricter and more defined policy measures for a unbundling. With two fall back options of the Independent System Operator (ISO) and the Independent Transmission Operator (ITO) when normal unbundling was impossible. These options were mainly included in order to gain support from France and Germany. This final option would still allow the ownership of the transmission network and control of supply in one company, but with several additional rules to prevent misuse due to the concentration of authority (Fiedler, 2015: 8). Subsequently, the TSOs are gathered in the European Network of Transmission System Operators (ENTSO) which was also established in 2009. Both the ACER and the ENTSO had to promote a functioning IEM (Kanellakis et al., 2013: 1025-6). A final measure of the third legislative package was to create rules for consumer protection in the IEM. In short, the primary policy changes from the second to the third directive concerned even stricter rules for the unbundling of the TSO and DSO. Also the rules for establishing national regulatory authorities increased in the third directive, giving these authorities more responsibilities and rights. Finally, the need for protecting consumers in the IEM has been given more attention in the latest directive.

After this directive on the IEM, legal changes did not end there. On March 3, 2011, the deadline for the implementation of the directive, the Commission brought infringement measures against MSs who were too late in implementing the third energy package. In the same year several more legislative measures were taken, for instance in the Regulation (EU) No 1227/2011 in which wholesale energy market integrity and transparency had to endeavour to guarantee fair trading practices on European energy markets. Furthermore, the EU set the year 2014 as the deadline to accomplish a functioning IEM. However, this market had to be truly complete in 2015, when the development of interconnections between MSs also had to be realized, meaning that the transmission and distribution system are fully linked together through connecting equipment. In other words, when the energy islands are also included in the total energy market (Commission, 2014: 2).

The legal basis for these energy policies was found in several articles of the European treaties such as the environment or external matters. However, since the Lisbon Treaty (2009) the subject of energy is directly legally binding as energy became a shared competence of the EU institutions and the MSs. Chapter XXI in the Treaty on the Functioning of the European Union[7] (TFEU)

6 Directive 2009/72/EC can be found at: http://eur-ex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:211: 0055:0093:EN:PDF.

7 The Treaty on the Functioning of the European Union can be found here: http://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX:12012E/TXT.

focuses entirely on energy. However, the energy policies still have to comply with the political principles of *subsidiarity* and *proportionality* as described in article 5 of the Treaty on European Union (TEU)[8] (Kanellakis et al., 2013: 1021). The former, meaning that the EU shall only act when the proposed objectives cannot be sufficiently completed at any lower level of governance, may it be the local, regional or national level. The latter concept also bounds the power of the EU by limiting the EU actions only to those that are necessary to achieve the given objective.

These principles and the shared competence impact the way the EU is able to establish the IEM. The EU is obligated to stick to soft law rather than choosing more rigid hard law. Soft law refers to legislation with legally binding norms, however the way these norms are met are free to decide for by all MSs. In this manner the MSs still have a rather large autonomy in this sector. A directive with guidelines is a type of soft law, yet a regulation, with hard obligations and precise rules on how to achieve the outcome, is off limit here (Terpan, 2014: 5-14). This will impact the IEM, primarily because it means that the MSs have to do the actual work by translating the articles established in the directives into national law. It could be quite difficult to truly achieve a functioning IEM without affective backing from the MSs. It is therefore important that the EU sets clear guidelines and rules in the directives so that it is easier and more effective for MSs to comply with these rules. Consequently, policy change in the IEM directives is needed when a directive is proven to be ineffective. This shows why the EU moved forward since the 1996 directive.

2.2. The Current State

The latest progress report of the IEM was published by the Commission in 2014. This report states that *'the EU is moving in the right direction, but [there are] still clear obstacles before the market functions smoothly'* (Commission, 2014: 3). The measures for unbundling are rather successful, as 96 out of the 100 transmission operators were unbundled. In addition, several infrastructure projects did create an increased security of supply in the EU. The Commission noticed that more investments in infrastructure were made in MSs with stable regulatory frameworks, so the necessity of a regulatory framework became more evident. The report also notes, however, that the total increase in infrastructure was still inadequate and that the electricity distribution grids had to become smarter, therefore more investments are needed. Nevertheless, the Commission believes the provisions of the third legislative package should have the ability to eventually form a good investment climate in which the needed money would be raised (Commission, 2014: 5-9)

Not only the hardware, the actual infrastructure as the Commission likes to call it, but also the software requires some adjustments. Mainly because in many MSs the regulatory framework is still rather nationally oriented. To achieve a functioning IEM, the regulatory frameworks ought to have a European focus. In the last package several binding European rules were adopted in connected regulations to assist this change, the so called Network Codes. According to the Commission these are now developed each year and applied in the practical functioning of the IEM. However, many differences per region are still visible so the effectiveness is not there yet (Commission, 2014: 9-10). Finally, in order to obtain European wide competition, first regional cooperation in energy markets is crucial. Therefore, the Commission believes regional integration is an objective that should get more attention and needs to be achieved (Commission, 2014: 12-15). Many of the barriers and proposed solutions in the progress report are also included in four out of the fifteen action points of the Energy Union[9] (Commission, 2015: 19-20).

8 The Treaty on European Union can be found here: http://eur-lex.europa.eu/legal-content/ EN/TXT/?uri=CELEX%3A12012M%2FTXT.

9 1. Full implementation and strict enforcement of existing energy and related legislation is the first priority to establish the Energy Union.

Continues on next page

2.3. The Academic Review

In large part, the scholarly literature on the IEM is mainly claiming the challenges, shortcomings and possible solutions for the IEM (Eikeland, 2011; Ipek& Williams, 2010; Mastropietro et all, 2015; Eurelectric; Kanellakis et al., 2013; Helm, 2013; Selleslaghs, 2014; CEER; Bruegel; CIEP). The main understanding is that despite some MSs are busy implementing the legislation of the third energy package, some measures are still not functioning because a majority of the people involved in the power sector still view energy and its security of supply as national issues. Therefore, more regional integration as urged by the Commission will most likely be difficult to achieve (Mastropietro et al., 2015: 38).
However, it is too easy to claim that the troubled progress of the IEM is a result of energy nationalism and the failure of MSs to implement the directives. Dieter Helm writes that: *'if the Commission really wants a genuine IEM then it has to come to terms with just how radical such a policy would have to be'* (Helm, 2013: 31). He believes the main aim of the Commission should be the creation of a European energy system, with the actual interconnectors. Because if the physical interconnection between the markets does not exists, the IEM is bound to fail. A big problem, he argues further, is that all MSs have their own way of valuing the assets in their energy markets, some include the sunk costs[10] of the transmission lines and others do not. But it is crucial for the operators that these sunk costs are covered, otherwise the market would not be as effective as it can be. Therefore, a common way of valuating assets across the EU is necessary for companies involved and to assure investors (Helm, 2013: 28-31).

Subsequently, Eurelectric, an association of the electricity industry in Europe that has been there from the start of the IEM, stated in a response paper to the Commission's 2014 progress report, that while it complies with the general findings and proposed action by the Commission, it believes the IEM should be an even bigger priority. It claims that if the Commission would not speed up and push MSs more strongly to comply with the legislative packages, the goal of a complete IEM in 2014 would not be achieved. The need for political pressure was also mentioned in this paper (Eurelectric, 2011: 1-12). As was also claimed by the think-tank Bruegel in 2013, because electricity networks are still a natural monopoly and energy in general is rather politicised, so it requires public intervention. Bruegel proposes to add a new 'European system-management layer', in order to help the national operation centres. For instance, by assisting them to communicate better information about their current status and their planned adjustments (Zachmann, 2013: 2-6). Finally, Bruegel continues by stating that 'the internal electricity market is at risk to end up as a hollow legal concept' (Bruegel et al., 2013: 3). On the wholesale level electricity might be traded between the MSs, yet the national sector rules would still be intact holding the creation of a fully functioning IEM back. To conclude this literature review, the troublesome situation of the IEM is evident and it is clear that many academics and organisations or associations have stated their opinion on the functioning of the IEM.

- The Commission will use all instruments to ensure that Member States fully implement energy legislation, in particular the 3rd Internal Energy Market Package, and it will strictly enforce the Treaty's competition rules.

5. Creating a seamless internal energy market that benefits citizens, ensuring security of supply, integrating renewables in the market and remedying the currently uncoordinated development of capacity mechanisms in Member States call for a review of the current market design.

- The Commission will propose legislation on security of supply for electricity in 2016.
- The Commission will review the regulatory framework, in particular the functioning of ACER and the ENTSOs, in 2015-2016 and will propose appropriate actions to reinforce the European regulatory framework.

7. Regional approaches to market integration are an important part of the move towards a fully integrated EU-wide energy market.

- The Commission will develop guidance on regional cooperation and engage actively in regional cooperation bodies with Member States and stakeholders.

8. Greater transparency on energy costs and prices as well as on the level of public support will enhance market integration and identify actions that distort the internal market (Commission, 2015: 19-20).

10 Sunk costs are the economic costs that have already been made in the past and cannot be undone.

3. Theoretical Framework

This chapter will briefly discuss policy change, afterwards the theory of policy learning is examined in more detail as it is the theoretical framework for this research.

Policy change is a subject that has been studied for quite a while now. The first thoughts on policy change were related to power relations and conflict-based theories. Both rational and more bureaucratic models of decision-making presumed that the individual actors involved in the policymaking process are rationally self-interested. Their decisions would therefore primarily had to be beneficial for their own position. In addition, many theories, from pluralist, neo-pluralist, corporatist to Marxist, shared the view that the governments are relatively passive and that their actions, including changing policies, are driven by social forces and conflicts (Nordlinger, 1981: 2-3). Conflict is thought to arise when the organisations involved disagree on the level of relevance to their self-interest. However, *'when conflict exists actions change and actors resort to bargaining mechanisms such as side payments, log rolling, and oversight to reach agreements and hold coalitions together'* (Matland, 1995: 156). Therefore, in this first theoretical phase of policy change theories, the main factor for policy change was believed to be the social actor that could put pressure on governments and its policymakers which would eventually result in a changed policy. The choices in the decision-making process are limited due to these social actors (John, 2015: 2-5).

However, not all theories accept that policies are able to change. Such a theory is *path dependency* by DiMaggio & Powell (1983). This theory states that it is rather difficult for a policy to change because the institutions that make the policy are 'sticky'. The actors in the policymaking process will do all to protect the existing model and so this theory assumes the existence of policy continuity over policy change (Cerna, 2013: 4).

Nonetheless, many theories on policy change followed, including the theory of **policy learning.** This will be the essential theory of this thesis and is discussed below. However, this introduction shows the need to see this theory in light of a dynamic set of theories on policy change.

3.1. Policy Learning

Instead of only looking at the power relations and conflict-based theories for policy change, in 1974 Hugh Heclo introduced the concepts of cognition and knowledge utilisation into the policy change research. This resulted in a new theoretical framework, policy learning. He described this switch in thought, writing:

> *'Tradition teaches that politics is about conflict and power. This is a blinkered view of politics... Politics finds its sources not only in power but also in uncertainty... Policy making is a form of collective puzzlement on society's behalf'* (Heclo, 1974: 305 in Grin & Loeber, 2007: 201).

Heclo concluded that a policy changes partially due to factors such as changing social and economic conditions, but mainly due to the interaction of the specialist in the policy area as they eventually gather more information on the policy problem and experiment (Sabatier, 1988: 130).

After this new insight, policy learning has been researched and debated much which resulted in a dynamic mix of policy learning theories. While policy learning is a separate theoretical framework, it can also appear as part of *policy innovation* or within a wider process in which learning will result in *policy diffusion* across multiple levels of governance and various policy sectors (Rietig, 2013: 26). The policy learning theories developed, all focus on different

conceptualizations of learning (Heclo, Sabatier, Rose, Hall, Etheredge). Nonetheless, all theories are centred around the complex relation between power and knowledge in the policy process and define a change in ideas as the key aspect to understand policy change (Grin & Loeber, 2007: 201-215). Changing their definition of policy learning slightly in terms of the subject and object of learning.

In order to make this concept of policy learning more operational, Bennett and Howlett analysed all main learning theories and characterised them into three types of learning characterised by *who* learns, *what* is learned and to what *effect* this learning leads. See figure 1 for this typology. The first type of learning, *government learning* deals with state officials who learn about the policy process in order to realize organisational change. Followed by *lesson-drawing* in which policy networks are the subject that learn about policy instruments resulting in a change in a program or policy, this is also known as *instrumental learning*. The last type of learning is *social learning* or *conceptual learning*, here whole communities learn about ideas which could result in a paradigm shift (Bennett & Howlett, 1992: 275-89). This typology is not absolute as other variations are possible.

Figure 1: Three types of learning and policy change

Learning type	Who learns	Learns what	To what effect
Government learning	State officials	Process-related	Organizational change
Lesson drawing	Policy Networks	Instruments	Program change
Social learning	Policy communities	Ideas	Paradigm shifts

Source: Bennett & Howlett, 1992: page 289.

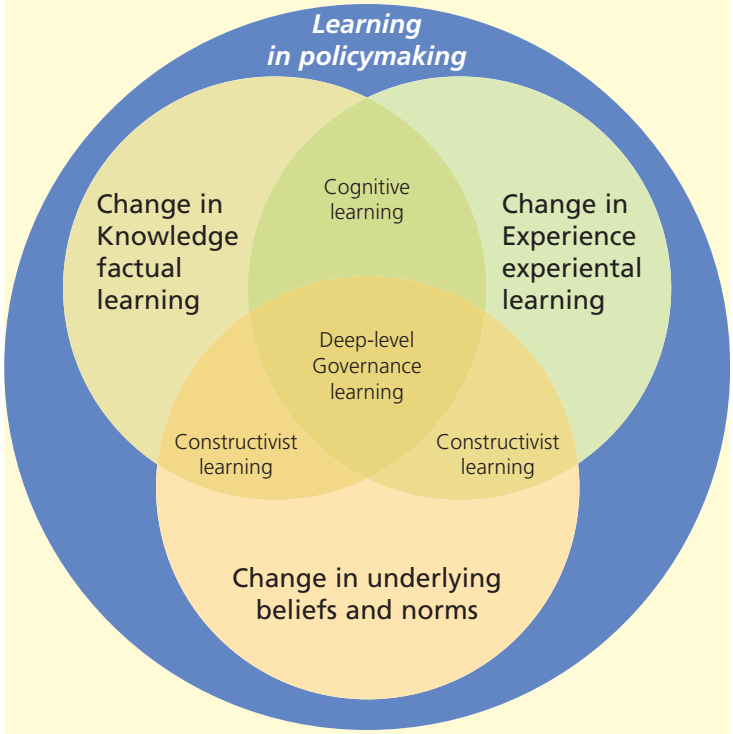
These three types of learning are all aspects of the policy learning theory. However, the theory can be made even a bit clearer when only focussing on policy learning in policymaking as is done by Rietig (2013). This thesis will also only focus on the policymaking process, therefore it is useful to define how Rietig claims policy learning can be detected. In Rietig's words:

> *'learning among decision makers [can] only occur if they reflect upon new information provided to them through an experience or increase in knowledge and if they, as a consequence, change their underlying assumptions, beliefs or values and come to a different view of the situation'* (Rietig, 2013: 3).

Therefore, she divided learning in policymaking into three elements of learning, as is shown in figure 2. A policymaker can learn in the policymaking process due to a *change in knowledge*, a *change in experience* and/or a *change in underlying beliefs and norms* (Rietig, 2013: 17). This typology is a useful tool in trying to determine if policy learning has taken place and how this learning occurred.

The three types of learning are overlapping, when all are reached the ultimate, the *deep-level governance learning*, is achieved. However, also when just one type of learning is proven, it can be claimed that the policymakers have learned. In addition, these elements of learning can happen at three levels, starting with the individual learning, to the institutional learning and finally the wider context with learning on the socio-political level. Eventually these levels can also influence each other (Rietig, 2013: 20).

Figure 2: Three types of learning and policy change



Source: Rietig, 2013: page 17.

The interesting point Rietig makes is, that she includes *non-learning* in her article, because learning can only take place when the policymakers actively make the decision to address a certain policy problem (Rietig, 2013: 9-17). Non-learning takes place outside the circle of policy learning as shown in figure 2. This non-learning is also part of the incrementalism theory by Lindblom (1959). He believes policymakers are usually expected to follow a certain model for policy choice. In general, when all values are ordered and all possible policy outcomes are analysed, the policymaker is able to simply choose the one policy with the greatest values. However, this is impossible in cases of complex policy problems in which many actors are involved who tend to disagree on multiple aspects, such energy policies. In these cases, the policymakers lack much needed information and the values of policies are not as easy to order in importance. 'Big jumps' towards the policy objective are simply unthinkable due to this lack of knowledge. The policymakers are therefore best to make a comparative analysis of incremental changes. He or she knows that the policy will never be the final solution to the problem and mainly hopes it will achieve at least a part of the solution. By succeeding the policies with incremental changes, a new incrementally changed policy can follow quickly after a successful policy or even when the past policy failed, a remedy may take place instantly. Lindblom referred to this method as *muddling through* (Lindblom, 1959: 79-88).

3.2. Policy Learning and the IEM

Policy learning is a rather complex and ambiguous theory. However, it has been divided into distinctive types which makes it feasible. This thesis will use Sabatier's definition of policy learning, he sees this '*as a relatively enduring alteration of thought or behavioural intentions that are concerned with the attainment (or revision) of the precepts of a policy belief system*' (Sabatier, 1987:

672 in Bennett and Howlett, 1992: 277). He created this theory in his research on policy networks and policy change and innovation. The term policy networks refers to a cluster of actors who are interested or have a share in a policy sector (Peterson, 2009: 105-6). With this theory he focuses on the actual policy and the instrumental change resulted by a shift in thinking of all the relevant actors in the policy networks. Sabatier's version is therefore called, *policy-oriented learning* as part of instrumental learning. He developed a framework on the basis of his definition which focuses on policy-oriented learning in policy networks. This is the so-called **Advocacy Coalition Framework** (ACF).

The ACF has particularly been used in studies with energy and environmental cases which are policy areas with conflicting goals and many actors from multiple levels of governance (Cerna, 2013: 6). Besides, it has been applied to European Union policies in several studies (van Muijen, 1993; Loeber & Grin, 1997; Eberg, 1997; Andersson, 1997; Ingold, 2011 &2014), yet primarily still within the energy and environmental sector. In addition, Sabatier regarded that:

> *'the ACF should apply well to the increasingly complex set of relationships evolving within the European Union, as European institutions - most notably the European Commission, the Court of Justice, the Council of Ministers and also the European Parliament - are increasingly displacing national institutions as the principal loci of policy change'* (Sabatier, 1998: 98-101).

Therefore, the IEM and policy learning, in particular the ACF, are a sound combination.

The ACF starts with some basic premises. First off, in order to understand the process of policy change one requires a time span of at least one decade. Second, the best way to observe policy change is by focusing on the *policy subsystem* and not just on one governmental institution. With the idea that policies are made and influenced by a large variety of actors. The policy subsystem is Sabatier's term for what others call policy networks. Thus, the set of actors, both from private and public organisations, who are concerned with the policy problem. In addition, in most policy subsystems actors from all levels of government are involved, from elected officials to interest groups and researchers (Sabatier, 1988: 138; 1998:99).

The actors form groups with other actors who share the same normative and causal beliefs, also known as the *belief system* (Sabatier, 1988: 131-9). However, these beliefs affects the way information is perceived. These formed groups are still relatively stable as the basic policy core beliefs act as glue, despite them also acting according to their individual and organizational self-interest (Sabatier, 1998: 108-115). The actors match the situation, roles and rules based on their experience and knowledge, relating to the *logic of appropriateness* of March and Olsen (2004). Decision- and policymakers usually act with a bias towards social norms instead of making purely rational decisions. These rules are institutionalized in contemporary democracies and thus difficult to adjust. However, change is possible through experiential learning (March & Olsen, 2004: 3-13).

The groups of actors involved in the policy subsystem form strategies in order to achieve the desired policy objective, resulting in the adoption of policies and legislation. Next, they are able to evaluate this policy and its process. By using new knowledge through studies or by making own evaluation to learn from own experience which could all alter the belief systems. Also external events could have that affect. Sabatier states that the policy subsystem and its actors are influenced by two sets of *exogenous variables*, one relatively stable and one dynamic. The stable factors may influence the subsystem both externally or internally, by shaping the success of the chosen policy instruments and also alternative instruments. The distribution of natural resource

may for instance alter the possibility and success rate of applying subsidies for specific energy sources, when the necessary amount of money is insufficient or distributed incorrectly. Other factors that are able to influence the beliefs and resources of the coalitions in the subsystem are more ambiguous and changeable. Sudden events, such as an economic downturn, environmental degradation after a natural disaster or geopolitical disputes such as between Russia and the Ukraine resulting in energy supply problems in the EU in 2006, may alter support for certain policies. Another option is that the previously taken decisions can impact the successfulness of the policy, these could also be decisions from other subsystems (Sabatier, 1988: 134-138). For instance, decisions taken by the environmental or climate change adaptation subsystems can influence the policies and decisions in the electricity subsystem. These variables affect the constraints, opportunities and resources of the actors in the subsystem, which further influence the policy subsystem.

It is this process of evaluating new knowledge, possibly adjusting the belief system, and actively refining the existing policy, that is the basis of the policy-oriented learning. As these evaluations may result in a change in their belief systems which causes policy change.

However, policy change in the ACF is not straightforward, as it can occur at three hierarchical levels of the belief system, all being sensitive to change in a different manner. The three levels are the *deep core beliefs, policy core beliefs and secondary beliefs*. See figure 3 for a detailed description of these levels and their characteristics.

Figure 3: The structure of belief systems

	Deep core	*Policy core*	*Secondary Aspects*
Defining characteristics	Fundamental normative and ontological principles	Fundamental policy positions concerning the basic strategies for achieving or values within the subsystem	Instrumental decisions and information searches necessary to implement policy core
Examples	The nature of man; inherently evil or socially redeemable; the relative priority of various ultimate values: freedom, security, health	Identification of key issues and groups whose welfare is of greatest concern; proper distribution of authority between government and market or among levels of government; priority accorded to policyinstruments (regulation, covenants, economic instruments); degree of seriousness of the problem; technological optimism vs. pessimism	Seriousness of specific aspects of the problem in specific locales; causal links; efficacy of administrative rules, and policies, appropriateness of funding arangements and budgets; statutory interpretation; relevant information for implementation
Scope	Across all policy subsystems	Specific to a subsystem	Specific to a subsystem or a sub-subsystem
Sensitivity to change	Very difficult; similar to a religious conversion	Difficult, but can occur if experience reveals serious anomalies	Moderately easy, this is the topic of most administrative and legislative policymaking.

Source: adapted from Sabatier and Jenskins-Smits (1993), Sabatier (1988; 1998) & Kemp, R. & Weehuizen, R. (2005).

The framework claims that changes in the *deep core* of the belief system are difficult to change. These include the fundamental and normative principles of life including the rules for the governmental or organisational programme (Sabatier, 1988: 134-145). Sabatier has later described this change as 'major' policy change in which policy goals or programmes completely change (Sabatier, 1998: 118-119). The next level in the belief system are the policy core beliefs which *'represent a coalition's basic normative commitments and causal perceptions across an entire policy domain or subsystem'* (Sabatier, 1998: 103). For instance, the importance of environmental protection or the degree of seriousness of the problem . These beliefs are still rather rigid and therefore difficult to change. Core beliefs can only be altered due to non-cognitive factors such as macroeconomic changes. Finally, the lowest level is the *secondary aspects* of a coalitions belief system, such as more detailed rules, instrumental decisions and relevant information for implementation (Sabatier, 1988: 134-145). This change is known as 'minor' policy change. Therefore, the policy change analysed in this thesis will presumably contain secondary aspects of the belief systems as they are most likely to change. In addition, the ACF assumes that external factors are not the most sufficient cause for policy change (Sabatier, 1998: 111-119).

However, not all policy change is directly policy learning. Therefore, Sabatier identified three modes of policy-oriented learning, that relate to the three types of learning according to Rietig:

1. The first one is *'improving one's understanding of the state of variables defined as important by one's belief system'*. This can involve the secondary aspects of the belief system or when belief systems are competing.
2. The second mode of learning is when one searches to improve the mechanisms to achieve the policy objective, by *'redefining one's understanding of logical and causal relationships internal to a belief system'*.
3. The final mode of learning comes from the *external factors*, such as a loss of resources, activities of the opponents which increases their resources and power. It is such events that force the actors in a subsystem to identify and respond to the new challenges and may result in adopting some new elements, sometimes even elements of opponents' beliefs. Yet also here, changes are usually restricted to change in secondary aspects of the belief system (Sabatier, 1988: 149-151).

In short, a process may be characterised as policy learning when the policymakers either learned about the secondary aspects of their belief systems, or the causal relationships between these aspects, all in order to actively improve the policy instrument to reach the policy goal. Or when external factors changed the other levels of their belief system which indirectly result in different preferences resulting in the desire to change the policy. Relating to Rietig, policy learning may take place in the process of evaluating governmental decisions by new knowledge through studies and experience or external factors. When this results in a change in the actors' belief systems and they actively make the decision to improve the policy instrument, policy learning is possibly the cause of the policy change. However, the extent of learning is affected by the degree of commitment between all the relevant actors involved (Rietig, 2013: 6).

3.3. The EU as a Member of a Policy Subsystem

The beliefs of policymaking and policy learning of Sabatier's ACF are favorable for answering the research question of this thesis. This subsection will show the relevance of the ACF and the IEM by stating that policymaking in the EU resembles the way it is believed to function in the ACF. Policymaking in the EU consists of policy networks, or policy subsystems as Sabatier described

these, in which specific policies are created in an area with a diverse set of actors. For each policy, different relevant actors will be present, simply depending on the policy topic. The main actors and influencers of policies are the official EU institutions. Starting with the supranational level consisting of the Commission which is the only institution with policymaking authority. Next are the intergovernmental institutions of the Council and the EP. Intergovernmental because they are the governance layer representing the MS's ideals, against the supranational EU ideals. The Council consists of the national ministers of specific policy sectors, and the EP has national parliamentarians chosen directly by the European people. These institutions are able to review and claim amendments to the proposed policy. Finally, MSs are also able to somewhat influence policymaking through the European Council, consisting of all heads of state or government of the MSs, as they set up the agenda (Eising, 2002: 89).

Depending on the specific policy, other EU institutions or organisations will also be invited to the process and able to make amendments. For the IEM, the EESC and the Committee of Regions were also involved. Which both primarily represent the national and regional ideals. This way, the authority of EU decision- and policymaking is shared across many levels of government, from supranational, national to subnational. This governance model is known as the *multi-level governance* system and has been used many times to explain the processes of decision- and policymaking in the EU. National governments still have some control over these processes, despite some of their formal authority has shifted towards the supranational level (Hooghe & Marks, 2001: 1-5). The multilayered negotiations from 28 MSs and other parties overshadow the formal powers of the main EU institutions (Eising, 2002: 89).

Next to these governmental actors, other actors can also be active in EU's decision- and policymaking process. As a result of the novelty of the IEM, the EU policymakers required much desired knowledge and input from the sector to understand their ideas and indirectly the possibilities for the market (Eberlein, 2008: 76-80). The Commission set up an open forum in which all willing actors were able to discuss the IEM. The so called **European Electricity Regulatory Forum**, also known as the **Florence Forum** as it is supported by the Florence School of Regulation (Karan & Kazdağli, 2011: 28). This forum was a way to create a place for informal discussion and cooperation between the market actors, the stakeholders and national regulators. Also interest groups such as Eurelectic, International Energy Agency (IEA), ENTSO, ACER, Europex and Geode are involved through this forum. Twice a year all actors will meet and debate on specific topics concerning electricity regulation, always chaired by the Commission. Through the debates and working groups, *'the Forum would develop, in a deliberative fashion, legally non-binding, best-practices rules, and outside the political arena'* (Eberlein, 2008: 78).

Therefore, through this forum and indirectly the Commission's need for expertise and knowledge due to the novelty of the policy on electricity market liberalisation, also non-governmental actors are able to enter and greatly influence the policymaking process. Especially large transnational networks such as Eurelectric, consisting of representatives from all national supply systems, are important and influential actors in the Forum (Eikeland, 2011: 256). Policy learning between actors with different belief systems is most likely to happen when a forum has been created in order to have an open space to discuss the policy problem. Nonetheless, it has to be a prestigious forum in which professionals with various belief systems are willing to take part in (Sabatier, 1998: 106-118). The Florence Forum is attended by several large and influential groups, from green parties, think tanks to organisations representing large energy companies, therefore, its existence may have triggered a process of policy learning.

Additionally, some research on the theory of policy learning and the IEM has already been done, proving the relevance of the policy learning theory with the IEM again. Eising (2002) for instance concluded, that before the first negotiations many MSs, excluding the UK, were strongly against the creation of an internal energy market. Due to negotiations between the EU and its MSs and between EU institutions, new information on the need for such a market appeared and gave the MSs new insights. Eising therefore posits that the MSs' change in thought can be explained as a policy learning process, *'the routine interaction between the EU organizations and in the Council can generate policy learning'* (Eising, 2002: 90). It was not just bargaining power that resulted in policy change, because the MSs' status quo eventually even exceeded the minimum requirements of the first IEM directive (Eising, 2002: 87-91).

In the end, EU's decision- and policymaking process is similar to Sabatier's idea of the policy subsystem in which the policies are influenced by actors from multiple levels of governance. It is this interaction between all the involved actors that influence policy change and possibly commence a process of policy learning. The EU institutions, indirectly the MSs and the actors involved in the Florence Forum are the main drivers for policy change in the IEM subsystem. However, the actors in the Florence Forum most likely push for the most radical change in policy as they represent the industry and regional parties who experience the effects of the IEM policies the best.

4. Discussion of Methodology

The way this research will be conducted has already been mentioned briefly in the introductory chapter. This chapter will extend on that by stating how the data was collected and explain how the literature content analysis is executed.

4.1. Data Collection

This research is purely based on natural occurring data. The used documents are openly available, as all legislation made by the EU is downloadable from their website[11], even in all official languages of the MSs.
The second and third legislative packages consisted of several directives and regulations, however, in order to get a fair analysis, the documents had to be of the same kind. Only then it is possible to show how the policy and its policy instruments might have changed in order to get the common policy goal. Thus, the choice of the three directives focussing on the common rules for the IEM for the literature analysis was obvious. The quality of the chosen documents is crucial for good scientific research. In general, documents that are not provoked are best to use as these will most likely not be affected by the interests of the researcher. As the documents used in this analysis are made and published by the European Commission, the level of quality is no obstacle for this research.
The natural data that is used will be detailed and accurate enough to adopt in this research. With the exclusive use of natural occurring data risk of subjectivity increases because the interpretation purely relies on the researcher (Lewis, 2003: 57). Taken measures to reduce this risks are discussed below.

4.2. Research Methods

The research methods used in this thesis are **document analysis** and in specific a **literature content analysis**. The choice for literature content analysis was obvious when looking at the research purpose and the given time and budget limits. In addition, the founder of the ACF, the part of the policy learning theory that is at the centre of this research, claimed in his study on this framework that *'content analyses of government documents (e.g. legislative and administrative hearings) and interest group publications probably offer the best prospects for systematic empirical work on changes in elite beliefs'* (Sabatier, 1988: 147).

Both methods rely on documents as their main evidence. Sometimes this kind of qualitative research is treated without the necessary accuracy. When documents are used as the primary data, the research should also have to be handled rigorously as is the case in quantitative fields. Normally quantitative researchers have to comply with strict rules of analysis, qualitative researchers on the other hand *'generally lack this type of commonly agreed to and 'objective' tool. Rather, they must rely on their ability to present a clear description, offer a convincing analysis, and make a strong argument for their interpretation to establish the value of their conclusions'* (Wesley, 2009: 3-4). Therefore, Wesley established several guidelines that should increase the trustworthiness of qualitative research and reduce the risk of subjectivity.

Triangulation is the first guideline, it refers to the need for external support of the findings from political documents. One such option is quantizing the findings, by for instance giving an indication of the amount of times a certain keyword or term appeared in the text. Another method to create objectivity and validity, is to produce detailed accounts of the findings (Wesley, 2009: 1-8). Finally, the findings and decisions made have to be justified and defended by the

11 All EU legislation can be found here: http://eur-lex.europa.eu/homepage.html?locale=nl.

researcher which increases the credibility of the analysis. The researcher should also keep in mind that other explanations are possible, as *'qualitative document analysts need not feel pressure to "prove" their reading is the only accurate one. In fact, they are encouraged to report evidence that places reasonable bounds on their findings'* (Wesley, 2009: 11).

4.2.1. Literature Content Analysis

The objective of using qualitative content analysis of literature is to *'describe a phenomenon in a conceptual form'* (Elo & Kyngäs, 2008: 107). An inductive approach is chosen as no such previous studies have been conducted that could structure the analysis. In the preparation phase, the concepts or keywords that are relevant for the analysis have been derived from the data. The unit of analysis is the three directives on the common rules for the internal electricity market.

These directives have been read several times in order to get sense of the whole documents and understand the proposed measures. Also Named Entity Recognition (NER) software[12] is used to detect relevant topics, terms and organisations. Subsequently, the data has been organised by making categories and themes. This process of open coding is done with the use of the Nvivo 11[13], a software to analyze qualitative data in great detail. The data was imported into the software, when it was read again until all relevant themes and codes were attached to the articles in order to include all aspects of the directives (Elo & Kyngäs, 2008: 107-109).

Codes with similar topics or main categories were grouped, such as Transmission system Operator and combined operator as both fall under the category of unbundling. This process of grouping topics continued until a workable amount of main categories were left. An overview of the sub-categories and main categories is included in the appendix as figure 19.

In order to improve the reliability and trustworthiness of this study, the analysis outcomes and the process will be described in much detail in the next chapter. Research outcomes will be either paraphrased or be supported by citations. The latter may increase the trustworthiness of this study too, yet in both cases clear referencing will make it possible for the reader to follow the process of analysis and interpretation (Elo & Kyngäs, 2008: 111-112).

Next to using Nvivo, the directives were imported into a Microsoft Office Excel document to be able to effectively compare the directives and view the policy change. As this was not easily done in the other software. This sheet is also added in the appendix as figure 20. The next analysis chapter mainly uses this document. However, the coding in Nvivo has helped to create visual displays of the directives and the policy change.

12 Available at: http://nlp.stanford.edu/software/CRF-NER.shtml.

13 Available at: http://www.qsrinternational.com/product/nvivo11-for-windows.

5. Data and Analysis

The goal of this thesis is to investigate the three directives the EU issued to guide the design of the IEM and to examine whether the similarities and differences between these directives can be explained as policy learning by the EU. To this end, this chapter proceeds by providing the results of the analysis of these three directives. Before the results of this qualitative analysis will be discussed, first some quantitative elements will be mentioned to *quantize* the research findings in order to improve the validity and reliability of this research as mentioned in the chapter before. Figure 4 gives a quick overview of the length of the directives and the number of articles.

Figure 4: Quantizing the three IEM directives

	Directive 1996	Directive 2003	Directive 2009
Articles	29	32	51
Pages	10	19	39
Chapters	8	8	11
Annexes	0	2	2

Source: European Commission 1996; 2003; 2009.

The most striking aspect is that the directives have clearly grown over the years. This may indicate that the IEM has become more important or the need to explicitly state certain rules may have increased. The directive in 2009 is overwhelmingly substantial compared to the first directive in 1996. The directive increased by three chapters and 22 articles, with the greatest increase in articles occurring in chapter four (1996) which has been split into two chapters in 2009. The three added chapters in the final directive were numbers five, nine and ten, indicating that the 'independent transmission operator', 'national regulatory authorities' and 'retail markets' were emergent themes from 2003 to 2009. Throughout the analysis more quantitative elements will be highlighted.

The analysis will be divided into four sections, each resembling a type of policy learning. Therefore, these types will be examined first.

5.1. Criteria for Policy-Oriented Learning and Non-Learning

In order to have a valid analysis, it is useful to clearly state the definitions of the learning types that could possibly be detected in the directives. When policy learning is not detectable, a definition of such non-learning is necessary as well. Therefore, figure 5 describes the three types of policy-oriented learning that this research aims to detect within the directives and what kind of policy change these types entail.

In short, *a policy change can be defined as policy-oriented learning when the change adjusts the secondary aspects of the belief system and the causal relationships within the three levels of the belief system or when external factors have influenced the belief system.* When one of these changes is detected it can be characterized as policy learning. However, assuming that the involved policymakers actively made a decision to approach this policy problem differently, in order to

Figure 5: Defining policy-oriented learning

	Types of policy-oriented learning	Policy change	Sources
1	**Learning about secondary aspects of the belief system** such as changes in policy preferences regarding desirable regulations or budgetary allocations or the evaluation of various actors' performances. In order to better understand important variables in one's belief system.	Changes in definitions; significant changes in language	Sabatier 1988,1998; Rietig 2013; Howlett 2012
2	**Learning about the causal relationships internal to a belief system**, to improve the mechanisms for the achievement of a policy objective. For instance changes or (small) instrumental additions that should improve the policy instruments.	New actor(s); new or deleted tasks for existing actors; change in existing policy instruments; new topic(s)	Sabatier 1988,1998; Rietig 2013; Howlett 2012
3	**Learning through external factors**, may result in adopting new elements, sometimes even elements of opponnents' beliefs. Mainly about the secondary aspects of the belief system.	Completely new policy instrument; new topic(s)	Sabatier 1988,1998; Rietig 2013; Howlett 2012; Cerna 2013

improve policy outcome. Because Rietig claims that this conscious choice is necessary for policy learning (Rietig, 2013: 9-17). Yet, this cognitive change cannot be researched in this thesis.

To clarify, the *belief system* refers to the shared normative and causal beliefs of all actors in the policy subsystem. It consists of three hierarchical levels, with the level of secondary belief being the one that is most likely to be affected by policy learning and change. Because these beliefs are less confined, such as beliefs about the importance of the policy problem and instruments or evaluations of the performance of the actors involved (Sabatier, 1998: 103-4). Referring back to figure 3 on page 13. And a *policy instrument* is a 'tool of governance' to be used by policymakers. They have a limited set of instruments to include in their policies in order to pursue the desired outcome. Examples of such tools are taxes or permits, better information or formulating codes or guidelines. The choice of policy instruments is associated with other theories, nonetheless, the choice is usually influenced by economic or political intentions. But also past experiences shape the choice of instruments, therefore policy learning theories would also be interesting for studies on instrument choice (Howlett & Ramesh, 1993: 4-14).

However, when policy change occurs policy learning is not always the case. Policy change is able to indicate if policy learning might have occurred, yet policy learning is not the only cause of this change. Additionally, policy learning may also happen when no policy changes are adopted. Because policy learning is the case when the policymakers actively make a decision reflecting their policy belief system (Eising, 2002: 91). Therefore, non-learning is also a possible outcome of this analysis. Referring to situations where a policy learning process was not able to commence. Figure 6 gives the typology for non-learning.

When the policy or policy instruments show no change, it is classified as non-learning. The policymakers clearly did not change any level of their belief system. However, non-learning is

Figure 6: Defining non-learning

	Theory	Policy change	Sources
	Non-learning	None; small changes in language; small instrumental changes that move towards the central policy goal; few and customary additions to the mechanisms	Rietig, 2013; Lindblom, 1959

also the case when the policy change is relatively small and is moving in the same direction as the policy before. Simply, *muddling through* as Lindblom calls it. Newer policies merely contain small changes that are thought to improve the road towards the policy goal. This may happen when policymakers from opposite belief systems have started a bargaining process in order to get a policy all actors comply with, usually resulting in less ambitious policies (Eising, 2002: 91). Or when policymakers tried to consciously or unconsciously avoid the problem, so-called *defensive avoidance*.

After stating the criteria for the types of policy-oriented learning and non-learning, the analysis is able to begin. Starting with the aspects in the directives which can be characterised as non-learning, towards changes that are defined as little learning. Here a process of policy learning has commenced, but the policy goal of market liberalisation remained the same. The next subchapter shows the differences in the directives that represent a lot of policy learning. These aspects resemble significant policy change and do not have liberalisation as their main goal. This chapter concludes with a brief conclusion on this analysis.

As a result of the length of the IEM directives and the differences or similarities between them, many more changes or uniformities could have been examined. However, the to be discussed policy changes and possible policy learning processes stuck out the most and are important and significant changes in order to see the overall development.

With the use of *quotes* and *comparison figures*, a brief historic overview of the development of the directives and a possible learning process is shown.

5.2 Non-Learning - Same Goals, Recalibrated Instruments

This section will present the parts of the directives that can be defined as non-learning. In other words, the unchanged policy instruments or policies that have only changed in an incremental manner, while still maintaining the same policy goal. These small changes are usually complementary instrumental additions, such as stricter rules or slight changes in language.
In the case of the IEM, the policy goal from the first directive onwards was market liberalisation in the energy sector. Which is a sector that has been exempted from competition for a long time due to the immense national interests. However, the Commission's idea was that by liberalising the national energy markets and integrating them into the European internal market for electricity, the energy prices would decrease while increasing the efficiency of the market by limiting the power of the natural monopoly of state-owned energy companies.

Generation

The first articles in which non-learning can be identified are the articles on generation, meaning the production of new electricity. Starting from the first directive, only two generation procedures are allowed, the **authorization procedure** and the **tendering procedure**. For the former, all three directives stated the same, see figure 7.

Figure 7: Articles on the authorization procedure for generation

Directive 1	Directive 2	Directive 3
Where they opt for the authorization procedure, Member States shall lay down the criteria for the grant of authorizations for the construction of generating capacity in their territory.		
	Member States shall ensure that authorisation procedures for small and/or distributed generation take into account their limited size and potential impact.	

Source: Directives 1996:5, 2003:6, 2009:7.

From 1996 to 2003 only some change in language appeared by adding a new sentence. This sentence does not change the outset of the policy measure. It is simply an incremental addition to the existing policy measure in order to create clearer rules for generation in a liberalised electricity market. Between the second to the third directive nothing changed in this article. Therefore, this change represents non-learning.

The Transmission System Operator and Distribution System Operator

In order to create a functioning IEM, the policymakers believed that specific rules for the transmission and distribution system had to be established. The companies owning these systems are fundamental because they deliver the electricity from the place of generation to the end consumer. Concerning the design of the transmission system, already from the first directive MSs were obligated to:

> *'designate or shall require undertakings which own transmission systems to designate ... a system operator to be responsible for operating, ensuring the maintenance of, and, if necessary, developing the transmission system in a given area and its interconnectors with other systems, in order to guarantee security of supply'* (Commission, 1996: art. 7.1).

This meant that an appointed person, the operator, would become accountable for the transport network its company owned. The so called Transmission System Operator (TSO). In 2003 it was made explicit that a MS could designate 'one or more' TSOs, as a country could have multiple companies owning parts of the transmission system. This small change cannot be claimed to be part of a process of policy learning, it is simply a clarification without considerable affect to the policy measure. Therefore, the changes between the articles on the creation of this actor from the first and second directive show a process of non-learning.

From the start of the IEM policy, MSs also had to create a Distribution System Operator (DSO). The designation of this DSO did not change much throughout the years, see figure 8.

The DSO is the person who is responsible for at least the maintenance and development of the distribution system it owns. The change in language in the designation of the DSO from 1996 to 2003 will not change the policy instrument much. It only formulates that in times of economic imbalance for instance, the MSs may choose the period in which a DSO is required. Thus, it is simply a small addition to the article based on the idea of keeping the economic efficiency in the MSs at all times in a liberalised market. The incremental aspect of this change makes it feasible to identify it as non-learning.

Figure 8: The designation of the Distribution System Operator

Directive 1	Directive 2 & Directive 3
Member States shall designate or shall require undertakings which own or are responsible for distribution systems to designate a system operator to be responsible for operating, ensuring the maintenance of and, if necessary, developing the distribution system in a given area and its interconnectors with other systems.	Member States shall designate or shall require undertakings that own or are responsible for distribution systems to designate, **for a period of time to be determined by Member States having regard to considerations of efficiency and economic balance, one or more distribution system operators.**

Source: Commission, 1996: art. 10, 2003: art. 13, 2009: art. 24.

In short, the discussed differences and similarities between the directives in this section are incremental changes working towards the same policy goal of market liberalisation. It is possible that certain barriers were present that prevented the policymakers from entering the policy learning process. For instance, power relations, political bargaining, lobbying or organisational constraints can lead to non-learning. While also limited resources and time pressures, resulting in too little time to learn, can negatively affect learning in policymaking (Rietig, 2013: 9-10).

5.3. Learning a Little - Same Goals, New Instruments

Some differences between the directives contain larger policy changes that can be characterized as part of a policy learning process according to the theoretical perspectives discussed in subchapter 5.1. The types of policy learning that resemble what is here defined as learning a little, are types 1 and 2. Thus, learning about the secondary aspects of the belief system and learning about the causal relationships internal to the belief system. The secondary aspects are the specific beliefs for the policy, such as instrumental decisions and the seriousness of the policy problem or changed preferences for the appropriate policy measure or funding arrangement. Together these two types of policy-oriented learning comply with policy changes such as changes in definitions, the creation of new actors or new tasks and other changes in the existing policy instruments. A crucial aspect is that the policy goal of liberalisation, and the succeeding market integration, is still the main objective of the changed policy measures. Only the secondary aspects of the belief system are adjusted and not the core beliefs.

This subchapter starts by showing the more general changes in the existing policy instruments and the new tasks for existing actors. Next, instrumental changes that move the directives towards a higher level of liberalisation and the introduction of new actors will be examined.

5.3.1. Changes in Existing Policy Instruments

Coming back to the rules for the generation of new electricity, consisting of two options, **authorization procedure** and the **tendering procedure**. The authorization procedure has already been discussed in the section on non-learning. The use of the tendering procedure has been narrowed down from 1996 to 2003. As shown in the figure 9, in the first directive this procedure was possible when the MSs had drawn up an inventory. However, these rules were retrieved and from 2003 onwards this procedure may only take place when the authorisation procedure is not effective enough to ensure the security of supply. This change in regulation can be seen as the second type policy-oriented learning. After learning about the causal relationships, the policymakers assumingly felt it was necessary to adjust the rules for the tendering procedure.

Figure 9: Articles on the tendering procedure for generation

Directive 1	Directive 2 & Directive 3
Member States or any competent body designated by the Member State concerned shall draw up an inventory of new means of production, including replacement capacity, on the basis of the regular estimate referred to in paragraph 2. The inventory shall take account of the need for interconnection of systems.	Member States shall ensure the possibility, in the interests of security of supply, of providing for new capacity or energy efficiency/ demand- side management measures through a tendering procedure or any procedure equivalent in terms of transparency and non-discrimination, on the basis of published criteria. These procedures can, however, only be launched if on the basis of the authorisation procedure the generating capacity being built or the energy efficiency/demand-side management measures being taken are not sufficient to ensure security of supply. Member States may ensure the possibility, in the interests of environmental protection and the promotion of infant new technologies, of tendering for new capacity on the basis of published criteria. This tender may relate to new capacity or energy efficiency/demand-side management measures.

Source: Commission, 1996: art. 6, 2003: art. 7, 2009: art.8.

This figure also shows that in 2003 and 2009 environmental protection became more important in the rules for generation. Also this inclusion of a new subject to the instrument can be defined as policy learning according to the theoretical perspective of this research. The policymakers readjusted the policy preferences, thus environmental protection entered or increased in importance within the belief system. Fitting in with type 2 of policy learning. However, more on the environmental aspect will follow later in this chapter, claiming that it could also be defined as policy-oriented learning type 3, learning through external factors.

5.3.2. Changes in the Tasks for Existing Parties

The Tasks of the TSO

The tasks of the Transmission System Operator increased with every directive, as stated in figure 10. The part of 1996 remained effective over the years, however additions were made. Resulting in greater responsibilities for the operator.

The most significant change here is between 1996 and 2003. Even though, the part of 1996 has also been expressed precisely in the later directives, the second directive adds reasonable elements to the article emphasising the long-term and security of supply. These changes in this policy measure are ways to improve the policy instrument, and can be defined as policy-oriented learning type 2. Another rule for the designation of the TSO was added in 2009 and may also be part of this policy-oriented learning process. When assuming a policy learning process already started between the earlier directives, the chances this process has continued are significant. Thus, despite the change in 2009 being just a small change, it is most likely still part of the policy-oriented learning process.

Figure 10: Articles on the tasks of the Transmission System Operator

Directive 1996	Directive 2003	Directive 2009
The system operator shall be responsible for managing energy flows on the system, taking into account exchanges with other interconnected systems. To that end, the system operator shall be responsible for ensuring a secure, reliable and efficient electricity system and, in that context, for ensuring the availability of all necessary ancillary services..	Additions to 1996: **(a) ensuring the long-term ability of the system to meet reasonable demands for the transmission of electricity;** **(b) contributing to security of supply through adequate transmission capacity and system reliability;** (c) managing energy flows on the system, taking into account exchanges with other interconnected systems. To that end, the transmission system operator shall be responsible for ensuring a secure, reliable and efficient electricity system and, in that context, for ensuring the availability of all necessary ancillary services **insofar as this availability is independent from any other transmission system with which its system is interconnected...**	Additions to 2003: **(b) ensuring adequate means to meet service obligations;**

Source: Commission, 1996: art. 7, 2003: art. 9, 2009: art. 12.

The Tasks of the DSO

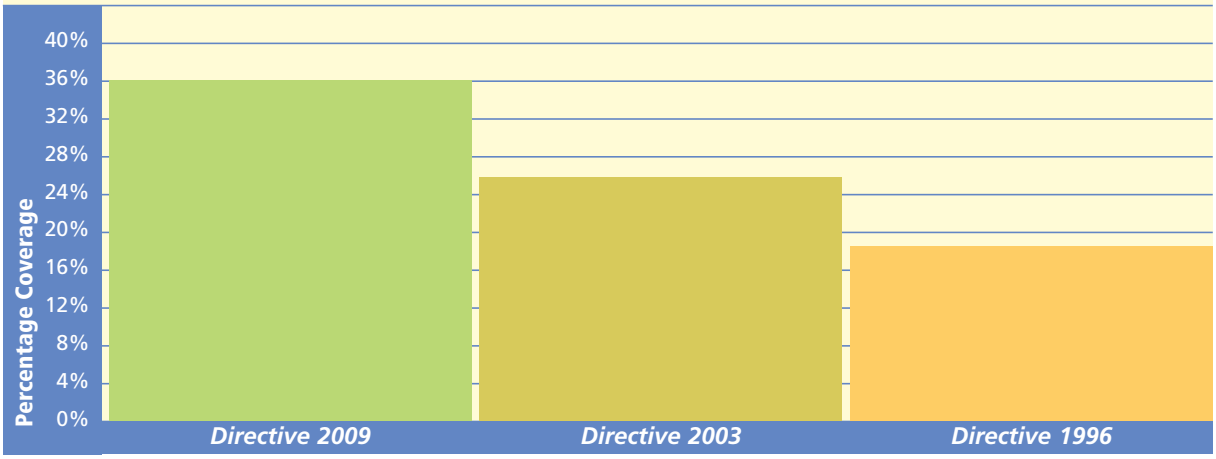
The policy preferences also changed in the articles concerning the tasks for the Distribution System Operator. The designation of the DSO has already been discussed before in the part on non-learning. However, not all articles on the DSO are showing a process of incremental change. For instance, the tasks for the DSO have been extended from 1996 to 2003 resulting in substantial change. In the first directive the DSO simply had to *'maintain a secure, reliable and efficient electricity distribution system in its area, with due regard for the environment'* (Commission, 1996: art. 11). From 2003 onwards, the DSO also became responsible to provide information to system users, to balance the electricity distribution system and to cover energy losses. These tasks were extended in 2009 when the DSO also became responsible for the long-term security and reliability of the distribution system, as an addition to the previously mentioned tasks. To summarise, these changes in the policy instrument, thus the creation of new tasks for the existing actors, comply with the second type of policy-oriented learning. Learning resulted in an improvement of the instrument in order to achieve the policy outcome.

5.3.3. Instrumental Changes towards a New Level of Liberalisation

Unbundling in the Transmission and Distribution System

More policy changes are appearing in the chapters concerning the rules on unbundling in the Transmission System and Distribution System. Regarding the systems for transporting electricity at the high-voltage and extra high-voltage networks for the former and medium to low-voltage networks for the latter. Unbundling can be seen as a new stage for energy market reform in order to realize a fully functioning liberalised market, succeeding the first stage of setting up rules for competition (Karan & Kazdağli, 2011: 12). With unbundling, the policymakers wish to separate the companies' functions of having control on the transport networks and generating or supplying electricity at the same time. Rules relating to unbundling absorb large

Figure 11: Coverage of Unbundling codes in Nvivo



parts of the total directives as is visible in figure 11. In the 2009 directive 36% of the total directive is coded to unbundling compared to around 17% in 1996.

The differences in the directive concerning the general rules for unbundling in the transmission system are shown in figure 12.

Figure 12: Article on unbundling in the transmission system

Directive 1996	Directive 2003	Directive 2009
The system operator shall be independent at least in management terms from other activities not relating to the transmission system.	Where the transmission system operator is part of a vertically integrated undertaking, it shall be independent at least in terms of its legal form, organisation and decision making from other activities not relating to transmission. These rules shall not create an obligation to separate the ownership of assets of the transmission system from the vertically integrated undertaking.	A transmission system owner, where an independent system operator has been appointed, which is part of a vertically integrated undertaking shall be independent at least in terms of its legal form, organisation and decision making from other activities not relating to transmission.

Source: Commission, 1996: art. 8, 2003: art. 10, 2009: art. 14.

For clarification, the term vertically integrated undertaking was first included in 1996, in another article, where it simply meant an enterprise that performed more functions at the same time, including generation, transmission and distribution of electricity. In 2003 and 2009 it has been defined a bit more specific, namely as:

> *'an electricity undertaking or a group of electricity undertakings where the same person or the same persons are entitled, directly or indirectly, to exercise control, and where the undertaking or group of undertakings perform at least one of the functions of transmission or distribution, and at least one of the functions of generation or supply of electricity'* (Commission, 2009: 12)

Such an undertaking was to be taken down by unbundling rules. Unbundling was already mentioned in the first directive, as is visible in figure 12. However, the independence of the TSO became legal from 2003 onwards, to make sure the two functions of the vertically integrated

undertakings were separated. This shift from obliging the TSO to be independent in management terms to legal unbundling is a clear change in the existing policy instruments, complying with policy-oriented learning type 2 in the theoretical perspective. The policymakers, as also expressed by the Commission, realized that unbundling would only be effective when vertically integrated undertakings would be discouraged to discriminate against other companies or customers, in terms of network access or investments (Commission, 2009: 2-3). The changes from 2003 onwards were supposed to eliminate the incentives to do so.

In 2009 another element was added to the transmission system's unbundling rules, namely that the *'MSs shall ensure that from 3 March 2012: 5. (a) each undertaking which owns a transmission system acts as a transmission system operator'* (Commission, 2009: art. 9). The 2009 directive usually talks about the transmission system owner instead of operator as in the previous directives. This because, according to this article stated above, all transmission owners have to become transmission system operators anyway. By stating an exact date, the policymakers, most likely wished to stimulate this process. The importance of the policy problem might have changed in the belief systems of the policymakers, resulting in stricter rules for unbundling.

In addition, the independence of the TSOs became more important in 2009 and was even discussed in a separate chapter which consists of seven rather extensive articles. The chapter talks about the assets and identity of the TSO, what rights and duties the employees have, how the management should be organised and that the TSO should have a Supervisory Body to take charge when important decisions had to be taken which could impact the value of assets of the shareholders. Also the TSOs were now obligated to create a compliance programme:

> *'which sets out the measures taken in order to ensure that discriminatory conduct is excluded, and ensure that the compliance with that programme is adequately monitored. The compliance programme shall set out the specific obligations of employees to meet those objectives. It shall be subject to approval by the regulatory authority.* (Commission, 2009: art. 21).

Subsequently, the programme has to be monitored by a compliance officer whose responsibilities are set out later in the article.

As for the unbundling rules in the distribution system, less change occurred when compared to the transmission system. Nevertheless, policy learning can also be detected here. The unbundling rules for this system were completely absent in the first directive. However, in 2003 and 2009 the directives stated the following:

> *'Where the distribution system operator is part of a vertically integrated undertaking, it shall be independent at least in terms of its legal form, organisation and decision making from other activities not relating to distribution. These rules shall not create an obligation to separate the ownership of assets of the distribution system operator from the vertically integrated undertaking'* (Commission, 2003: art. 15.1, 2009: art. 26.1).

Between the first two directives this new topic of unbundling was introduced in the rules for the distribution system. Both policy-oriented learning type 2 and 3 are possible explanations for this change. The third type because a big change as this is most likely the result of an external factor. Which eventually also indirectly influenced the belief systems of the policymakers involved, which could have changed the causal relationships between the relevant aspects. However, type 2 is most likely here because the topic was not completely new as it was already included in the rules for the transmission system. Policymakers must have realized that also the DSO had to follow unbundling rules before a single market for electricity was possible. The articles for the unbundling of the DSOs changed little from 2003 to 2009, only slight changes in

language occurred. However, these small changes may still be part of the previously initiated learning process.

Another place where policy learning may be identified between the two final directives is the introduction of the **closed distribution systems** in 2009. When a system distributes *'within a geographically confined industrial, commercial or shared services site and does not,...supply household customers'* (Commission, 2009: art. 28.1), the regulatory authority may classify this system as a closed distribution system. The system should then still create an operator. This new option is a development of the mechanism to achieve the overall policy goal of a non-discriminatory and functioning IEM. Therefore, this policy change may also be explained by the second type of policy-oriented learning from the theoretical perspective.

These significant adjustments in the policy measures for unbundling in the transmission and distribution system, can be seen as ways to improve the mechanism and to truly achieve ownership unbundling. Which in turn was seen as a crucial step towards a functioning IEM. Therefore, the second type of policy-oriented learning is credible for these unbundling rules.

Market Access and Regional Cooperation

In order to create an effective market for electricity, specific rules for market access have to be made. Therefore, the 1996 directive started with two procedures for access, the first was negotiated access and the second was a procedure in case of a single buyer. From 2003 onwards these procedures were repealed and replaced with **Third Party Access** (TPA):

> *'Member States shall ensure the implementation of a system of third party access to the transmission and distribution systems based on published tariffs, applicable to all eligible customers and applied objectively and without discrimination between system users. Member States shall ensure that these tariffs, or the methodologies underlying their calculation, are approved prior to their entry into force....'* (Commission, 2003: art. 20, 2009: art. 32).

This directive introduced a new topic, resulting in the fact that the transmission and distribution systems have to accept all electricity or consumers who wish to use their services. This has to be done in a non-discriminatory manner. The drastic changes in the rules for system access from 1996 to 2003 can be reviewed as part of a policy-oriented learning process, mainly as type 2. This adjustment in the existing instrument is an improvement of the mechanism towards an effective internal market. Between the 2003 and 2009 directive this part merely changed, TPA remained central to market access. The only policy change in these years was the mentioning of a new actor, the *regulatory authority*, an independent national body established to manage and control the regulatory system for electricity in the home country. However, this change will be discussed in the next subsection.

Finally, another new and important topic was introduced in 2009, namely **regional cooperation**. This directive clearly states that regional cooperation should be promoted by the MSs and the regulatory authorities, *'...for the purpose of integrating their national markets at one or more regional levels, as a first step towards the creation of a fully liberalised internal market...'* (Commission, 2003: art. 20, 2009: art. 32). Whereas, the two previous directives did not mention the need for regional cooperation. However, a clear definition of the term is not provided yet. Nonetheless, the introduction of these new topics, both TPA and regional cooperation, may well be the outcome of a policy-oriented learning process. These changes may be defined as part of policy-oriented learning type 2, because they should improve the policy instruments for a functioning liberalised market for electricity.

5.3.4. New Actors

From the start of the legislation on the IEM, the MSs' responsibilities on regulation were directed to other bodies. As the 1996 directive clarified that the MSs were obligated to design *'appropriate and efficient mechanisms for regulation, control and transparency so as to avoid any abuse of dominant position...'* (Commission, 1996: art. 22). How this had to be done was not defined in this directive. This changed in the succeeding directive when a new actor, the **regulatory authority**, was formed. This meant that MSs had to create a competent body who would become responsible for controling and overseeing the regulatory system in the country. Next to eight specific tasks for this authority, it has to be completely independent from the electricity industry and politics. The authority's name changed slightly in 2009, becoming the **national regulatory authority**. When it was also discussed more extensively in a separate chapter with the articles 35 to 40. Independence became an even greater element here, because the policymakers realized that this independence is necessary in order for the energy regulators to make the required decisions on regulatory issues (Commission, 2009: p. 6).

Other actors were introduced in 2009 which resulted in loosened responsibilities for the MSs concerning the unbundling in the transmission and distribution system. The so called Independent System Operator (ISO) and Independent Transmission Operator (ITO), becoming fall back options in case the national transmission system owners were unable to comply with the rules for the TSO. Therefore, the MSs could apply to have an ISO: *'Where the transmission system belongs to a vertically integrated undertaking on 3 September 2009, Member States may decide not to apply Article 9(1) and designate an independent system operator upon a proposal from the transmission system owner'* (Commission, 2009: art. 13). Meaning that the company that owns the network, is not directly responsible for the operation, maintenance and development of the network, as would be the case for TSOs (Fiedler, 2015: 7). However, the articles continue by stating several additional rules that apply before such a title would be given to the party. Eventually, after these rules were met, the Commission even had to approve this option, making it a rather difficult option.
The other actor created, was the ITO which would still make it possible for owners of the transmission network who have control over the network, to also have the supply activity in one integrated company. However, some additional rules are added in order to prevent misuse. Because this misuse of power over the network and control the supply of electricity was the main reason for setting up the rules for unbundling of the TSOs.

Subsequent to these national parties, the 2009 directive also referred to a new governance structure by creating two European organisations in order to stimulate the creation of a functioning IEM. One organisation is the **Agency for the Cooperation of Energy Regulators** *(ACER)*, for short the **Agency**, which has been established by the Regulation (EC) No 713/2009 on July 13, 2009. The same day the third IEM directive was adopted. The Agency has been mentioned several times in the 2009 directive, for instance as the actor the national regulatory authorities ought to cooperate with. By working closely together with the national regulators, the Agency should promote regional cooperation which was a newly adopted theme in the 2009 directive as discussed before. The Agency should also assist the national regulatory authorities with the monitoring of the TSOs.

Another EU party that has been brought up multiple times in the final directive is the **European network of transmission system operators for electricity** (ENTSO-E) established in by the Regulation (EC) No 714/2009, also from the 13th of July 2009. This organisation was created

for EU level cooperation between all the TSOs within the geographical boundaries of the IEM. This cooperation should promote cross-border trade and a secure and reliable interconnected transmission network to eventually realize a successful IEM (ENTSO-E, 2015). This group was already mentioned in the 2003 directive, however it was only one sentence which stated that the Commission had the intention to create such a group for the above explained reasons.

Even though, these two EU actors were not directly established in the 2009 IEM directive, they have been referred to several times and thus new actors were introduced in the directives. The creation of these new actors may be the result of a policy learning process. When reviewing the theoretical perspective, this change fits in the second type of policy-oriented learning. By establishing these new actors, the mechanisms for a successful policy outcome are improved. Because it should improve the regulatory system within all MSs, which is an important element for a successful IEM. All new actors have the function to contribute to the liberalisation of the European electricity market, therefore the policy goal is still the same after the policy changes.

When reviewing the introduction of new actors, it is also a chance to briefly touch upon the topic of power, which is still an important element for policymaking. As the rules and mechanisms increased throughout the directives, the responsibilities of the MSs also increased, because they have to ensure that the rules in the directives are met. On the one hand, it can be claimed that the MSs have received more responsibilities concerning the creation of the IEM. Even though, sometimes this responsibility has been forwarded to new actors and individuals, yet in the end the MSs are accountable. Whereas, the creation of the two EU organisations does not directly result in more power or influence for the European Union on the subject of electricity and the IEM. These organisations are merely there to help the national parties and stimulate them to cooperate more. However, by making the rules more specific in each directive, the power of the MSs has decreased somewhat. Because by doing so, the EU policymakers reduced the leeway for MSs resulting in less flexibility and influence. Nevertheless, this small shift in power is still within the level playing field created by the EU treaties when the principles of subsidiarity and proportionality were stated.

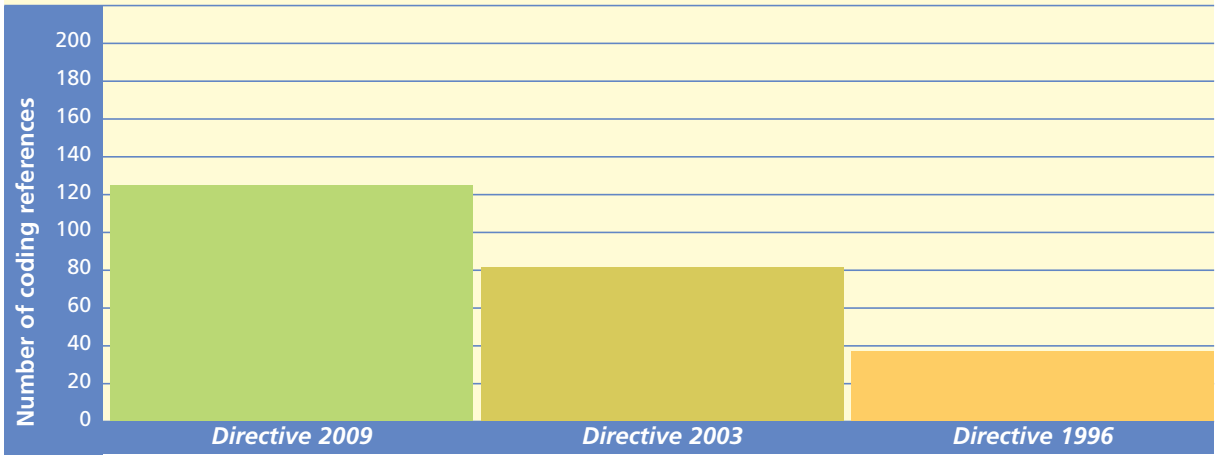
5.4 Learning a Lot: New Goals, New Instruments

Some dissimilarities between the three directives are more substantial than the previously discussed changes. For instance, the differences due to the introduction of completely new topics or instruments with sometimes even contrasting policy goals. These major changes are able to adjust the preferences of the policy core level of the belief system (Sabatier, 1998: 118-119). Due to the level of change in the cases discussed in this subchapter, a lot of policy learning may be detected. Therefore, policy-oriented learning type 3 is relevant here. Meaning that external factors have caused a change in the policy core beliefs and in the secondary aspects of the belief system. Starting with the topic of consumer protection, after which the renewable energy sources and environmental protection are examined.

5.4.1. Consumer Protection

The topic of consumer protection has been subject to much change between the directives. Figure 13 shows the number of times the term 'consumer protection' has been mentioned in all three directives, proving this change.

Figure 13: Number of references of consumer protection



Clearly, the term has been used more in 2003 compared to the first directive, but the number of references of 'consumer protection' continued to increase substantially between the second and third directive. Even though, the 1996 directive mentioned the customers and their protection multiple times, it was not specifically expressed in separate articles. From the second directive onwards, the subject of consumer protection entered the IEM legislation by introducing consumer rights. Figure 14 shows this instrumental change.

Figure 14: Articles on consumer protection

	Directive 1	Directive 2	Directive 3
		Member States shall ensure that all household customers, ... , enjoy universal service, that is the right to be supplied with electricity of a specified quality within their territory at reasonable, easily and clearly comparable and transparent prices... Member States shall impose on distribution companies an obligation to connect customers to their grid under terms, conditions and tariffs set in accordance with the procedure laid down in Article 23(2).	
		Member States shall take appropriate measures to protect final customers, and shall in particular ensure that there are adequate safeguards to protect vulnerable customers, including measures to help them avoid disconnection. In this context, Member States may take measures to protect final customers in remote areas. They shall ensure high levels of consumer protection, particularly with respect to transparency regarding contractual terms and conditions, general information and dispute settlement mechanisms. Member States shall ensure that the eligible customer is in fact able to switch to a new supplier.As regards at least household customers, these measures shall include those set out in Annex A.	Addition to 2003: **each Member State shall define the concept of vulnerable customers which may refer to energy poverty and, inter alia, to the prohibition of disconnection of electricity to such customers in critical times. Member States shall ensure that rights and obligations linked to vulnerable customers are applied.**

Source: Directives 2003: art. 3.3 & 3.5; 2009 art. 3.3 & 3.7.

In other words, all consumers have the right to receive electricity from any supplier they choose and the distribution companies delivering the electricity have to comply. In addition, the second row also states that from the second directive onwards, in specific vulnerable costumers have to be protected. In 2009 the MSs are obliged to define this concept in order to create clearer rules.

Furthermore, in 2009 the directive continues to give rights to customers by introducing the following:

> *' Member States shall ensure that all customers are entitled to have their electricity provided by a supplier, subject to the supplier's agreement, regardless of the Member State in which the supplier is registered, as long as the supplier follows the applicable trading and balancing rules...'* (Commission, 2009: art 3.4).

Resulting in the fact that since the third directive, consumers also have the right to buy and receive electricity from any supplier in any EU country. Specifically stating the non-discriminatory manner in which this has to happen. The previous directive only stated that consumers were free to choose their supplier, without specific rules.

Despite already being stated several times in the second directive, consumer protection only became an official part of the directive's scope in 2009. As only then the article concerning the scope included this topic by stating:

> '*This Directive establishes common rules for the generation, transmission, distribution and supply of electricity, together with consumer protection provisions, with a view to improving and integrating competitive electricity markets in the Community. It lays down the rules relating to the organisation and functioning of the electricity sector, open access to the market, the criteria and procedures applicable to calls for tenders and the granting of authorisations and the operation of systems. It also lays down universal service obligations and the rights of electricity consumers and clarifies competition requirements.'* (Commission, 1996: art.1).

By specifically mentioning this topic in the scope as an addition to the rules for the creation of the internal electricity market, it is clearly different from the overall policy goal of market liberalisation. Otherwise there was no need to explicitly mention it. Customer protection is not automatically a progression of the process of liberalisation, as is the case for unbundling measures. Therefore, the introduction of this completely new topic is a substantial policy change. This change may be characterised by the third type of policy-oriented learning which is only possible in cases of large change, such as including completely new topics or actors. Referring to learning through external factors. This change may well be connected with the fact that the Committee of the Regions was able to state its opinion in the process of making this legislation. This institution represents regional actors, thus actors closer to the consumers. They claimed that IEM legislation should centre around the consumer, clearly they have been rather successful. Thus, the actors able to influence the policy changed which is also an external factor.

Nonetheless, it became clear that in a liberalised energy market consumers needed to be protected from possible financial exploitation or undesired refusal of transporting electricity, for instance to isolated locations which would be costly for system operators. Due to the level and impact of this change it is most likely the result of learning through external factors. However, these factors have indirectly resulted in changes in the belief systems of the policymakers, making smaller changes such as type 1 and 2 also possible. For instance, the changes between the second and third directive as shown in figure 14.

5.4.2. Renewable Energy Sources

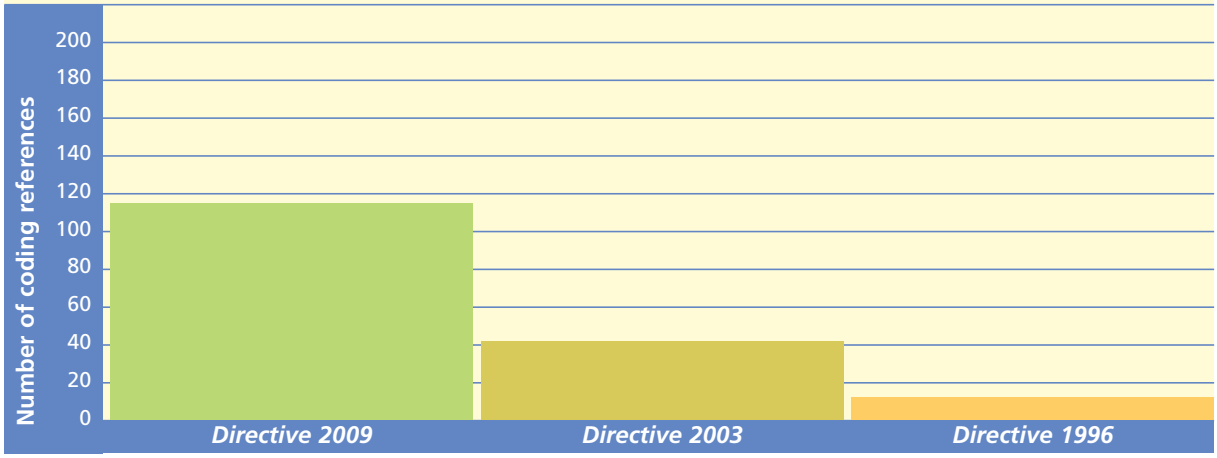
The final topic that will be discussed in this chapter is the environmental element in the IEM, including renewable energy and environmental protection. Even thought this topic is not directly related to the creation of the IEM, it has been mentioned several times in the directives. It is an important topic as it could directly and indirectly affect the outcomes the IEM policies. Both the topics of energy and environment are part of the so called **Energy Trilemma as** established by the

World Energy Council. This trilemma states that the energy sector needs to consider the energy security, energy equity and environmental sustainability all together in order to deal with the challenges. Making energy policies interconnected with the environmental and sustainability topics (World Energy Council, 2016: 5-23). Major influencers for the IEM policy could therefore be EU's environmental and climate change policies, focussing on decarbonising the EU, which could alter the electricity generation and consumption.

These environmental aspects have been included in several articles. One part of the article on the Distribution System Operator mentioned the same sentence in all three directives, namely *'a Member state may require the distribution system operator, when dispatching generating installations, to give priority to generating installations using RES or waste or producing combined heat and power'* (Commission, 1996: art. 11.3, 2003: art. 14.4, 2009: art. 25.4). On the one hand, this uniformity is remarkable because this topic was already included in 1996 when renewable energy was less known and consumed in the EU. Because the share of renewable energy consumption almost doubling between 1999 to 2009 from 5,4% to 9% of the total energy consumption in EU-27[14] (Eurostat, 2011). Despite the term *'renewable energy sources' already appearing in the first directive, it was not defined until 2003. The directives of 2003 and 2009 defines it as: 'renewable non-fossil energy sources (wind, solar, geothermal, wave, tidal, hydropower, biomass, landfill gas, sewage treatment plant gas and biogases)'* (Commission, 2003; 2009). On the other hand, the DSO article is interesting because this part of the policy instrument and even the formulation have not changed at all over the years. Even in 2009, when renewable energy received a larger awareness in politics and society, it is still an 'option' to decide for by the DSO to give priority to electricity from RES.

This example could defend the fact that non-learning was apparent for the concept of renewable energy in the IEM directives, as nothing changed in this article and the DSOs were not strictly obligated to give priority to electricity from RES. However, throughout the directives renewable energy have been included more and more in articles. Figure 15 shows the number of references of this concept in all three directives.

Figure 15: Number of references of renewable energy



14 EU27 referring to the EU with its 27 Member States, thus without Croatia who became a Member only since 2013.

The substantial increase in references of the term renewable energy may signal policy learning for the policymakers. However, firstly some other articles that show this change in more detail will be discussed. Starting with the articles concerning the general rules for the sector, shown in figure 16. The term 'environmental protection' has already been mentioned in the first directive. However, this topic is becoming larger and more detailed in every succeeding directive. The inclusion of renewable energy since the 2009 directive signals the fact that the policymakers may have adjusted their policy preferences. Despite it being small additions in the articles, the term environmental protection simply has been explained in more detail including the need to use RES. However, the impact on the total directives are more substantial.

Figure 16: Articles on the general rules for the organization of the sector

Directive 1996	Directive 2003	Directive 2009
Having full regard to the relevant provisions of the Treaty, in particular Article 90, Member States may impose on undertakings operating in the electricity sector, in the general economic interest, public service obligations which may relate to security, including security of supply, regularity, quality and price of supplies and to **environmental protection**.	Having full regard to the relevant provisions of the Treaty, in particular Article 86 thereof, Member States may impose on undertakings operating in the electricity sector, in the general economic interest, public service obligations which may relate to security, including security of supply, regularity, quality and price of supplies and environmental protection, **including energy efficiency and climate protection.**	Having full regard to the relevant provisions of the Treaty, in particular Article 86 thereof, Member States may impose on undertakings operating in the electricity sector, in the general economic interest, public service obligations which may relate to security, including security of supply, regularity, quality and price of supplies and environmental protection, **including energy efficiency, energy from renewable sources and climate protection**.

Source: Commission 1996: art. 3.2, 2003: art. 3.2, 2009: art. 3.2.

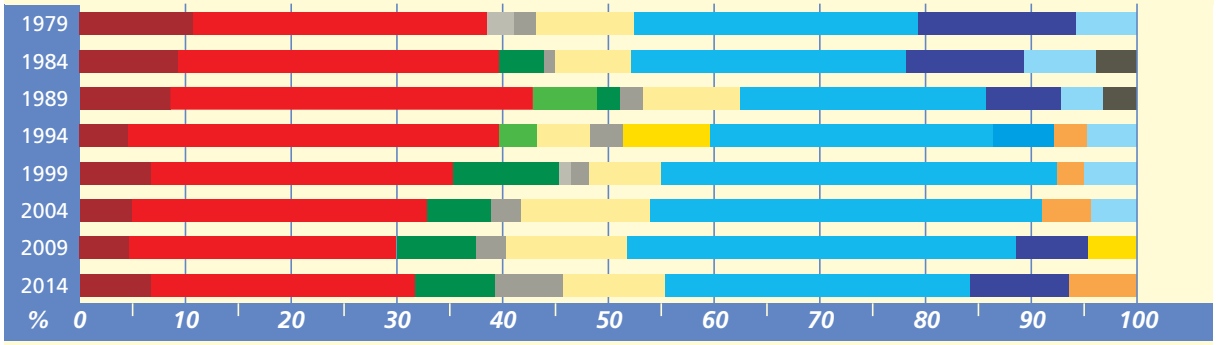
In addition, when going back to the rules for the generation of new electricity. One example of the environmental aspect and the rules for tendering has already been mentioned on page 24 with figure 9. Showing that the second and third directive included environmental protection and the promotion of infant electricity generation technologies, of which RES are options. However, more changes for the tendering procedure appeared from 2003 to 2009 by the increase of the number of criteria increased moderately over the years. In 2009 the criteria included some emphasising other EU legislation on renewable energy and CO2 emissions.

At a superficial level these are incremental changes for the specific articles. However, when reviewing the changes in the directive more general, they all reflect the need to address the issue of climate change in the directives. The impact of the increased inclusion of the topics of environmental protection and RES are more substantial, mainly because these topics do not directly correspond to the process of market liberalisation. By adding these completely new topics that should recalibrate the liberalisation goal, the third type of policy learning is most likely here. This major change must have been caused by external factors that are able to influence the policy core beliefs, instead of only policy learning caused by differences in the secondary aspects of the belief system.

This shows that renewable energy has become more paramount for the policymakers. The fact that RES are more and more included in the policies signals that the policymakers learned from new knowledge through studies and/or other actors were starting to get involved in the

decision-making process, for instance the renewable energy industry. This suggests that the EU is acknowledging the increased legitimacy of this industry and actors from this industry. It also suggests that renewables are now considered a part of the solution for energy production, delivery, and security in Europe. Therefore, a real change in the belief system is visible. Especially considering the fact that the share of the Greens and the Greens & Regionalist political groups in the European Parliament, being an important actor in the European decision-making process, has relatively remained the same from the end of the 1980s to 2014, see figure 17. This indicates that other EP parties also must have changed their preferences towards environmental protection and increasing the share of renewables (Environmental Europe, 2014).

Figure 17: Overview composition EP



The composition of the European Parliament with regard to percental share of deputies for each political group, 1974 to 2014. Left to right:

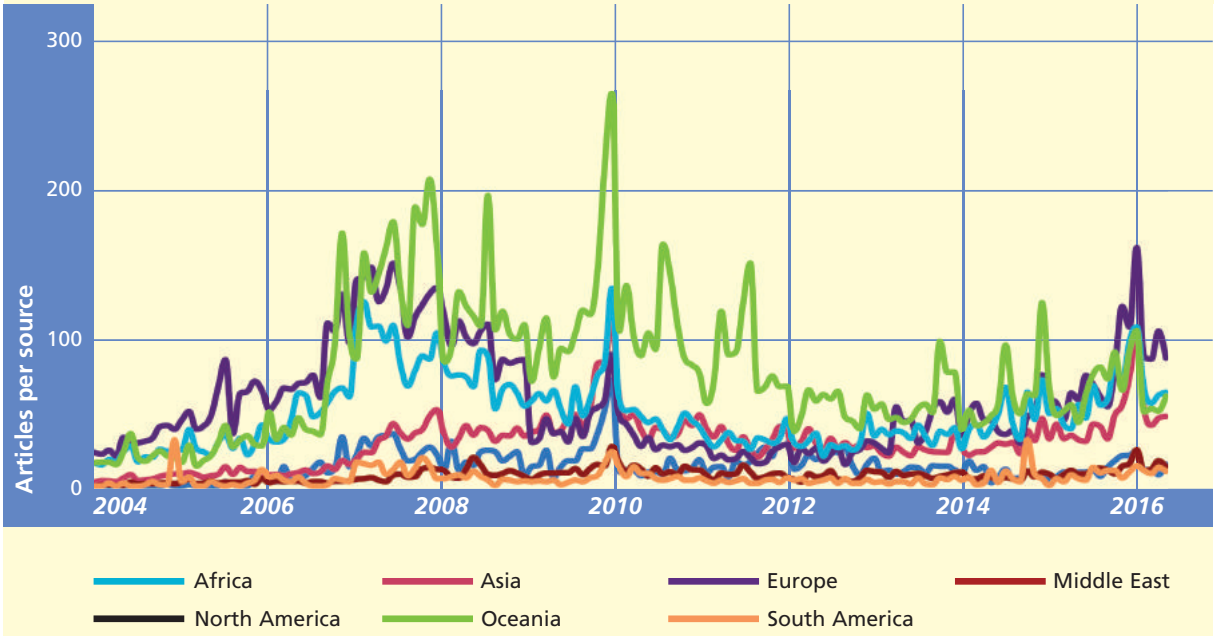
Radical left
Socialists
Green & Regionalists
Greens
CDI or TGI
Non-Inscrits
Liberals
Radical Alliance
CD / EPP left
Forza Europa
Conservatists
Euroceptics
UEN
Far Right

Source: European Parliament (2015)

This suggested change in belief system op the EU policymakers for the IEM is most likely caused by external factors, indicating policy-oriented learning type 3. Possible originators that resulted in such a big shift in the belief system are certain events causing more media attention, better understanding of climate change science, innovations in RES technology and other EU legislation.

Around 2007, when the policymaking process for the final directive commenced, climate change started the be framed differently and received much more media attention. Figure 18 shows the newspaper coverage of climate change or global warming, with which the promotion of renewable energy is closely related. Consequently, the public became increasingly aware of climate change which in turn resulted in more societal and political pressure for climate change adaptation (Fiedler, 2015: 5-6).

Figure 18: 2004-2016 World Newspaper Coverage of Climate Change or Global Warming



Source: CIRES Center for Science and Technology Policy Research, University of Colorado Boulder, http://sciencepolicy.colorado.edu/media_coverage

When only looking at the increased media attention, this policy change could be labelled as a *large leap theory or the punctuated equilibrium* theory by Baumgarter and Jones (1991). They claim that *'once an idea gets attention it will expand rapidly and become unstoppable'* (Cerna, 2013: 9). Only sudden external events can create more attention for a certain topic or policy over the other. Such an event creates a large leap or big step forward for that certain policy because the policy problem is defined or framed differently. In this theory, the government is thought to have monopoly in the decision- and policymaking process (Stachowiak, 2009: 4). However, for the process in the EU and for the IEM this is not the case, as also other parties such as the industry, scientists and sometimes even public parties are included in the policymaking process, referring to EU's *multi-level governance system*. Making such events and increased attention in media merely a part of the reasons why the policy changes. One of the premises for policy learning by Sabatier was also that external factors would just be sub factors for policy learning, as the learning would mostly be affected by the interaction between the actors involved which could change the belief system of other coalitions (Sabatier, 1988: 130).

Other originators of the change in belief systems of the policymakers which influenced the increased inclusion of RES in the final two directives, is the newly acquired knowledge and innovation in technology focussing on renewables. Making the large leap theory less probable here. The technology concerning RES has increased much over the years. The International Energy Agency (IEA) distinguished three generations of renewable energy technologies. The first includes hydropower and biomass and have basically already reached their full capacity. The second generation are the technologies currently used, such as solar and wind power. These are also being developed into more efficient sources, namely by increasing the amount of electricity a single source is able to attract. Even better and more efficient technologies are being developed which are part of the third generation, such as integrated bio-energy systems and

ocean energy (IEA, 2006: 16-19). The innovation in technologies will continue in the future. Solar and wind power will become bigger and smarter and new materials in the energy sector will make big improvements for instance by providing new coatings for solar panels and hybrid systems (DNV, 2016: 2-16). However, the velocity depends on the investment climate and the amount of money spend on Research and Development (R&D). All MSs have to spend a reasonable percentages of their GDP on R&D for RES and climate change adaption.

This innovation in renewable energy technology in turn resulted in the option of more decentralised electricity generation. In specific, the prices for solar panels decreased drastically over the years (The Guardian, 2016). In combination with the consumers' desire of being independent from large energy companies and the wish to use green electricity, decentralised generation expanded. For instance farmers installing wind turbines on their farmland, individuals buying solar panels for their roofs or villages collectively investing in RES for own use. However, this decentralised generation of electricity brings some challenges. Before, all the electricity came from large energy companies who were directly connected to the grid. These new, small, electricity producers also need to be connected to the grid to be able to transport excess electricity to the market. This demands that the transmission and distribution networks and grids need to be modernised.

A final factor that might have influenced the IEM directives have to do with other EU legislation. A few months before the adoption of the 2009 IEM directive, the Renewable Energy Directive (2009/28/EC)[15] was adopted in April 2009. This legislation set the rules for the production and promotion of renewable energy and set a target of 20% renewables from the total energy consumption for 2020. The policymaking processes for this directives and the IEM directive occurred simultaneously. So, the knowledge generated in the other policy subsystem could have influenced the third IEM directive which could explains the introduction of renewable energy and more explicit environmental protection in several articles. Meaning that the policymakers for the IEM have learned about this topic from the other policy subsystem which resulted in changes in their belief system and policy preferences towards more sustainable policy instruments. Learning from the interaction in other policy subsystems is also an external factor.

In the end, a policy learning process for the inclusion of RES and more environmental protection can be detected. It is clear that external factors, such as new studies which caused more media attention, or technological innovations, resulted in new knowledge for the policymakers which may well have affected their policy core beliefs. The type of policy-oriented learning may be different for the specific article in which these topics are mentioned. For some articles that were discussed it was only a small addition by simply adding the terms environmental protection or renewable energy source. However, in general these inclusions greatly affect the outset of the directives and will recalibrate the liberalisation goal of the internal electricity market. In order to also make this market sustainable and able to adapt to future market changes.

The topics of environmental protection and RES have also been important in EU legislation following the final IEM directive, and will also be crucial for upcoming policies. However, several challenges for the IEM and RES are predicted. The increasing generation of electricity from RES demands a change in infrastructure, as the supply of electricity from RES varies constantly due to its dependence on the weather conditions. But, the electricity grids are bound to a minimum and maximum amount of electricity, in order to have a reliable network. With conventional energy sources, control over supply was more accessible (Buchan, 2012: 24). In addition, the increase

15 Directive 2009/28/EC can be found here: http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32009L0028

in decentralised electricity generation asks for modifications to the grids as the consumers are now also producers and need to be able to transfer electricity back to the market.

These challenges were also expressed by Cañete (European Energy Commissioners) in his 2016 speech at the Florence Forum. *'We have been unable to adapt our market framework quickly enough to the challenges that decarbonisation, and in particular the massive roll-out of variable renewable generation, have brought along'* (Commission, 2016). Therefore, adapting the IEM to increasing generation of renewable electricity should be a fundamental component of a possible new policymaking process to renew the IEM directives. Also with the current Energy Union, the EU wishes to integrate Energy and Climate policies and the IEM is an important aspect that should facilitate an energy transition to renewable energy.

5.5. Conclusion

The analysis shows that the changed directives cannot be viewed as part of a policy learning process in general. Specific articles have shown no change or merely an incremental adjustment, claiming non-learning has been present there. Whereas other articles showed bigger change in the policy by making substantial adjustments to the instruments or by introducing newly established actors. These change comply with either the first or second type of policy-oriented learning. Thus, learning about the secondary aspects of the belief system and the causal relationships internal to the belief system. However, for these two types of policy-oriented learning and non-learning, the policy goal remained the same. Therefore, these changes are defined as learning a little. Through the instrumental learning that has taken place, the policymakers tried to better understand the policy problem in order to further the policy goal.

The differences between the directives that show more significant policy change can be characterised by policy-oriented learning type 3. They are more significant because these are newly introduced topics that do not automatically fit in with the goal of liberalisation. The third type is chosen here, because in general these are rather substantial changes and contained completely new elements that could not have been established by reviewing and evaluating the previous policies. The introduction of these elements show that the policymakers truly adjusted their beliefs in order to compete with new challenges. Therefore, only these additions can be reviewed as a lot of policy learning.

To conclude, the analysis has explained which aspects can be defined as policy learning or as non-learning. Some types of policy learning can clearly be detected in the three directives. In the end it has also stated some of the future challenges for the IEM by focussing on the environmental and sustainable aspect of the electricity market. However, now that a process of policy learning has been detected in the IEM policies concerning RES, this process may well continue and benefit future policies on the IEM or RES to overcome these challenges.

6. Conclusion

6.1. Main findings

Through extracting the theories and thoughts on policy learning in policymaking from the main literature (Sabatier: 1988; 1998 & Rietig: 2013), specific types of policy-oriented learning have been constructed in order to make a clear analysis and get trustworthy research outcomes. These types have distinctive criteria to help to detect policy learning in the three directives on the common rules of the IEM. These three types can be summarized as follows: *a policy change can be defined as policy-oriented learning when the change adjusts the secondary aspects of the belief system (type 1) and the causal relationships within the three levels of the belief system (type 2) or when external factors have influenced the belief system (3)*. See figure 5 on page 20 for the exact definitions of these types. When one of these changes is detected it can be characterized as policy learning, because this change is a clear indication that policy learning might have commenced.

On the contrary, this thesis has also identified criteria for non-learning. Meaning that the policymakers consciously or unconsciously decided not to address the policy problem of the IEM differently which prevented them from entering a policy learning process. Cases without visible policy change or merely incremental change such as small changes in language are defined as non-learning in this thesis.

The research is executed with the use of qualitative literature content analysis which helps to analyze the three directives in order to see the changes or uniformities. This has resulted in several detections of a policy learning process within the differences and similarities between the directives.

Starting with the cases displaying either policy-oriented learning types 1 or 2, signifying learning about the secondary aspects or the causal relationships within the belief systems. Some articles showed instrumental changes in existing policy measures, such as the changed rules for the tendering procedure from 1996 to 2003. These rules from the first directive were repealed in the succeeding one. Also additional tasks for existing actors can be characterised as policy learning type 2, which has been the case for the tasks created for the transmission and distribution system operators in the second and third directive. Many more policy changes occurred in the rules concerning unbundling in which a policy learning process has been detected for both the TSO and DSO. Through unbundling, the policymakers wish to separate the companies' functions of having control on the transport networks and generating or supplying electricity at the same time. The final examples of policy learning that has been defined as the second type, are the new actors that have been created throughout the three directives. The national regulatory authorities, the ISO and the ITO for the national level and the Agency and the ENTSO-E for the European level.

The reason for defining these changes and learning processes as 'learning a little' is because these adjustments, even though rather substantial, still comply with the goal of the IEM policy, namely market liberalisation. The changes are simply improvements of the existing policy instruments in order to effectively achieve the functioning IEM, no major change in the belief systems was necessary.

On the other hand, also a few policy changes that do not directly correspond to the goal of market liberalisation have been identified. These changes have therefore been characterised as

a lot of policy learning. The newly introduced topics that are defined as policy-oriented learning type 3 are consumer protection and the highly increased mentioning of RES. Consumer protection entered the IEM policy in 2003, however only becoming a legitimate part of the scope of the directive in 2009. Nonetheless, due to external factors, for instance new actors entering the policymaking process, the policymakers realized that the customers had to have some sort of protection against the open market for electricity. Additionally, the policymakers also adjusted their policy beliefs concerning RES and environmental protection in the IEM. RES have been mentioned more frequently in the second and especially in the third directive, when it was also added to several articles. In articles concerning the generation of new electricity and the general rules for the organisation of the sector. This suggests that the EU is acknowledging the increased legitimacy of this industry and actors from this industry. It also suggests that renewables are now considered a part of the solution for energy production, delivery, and security in Europe.

However, not all cases could have been characterised with a degree of policy learning. Several articles have shown the existence of non-learning in the policymaking of the IEM. Non-learning has been detected in cases where the policy or policy instruments did not change at all, or when it only changed slightly in an incremental manner. For instance merely changes in language as was the case in the articles on the designation of the TSO and DSO.

In the end, the results of this research show that in specific articles some degree of policy learning can be detected. The most policy changes that occurred fall in the category of learning a little, reflecting policy-oriented learning type 1 or 2. Suggesting that the main goal is still market liberalisation. However, due to the detected learning types 3, this goal has been recalibrated toward a liberalised electricity market that is also fair and sustainable. Nonetheless, this research claims the EU policymakers are able to initiate a policy learning process as they have done so in several parts in the IEM policies. The current IEM still has several challenges to deal with and policies will be more successful when policy learning is happening, this research may be very useful for the future IEM policies, other research and policymakers.

6.2. Limitations of the Research

The main limitation of this research is the fact that the theory of policy learning also focuses on cognitive aspects. Because policy learning is truly happening when the policymakers actively make the decision to address the policy problem differently as a result of changed beliefs. However, these cognitive changes are difficult to examine without interviewing all relevant policymakers throughout the years. But, even then the policy outcome would not be definite because of restrictions and barriers connected to this method of research. For instance, the policymakers cannot clearly remember their exact thoughts on the change or they try to give the answer they feel the researcher wishes to hear. In addition, it would be very challenging to get in contact with all the relevant policymakers and that they are also willing to take part in such a project.

Therefore, this research has tried to give a clear description of what policy learning, and in specific policy-oriented learning, is and how it may be detected in the directives. In order to validate and strengthen the outcomes of the research. Nonetheless, when this research states policy-oriented learning was likely the case, it can never be claimed for sure.

Additionally, the analysis started by trying to identify policy change. Because policy change is able to indicate that policy learning has occurred. However, policy learning is also possible when the

policy remained the same. Without policy change, some policymakers could still have actively changed their preferences and strived for other policies, but for instance a bargaining process may have ended up in an unchanged policy (Eising, 2002: 91). Yet again, because these cognitive adjustments are not easy to identity, policy change has been used as an indicator for a possible policy learning process.

6.3. Outlook to further research

As also mentioned in the introduction several steps have been constructed by academics in order to research policy learning. The first step was to make a clear distinction between the types of policy learning. This has been done in chapter three writing about the theoretical framework and chapter 5.1 which states the distinctive types of policy-oriented learning this research uses. The next step was to point out *what* is learned by the policymakers. This research has also focused on this step, it mainly tried to detect a policy learning process within the changed policy instruments for the creation of the IEM.

However, when the change is known, the next step is to establish *how* the actors involved have learned, for instance through learning by doing, thus experience. Or through additional studies by for example research from think tanks or interest groups, thus learning by knowledge. Another option would be through primarily external factors, such as an economic shift or a natural disaster (Rietig, 2013). The final step, is to research *what the role of this learning* was for the policy change and possibly also for the innovation in the public sector (Kemp & Weehuizen, 2005: 16-18). These two final steps have not been discussed in this thesis.

Therefore, further research could focus on these steps in order to be more certain an actual policy learning process has been taken place. But also to understand *how* the actors have learned. When doing this, it would be very useful to define all the actors in the policy subsystem for the IEM and clarify the network structure. When this is known, the research can show if and how the beliefs of certain actors within the policy subsystem might have changed or which group of actors might have prevented the IEM directives to change more drastically. For instance, large national energy companies, the incumbent actors, might lobby hard against more liberalisation and more influence of renewable energy as this will change their position in the market. Such research on the IEM and policy learning would be interesting and could shed new light onto the ability of policymakers to learn and could detect possible barriers which result in non-learning.

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The Internal Electricity Market in the European Union

A process of policy learning

Appendix

8. Appendix

8.1. Designed Nodes in Nvivo 11

Figure 19: Designed nodes in Nvivo 11

Main categorie	*Internal electricity market (general)*	*Generation*	*Other themes*	*Unbundling*	*Parties*
Sub-categories	• interconnection • security of supply • (regional) cooperation • market access • third party access	• authorisation • tendering	• customer protection • environmental protection • renewableenergy	• Combined operator • Distribution System-Operator • Independent Sys-temOperator • Independent Transmission • Transmission System-Operator • Ownership unbundling • Unbundling of accounts	• EU parties: - ACER - ENTSO • Member States - National regulatory authorities • Industry

8.2. Excel Sheet for Analysis of the Directives on the IEM

Figure 20: Excel Sheet for Analysis of the Directives on the IEM

<table>
<tr><th>1996</th><th>2003</th><th>2009</th></tr>
<tr><td colspan="3">CHAPTER I</td></tr>
<tr><td colspan="3">Scope and definitions</td></tr>
<tr><td colspan="3">Article 1</td></tr>
<tr><td>This Directive establishes common rules for the generation, transmission and distribution of electricity. It lays down the rules relating to the organization and functioning of the electricity sector, access to the market, the criteria and procedures applicable to calls for tender and the granting of authorizations and the operation of systems.</td><td>This Directive establishes common rules for the generation, transmission, distribution and supply of electricity. It lays down the rules relating to the organisation and functioning of the electricity sector, access to the market, the criteria and procedures applicable to calls for tenders and the granting of authorisations and the operation of systems.</td><td>This Directive establishes common rules for the generation, transmission, distribution and supply of electricity, together with consumer protection provisions, with a view to improving and integrating competitive electricity markets in the Community. It lays down the rules relating to the organisation and functioning of the electricity sector, open access to the market, the criteria and procedures applicable to calls for tenders and the granting of authorisations and the operation of systems. It also lays down universal service obligations and the rights of electricity consumers and clarifies competition requirements.</td></tr>
</table>

<table>
<tr><th>1996</th><th>2003</th><th>2009</th></tr>
<tr><td colspan="3">CHAPTER II</td></tr>
<tr><td colspan="3">General rules for the organization of the sector</td></tr>
<tr><td colspan="3">Article 3</td></tr>
<tr><td>></td><td colspan="2">Public service obligations and customer protection</td></tr>
<tr><td>Member States shall ensure, on the basis of their institutional organization and with due regard for the principle of subsidiarity, that, without prejudice to paragraph 2, electricity undertakings are operated in accordance with the principles of this Directive, with a view to achieving a competitive market in electricity, and shall not discriminate between these undertakings as regards either rights or obligations. The two approaches to system access referred to in Articles 17 and 18 must lead to equivalent economic results and hence to a directly comparable level of opening-up of markets and to a directly comparable degree of access to electricity markets.</td><td colspan="2">Member States shall ensure, on the basis of their institutional organisation and with due regard to the principle of subsidiarity, that, without prejudice to paragraph 2, electricity undertakings are operated in accordance with the principles of this Directive with a view to achieving a competitive, secure and environmentally sustainable market in electricity, and shall not discriminate between these undertakings as regards either rights or obligations.</td></tr>
<tr><td>Having full regard to the relevant provisions of the Treaty, in particular Article 90, Member States may impose on undertakings operating in the electricity sector, in the general economic interest, public service obligations which may relate to security, including security of supply, regularity, quality and price of supplies and to environmental protection. Such obligations must be clearly defined, transparent, non-discriminatory and verifiable; they, and any revision thereof, shall be published and notified to the Commission by Member States without delay. As a means of carrying out the abovementioned public service obligations, Member States which so wish may introduce the implementation of long-term planning.</td><td colspan="2">Having full regard to the relevant provisions of the Treaty, in particular Article 86 thereof, Member States may impose on undertakings operating in the electricity sector, in the general economic interest, public service obligations which may relate to security, including security of supply, regularity, quality and price of supplies and environmental protection, including energy efficiency and climate protection. Such obligations shall be clearly defined, transparent, non discriminatory, verifiable and shall guarantee equality of access for EU electricity companies to national consumers. In relation to security of supply, energy efficiency/demand-side management and for the fulfilment of environmental goals, as referred to in this paragraph, Member States may introduce the implementation of long term planning, taking into account the possibility of third parties seeking access to the system.</td></tr>
</table>

Member States may decide not to apply the provisions of Articles 5, 6, 17, 18 and 21 insofar as the application of these provisions would obstruct the performance, in law or in fact, of the obligations imposed on electricity undertakings in the general economic interest and insofar as the development of trade would not be affected to such an extent as would be contrary to the interests of the Community. The interests of the Community include, inter alia, competition with regard to eligible customers in accordance with this Directive and Article 90 of the Treaty.	Member States shall ensure that all household customers, and, where Member States deem it appropriate, small enterprises, (namely enterprises with fewer than 50 occupied persons and an annual turnover or balance sheet not exceeding EUR 10 million), enjoy universal service, that is the right to be supplied with electricity of a specified quality within their territory at reasonable, easily and clearly comparable and transparent prices. To ensure the provision of universal service, Member States may appoint a supplier of last resort. Member States shall impose on distribution companies an obligation to connect customers to their grid under terms, conditions and tariffs set in accordance with the procedure laid down in Article 23(2). Nothing in this Directive shall prevent Member States from strengthening the market position of the domestic, small and medium-sized consumers by promoting the possibilities of voluntary aggregation of representation for this class of consumers.The first subparagraph shall be implemented in a transparent and non-discriminatory way and shall not impede the opening of the market provided for in Article 21.	Member States shall ensure that all household customers, and, where Member States deem it appropriate, small enterprises (namely enterprises with fewer than 50 occupied persons and an annual turnover or balance sheet not exceeding EUR 10 million), enjoy universal service, that is the right to be supplied with electricity of a specified quality within their territory at reasonable, easily and clearly comparable, transparent and non-discriminatory prices. To ensure the provision of universal service, Member States may appoint a supplier of last resort. Member States shall impose on distribution companies an obligation to connect customers to their network under terms, conditions and tariffs set in accordance with the procedure laid down in Article 37(6). Nothing in this Directive shall prevent Member States from strengthening the market position of the household, small and medium-sized consumers by promoting the possibilities of voluntary aggregation of representation for that class of consumers.The first subparagraph shall be implemented in a transparent and non-discriminatory way and shall not impede the opening of the market provided for in Article 33.
	When financial compensation, other forms of compensation and exclusive rights which a Member State grants for the fulfilment of the obligations set out in paragraphs 2 and 3 are provided, this shall be done in a non-discriminatory and transparent way.	Member States shall ensure that all customers are entitled to have their electricity provided by a supplier, subject to the supplier's agreement, regardless of the Member State in which the supplier is registered, as long as the supplier follows the applicable trading and balancing rules. In this regard, Member States shall take all measures necessary to ensure that administrative procedures do not discriminate against supply
	Member States shall take appropriate measures to protect final customers, and shall in particular ensure that there are adequate safeguards to protect vulnerable customers, including measures to help them avoid disconnection. In this context, Member States may take measures to protect final customers in remote areas. They shall ensure high levels of consumer protection, particularly with respect to transparency regarding contractual terms and conditions, general information and dispute settlement mechanisms. Member States shall ensure that the eligible customer is in fact able to switch to a new supplier. As regards at least household customers, these measures shall include those set out in Annex A.	5. Member States shall ensure that:(a) where a customer, while respecting contractual conditions, wishes to change supplier, the change is effected by the operator(s) concerned within three weeks; and; (b) customers are entitled to receive all relevant consumption data. Member States shall ensure that the rights referred to in points (a) and (b) are granted to customers in a non-discriminatory manner as regards cost, effort or time.
	Member States shall ensure that electricity suppliers specify in or with the bills and in promotional materials made available to final customers: (a) the contribution of each energy source to the overall fuel mix of the supplier over the preceding year; (b) at least the reference to existing reference sources, such as web-pages, where information on the environmental impact, in terms of at least emissions of CO2 and the radioactive waste resulting from the electricity produced by the overall fuel mix of the supplier over the preceding year is publicly available...	Where financial compensation, other forms of compensation and exclusive rights which a Member State grants for the fulfilment of the obligations set out in paragraphs 2 and 3 are provided, this shall be done in a non-discriminatory and transparent way.
	Member States shall implement appropriate measures to achieve the objectives of social and economic cohesion, environmental protection, which may include energy efficiency/demand-side management measures and means to combat climate change, and security of supply. Such measures may include, in particular, the provision of adequate economic incentives, using, where appropriate, all existing national and Community tools, for the maintenance and construction of the necessary network infrastructure, including interconnection capacity. Till point 9	
		Member States shall take appropriate measures to protect final customers, and shall, in particular, ensure that there are adequate safeguards to protect vulnerable customers. In this context, each Member State shall define the concept of vulnerable customers which may refer to energy poverty and, inter alia, to the prohibition of disconnection of electricity to such customers in critical times. Member States shall ensure that rights and obligations linked to vulnerable customers are applied. In particular, they shall take measures to protect final customers in remote areas. They shall ensure high levels of consumer protection....
>>	Article 4	
>>	**Monitoring of security of supply**	
>>	Member States shall ensure the monitoring of security of supply issues. (...) This monitoring shall, in particular, cover the supply/demand balance on the national market, the level of expected future demand and envisaged additional capacity being planned or under construction, and the quality and level of maintenance of the networks, as well as measures to cover peak demand and to deal with shortfalls of one or more suppliers. The competent authorities shall publish every two years, by 31 July at the latest, a report outlining the findings resulting from the monitoring of these issues, as well as any measures taken or envisaged to address them and shall forward this report to the Commission forthwith.	
>>	Article 5	
>>	**Technical rules**	
>>	Member States shall ensure that technical safety criteria are defined and that technical rules establishing the minimum technical design and operational requirements for the connection to the system of generating installations, distribution systems, directly connected consumers' equipment, interconnector circuits and direct lines are developed and made public. These technical rules shall ensure the interoperability of systems and shall be objective and non discriminatory. They shall be notified to the Commission in accordance with Article 8 of Directive 98/34/EC of the European Parliament and of the Council of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations and of rules on Information Society Services (1).	The regulatory authorities where Member States have so provided or Member States shall ensure that technical safety criteria are defined and that technical rules establishing the minimum technical design and operational requirements for the connection to the system of generating installations, distribution systems, directly connected consumers' equipment, interconnector circuits and direct lines are developed and made public. Those technical rules shall ensure the interoperability of systems and shall be objective and non-discriminatory. The Agency may make appropriate recommendations towards achieving compatibility of those rules, where appropriate. Those rules shall be notified to the Commission in accordance with Article 8 of Directive 98/34/EC of the European Parliament and of the Council of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations and of rules on Information Society services

	>>	Article 6
	>>	**Promotion of regional cooperation**
	>>	Member States as well as the regulatory authorities shall cooperate with each other for the purpose of integrating their national markets at one or more regional levels, as a first step towards the creation of a fully liberalised internal market.
	>>	The Agency shall cooperate with national regulatory authorities and transmission system operators to ensure the compatibility of regulatory frameworks between the regions with the aim of creating a competitive internal market in electricity.
	>>	Where vertically integrated transmission system operators participate in a joint undertaking established for implementing such cooperation, the joint undertaking shall establish and implement a compliance programme which sets out the measures to be taken to ensure that discriminatory and anticompetitive conduct is excluded. That compliance programme shall set out the specific obligations of employees to meet the objective of excluding discriminatory and anticompetitive conduct. It shall be subject to the approval of the Agency. Compliance with the programme shall be independently monitored by the compliance officers of the vertically integrated transmission system operators.

1996	2003	2009
	CHAPTER III	
	Generation	
Article 4		
For the construction of new generating capacity, Member States may choose between an authorization procedure and/or a tendering procedure.	<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<	
	Authorisation procedure for new capacity	
Article 5	Article 6	Article 7
Where they opt for the authorization procedure, Member States shall lay down the criteria for the grant of authorizations for the construction of generating capacity in their territory. And that the criteria should be made public. When there is a refusal, full disclosure of grounds for refusal shall be given to the applicant.		
	>>	the contribution of the generating capacity to meeting the overall Community target of at least a 20 % share of energy from renewable sources in the Community's gross final consumption of energy in 2020 referred to in Article 3(1) of Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources
>>	Member States shall ensure that authorisation procedures for small and/or distributed generation take into account their limited size and potential impact.	
	>>	Member States may set guidelines for that specific authorisation procedure. National regulatory authorities or other competent national authorities including planning authorities shall review those guidelines and may recommend amendments thereto.
	>>	Where Member States have established particular land use permit procedures applying to major new infrastructure projects in generation capacity, Member States shall, where appropriate, include the construction of new generation capacity within the scope of those procedures and shall implement them in a nondiscriminatory manner and within an appropriate time-frame.
	Tendering for new capacity	
Article 6	Article 7	Article 8
Where they opt for the tendering procedure, Member States (...) shall draw up an inventory of new means of production	<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<	
>>	Member States shall ensure the possibility, in the interests of security of supply, of providing for new capacity or energy efficiency/demand-side management measures through a tendering procedure or any procedure equivalent in terms of transparency and non-discrimination, on the basis of published criteria. These procedures can, however, only be launched if on the basis of the authorisation procedure the generating capacity being built or the energy efficiency/demand-side management measures being taken are not sufficient to ensure security of supply.	
>>	Member States may ensure the possibility, in the interests of environmental protection and the promotion of infant new technologies, of tendering for new capacity on the basis of published criteria. This tender may relate to new capacity or energy efficiency/demand-side management measures. A tendering procedure can, however, only be launched if on the basis of the authorisation procedure the generating capacity being built or the measures being taken are not sufficient to achieve these objectives.	
The transmission system operator or any other competent authority designated by the Member State concerned shall draw up and publish under State supervision , at least every two years, a regular estimate of the generating and transmission capacity which is likely to be connected to the system, of the need for interconnectors with other systems, of potential transmission capacity and of the demand for electricity.	<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<	
Details of the tendering procedure for means of production shall be published in the Official Journal of the European Communities at least six months prior to the closing date for tenders.		

>>	In invitations to tender for the requisite generating capacity, consideration must also be given to electricity supply offers with long-term guarantees from existing generating units, provided that additional requirements can be met in this way.	
Member States shall designate an authority or a public body or a private body independent of electricity generation, transmission and distribution activities to be responsible for the organization, monitoring and control of the tendering procedure. This authority or body shall take all necessary steps to ensure confidentiality of the information contained in the tenders.		
However, it must be possible for autoproducers and independent producers to obtain authorization, on the basis of objective, transparent and non-discriminatory criteria as laid down in Articles 4 and 5, in Member States which have opted for the tendering procedure .	<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<	

1996	2003	2009
	CHAPTER IV/ V (in 2009)	
	TRANSMISSION SYSTEM OPERATION	
Article 7	Article 8	
>>	**Designation of Transmission System Operators**	
Member States shall designate or shall require undertakings which own transmission systems to designate (...) a system operator to be responsible for operating, ensuring the maintenance of, and, if necessary, developing the transmission system iri a given area and its interconnectors with other systems, in order to guarantee security of supply.		
MSs shall ensure that technical rules establishing the minimum technical design and operational requirements for the connection to the system of generating installations, distribution systems, directly connected consumers' equipment, interconnector circuits and direct lines are developed and published.	<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<	
	Tasks of Transmission System Operators	
The system operator shall be responsible for managing energy flows on the system, taking into account exchanges with other interconnected systems. To that end, the system operator shall be responsible for ensuring a secure, reliable and efficient electricity system and, in that context, for ensuring the availability of all necessary ancillary services.The system operator shall provide to the operator of any other system with which its system is interconnected sufficient information to ensure the secure and efficient operation, coordinated development and interoperability of the interconnected system .The system operator shall not discriminate between system users or classes of system users, particularly in favour of its subsidiaries or shareholders.Unless the transmission system is already independent from generation and distribution activities, **the system operator shall be independent at least in management terms from other activities not relating to the transmission system.**	Each transmission system operator shall be responsible for: (a) ensuring the long-term ability of the system to meet reasonable demands for the transmission of electricity; (b) contributing to security of supply through adequate transmission capacity and system reliability; (c) managing energy flows on the system, taking into account exchanges with other interconnected systems. To that end, the transmission system operator shall be responsible for ensuring a secure, reliable and efficient electricity system and, in that context, for ensuring the availability of all necessary ancillary services insofar as this availability is independent from any other transmission system with which its system is interconnected; (d) providing to the operator of any other system with which its system is interconnected sufficient information to ensure the secure and efficient operation, (e) ensuring non-discrimination as between system users or classes of system users, particularly in favour of its related undertakings; coordinated development and interoperability of the interconnected system; providing system users with the information they need for efficient access to the system.	Each transmission system operator shall be responsible for: (a) ensuring the long-term ability of the system to meet reasonable demands for the transmission of electricity, operating, maintaining and developing under economic conditions secure, reliable and efficient transmission systems with due regard to the environment; (b) ensuring adequate means to meet service obligations; (c) contributing to security of supply through adequate transmission capacity and system reliability;(d) managing electricity flows on the system, taking into account exchanges with other interconnected systems. To that end, the transmission system operator shall be responsible for ensuring a secure, reliable and efficient electricity system and, in that context, for ensuring the availability of all necessary ancillary services, including those provided by demand response, insofar as such availability is independent from any other transmission system with which its system is interconnected; (e) providing to the operator of any other system with which its system is interconnected sufficient information to ensure the secure and efficient operation, coordinated development and interoperability of the interconnected system;(f) ensuring non-discrimination as between system users or classes of system users, particularly in favour of its related undertakings; (g) providing system users with the information they need for efficient access to the system; and (h) collecting congestion rents and payments under the intertransmission system operator compensation mechanism, in compliance with Article 13 of Regulation (EC) No 714/2009, granting and managing third-party access and giving reasoned explanations when it denies such access, which shall be monitored by the national regulatory authorities; in carrying out their tasks under this Article transmission system operators shall primarily facilitate market integration.
Article 9	Article 12	Article 12
The transmission system operator must preserve the confidentiality of commercially sensitive information obtained in the course of carrying out its business.	Without prejudice to Article 18 or any other legal duty to disclose information, the transmission system operator shall preserve the confidentiality of commercially sensitive information obtained in the course of carrying out its business. Information disclosed regarding its own activities, which may be commercially advantageous, shall be made available in a non-discriminatory manner.	
	>>	Article 9
	>>	**Unbundling of transmission systems and transmission system operators**
	>>	MSs shall ensure that from 3 March 2012: 5. (a) each undertaking which owns a transmission system acts as a transmission system operator; (b) the same person or persons are entitled neither: (i) directly or indirectly to exercise control over an undertaking performing any of the functions of generation or supply, and directly or indirectly to exercise control or exercise any right over a transmission system operator or over a transmission system; nor (ii) directly or indirectly to exercise control over a transmission system operator or over a transmission system, and directly or indirectly to exercise control or exercise any right over an undertaking performing any of the functions of generation or supply; (c) the same person or persons are not entitled to appoint members of the supervisory board, the administrative board or bodies legally representing the undertaking, of a transmission system operator or a transmission system, and directly or indirectly to exercise control or exercise any right over an undertaking performing any of the functions of generation or supply; and (d) the same person is not entitled to be a member of the supervisory board, the administrative board or bodies legally representing the undertaking, of both an undertaking performing any of the functions of generation or supply and a transmission system operator or a transmission system.
	>>	The rights referred to in points (b) and (c) of paragraph 1 shall include, in particular: (a) the power to exercise voting rights; (b) the power to appoint members of the supervisory board, the administrative board or bodies legally representing the undertaking; or (c) the holding of a majority share.

		For the purpose of paragraph 1(b), the notion 'undertaking performing any of the functions of generation or supply' shall include 'undertaking performing any of the functions of production and supply' within the meaning of Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 1), 14.8.2009 concerning common rules for the internal market in natural gas (antd he terms 'transmission system operator' and 'transmission system' shall include 'transmission system operator' and 'transmission system' within the meaning of that Directive.
		Member States may allow for derogations from points (b) and (c) of paragraph 1 until 3 March 2013, provided that transmission system operators are not part of a vertically integrated undertaking.
		The obligation set out in paragraph 1(a) shall be deemed to be fulfilled in a situation where two or more undertakings which own transmission systems have created a joint venture which acts as a transmission system operator in two or more Member States for the transmission systems concerned. No other undertaking may be part of the joint venture, unless it has been approved under Article 13 as an independent system operator or as an independent transmission operator for the purposes of Chapter V.
		For the implementation of this Article, where the person referred to in points (b), (c) and (d) of paragraph 1 is the Member State or another public body, two separate public bodies exercising control over a transmission system operator or over a transmission system on the one hand, and over an undertaking performing any of the functions of generation or supply on the other, shall be deemed not to be the same person or persons
		Member States shall ensure that neither commercially sensitive information referred to in Article 16 held by a transmission system operator which was part of a vertically integrated undertaking, nor the staff of such a transmission system operator, is transferred to undertakings performing any of the functions of generation and supply.
		Where on 3 September 2009, the transmission system belongs to a vertically integrated undertaking a Member State may decide not to apply paragraph 1. In such case, the Member State concerned shall either: (a) designate an independent system operator in accordance with Article 13; or (b) comply with the provisions of Chapter V.
		Where, on 3 September 2009, the transmission system belongs to a vertically integrated undertaking and there are arrangements in place which guarantee more effective independence of the transmission system operator than the provisions of Chapter V, a Member State may decide not to apply paragraph 1.
		Before an undertaking is approved and designated as a For the purpose of paragraph 1(b), the notion 'undertaking performing any of the functions of generation or supply' shall include 'undertaking performing any of the functions of production and supply' within the meaning of Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 transmission system operator under paragraph 9 of this Article, it shall be certified according to the procedures laid down in Article 10(4), (5) and (6) of this Directive and in Article 3 of Regulation (EC) No 714/2009, pursuant to which the Commission shall verify that the arrangements in place clearly guarantee more effective independence of the transmission system operator than the provisions of Chapter V.
		Vertically integrated undertakings which own a transmis- sion system shall not in any event be prevented from taking steps to comply with paragraph 1.
		Undertakings performing any of the functions of generation or supply shall not in any event be able to directly or indirectly take control over or exercise any right over unbundled transmission system operators in Member States which apply paragraph 1.
		Article 10
		Designation and certification of transmission system operators
		Before an undertaking is approved and designated as transmission system operator, it shall be certified according to the procedures laid down in paragraphs 4, 5 and 6 of this Article and in Article 3 of Regulation (EC) No 714/2009.
		Undertakings which own a transmission system and which have been certified by the national regulatory authority as having complied with the requirements of Article 9, pursuant to the certification procedure below, shall be approved and designated as transmission system operators by Member States. The designation of transmission system operators shall be notified to the Commission and published in the Official Journal of the European Union.
		Transmission system operators shall notify to the regulatory authority any planned transaction which may require a reassessment of their compliance with the requirements of Article 9.
The regulatory authority shall adopt a draft decision on the certification of a transmission system operator within four months from the date of notification by the transmission system operator. It shall refuse the certification if it has not been demonstrated:		Regulatory authorities shall monitor the continuing compliance of transmission system operators with the requirements of Article 9. They shall open a certification procedure to ensure such compliance: (a) upon notification by the transmission system operator pursuant to paragraph 3; (b) on their own initiative where they have knowledge that a planned change in rights or influence over transmission system owners or transmission system operators may lead to an infringement of Article 9, or where they have reason to believe that such an infringement may have occurred; or (c) upon a reasoned request from the Commission.
		The regulatory authorities shall adopt a decision on the cer- tification of a transmission system operator within a period of four months from the date of the notification by the transmission system operator or from the date of the Commission request. After expiry of that period, the certification shall be deemed to be granted. The explicit or tacit decision of the regulatory authority shall become effective only after the conclusion of the procedure set out in paragraph 6.
		The explicit or tacit decision on the certification of a transmission system operator shall be notified without delay to the Commission by the regulatory authority, together with all the relevant information with respect to that decision. The Commission shall act in accordance with the procedure laid down in Article 3 of Regulation (EC) No 714/2009.
		The regulatory authorities and the Commission may request from transmission system operators and undertakings performing any of the functions of generation or supply any information relevant for the fulfilment of their tasks under this Article.
		Regulatory authorities and the Commission shall preserve the confidentiality of commercially sensitive information.

		Article 11
	>>>	**Certification in relation to third countries**
	>>>	Where certification is requested by a transmission system owner or a transmission system operator which is controlled by a person or persons from a third country or third countries, the regulatory authority shall notify the Commission. The regulatory authority shall also notify to the Commission without delay any circumstances that would result in a person or persons from a third country or third countries acquiring control of a transmission system or a transmission system operator.
	>>>	The transmission system operator shall notify to the regu-latory authority any circumstances that would result in a person or persons from a third country or third countries acquiring control of the transmission system or the transmission system operator.
	>>>	(a) that the entity concerned complies with the requirements of Article 9; and (b) to the regulatory authority or to another competent authority designated by the Member State that granting certification will not put at risk the security of energy supply of the Member State and the Community. In considering that question the regulatory authority or other competent authority so designated shall take into account:

	>>	The regulatory authorities shall adopt a decision on the certification of a transmission system operator within a period of four months from the date of the notification by the transmission system operator or from the date of the Commission request. After expiry of that period, the certification shall be deemed to be granted. The explicit or tacit decision of the regulatory authority shall become effective only after the conclusion of the procedure set out in paragraph 6. (i) the rights and obligations of the Community with respect to that third country arising under international law, including any agreement concluded with one or more third countries to which the Community is a party and which addresses the issues of security of energy supply;(ii) the rights and obligations of the Member State with respect to that third country arising under agreements concluded with it, insofar as they are in compliance with Community law; and (iii) other specific facts and circumstances of the case and the third country concerned.
	>>	The regulatory authority shall notify the decision to the Commission without delay, together with all the relevant information with respect to that decision.
	>>	The Commission shall examine the request referred to in paragraph 5 as soon as it is received. Within a period of two months after receiving the request, it shall deliver its opinion to the national regulatory authority or, if the request was made by the designated competent authority, to that authority. In preparing the opinion, the Commission may request the views of the Agency, the Member State concerned, and interested parties. In the event that the Commission makes such a request, the two-month period shall be extended by two months. In the absence of an opinion by the Commission within the period referred to in the first and second subparagraphs, the Commission shall be deemed not to raise objections to the decision of the regulatory authority.
	>>	When assessing whether the control by a person or persons from a third country or third countries will put at risk the security of energy supply to the Community, the Commission shall take into account: (a) the specific facts of the case and the third country or third countries concerned; and (b) the rights and obligations of the Community with respect to that third country or third countries arising under international law, including an agreement concluded with one or more third countries to which the Community is a party and which addresses the issues of security of supply.
	>>	The national regulatory authority shall, within a period of two months after the expiry of the period referred to in paragraph 6, adopt its final decision on the certification. In adopting its final decision the national regulatory authority shall take utmost account of the Commission's opinion. In any event Member States shall have the right to refuse certification where granting certification puts at risk the Member State's security of energysupply or the security of energy supply of another Member State. Where the Member State has designated another competent authority to assess paragraph 3(b), it may require the national regulatory authority to adopt its final decision in accordance with the assessment of that competent authority. The national regulatory authority's final decision and the Commission's opinion shall be published together. Where the final decision diverges from the Commission's opinion, the Member State concerned shall provide and publish, together with that decision, the reasoning underlying such decision.
	>>	Nothing in this Article shall affect the right of Member States to exercise, in compliance with Community law, national legal controls to protect legitimate public security interests.
	>>	The Commission may adopt Guidelines setting out the details of the procedure to be followed for the application of this Article. Those measures, designed to amend non-essential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 46(2).
	>>	This Article, with exception of paragraph 3(a), shall also apply to Member States which are subject to a derogation under Article 44.
	Article 10	Article 14 (Owners instead of Operators)
	Unbundling of Transmission System Operators	
>>	Where the transmission system operator is part of a vertically integrated undertaking, it shall be independent at least in terms of its legal form, organisation and decision making from other activities not relating to transmission. These rules shall not create an obligation to separate the ownership of assets of the transmission system from the vertically integrated undertaking.	A transmission system owner, where an independent system operator has been appointed, which is part of a vertically integrated undertaking shall be independent at least in terms of its legal form, organisation and decision making from other activities not relating to transmission.
>>	In order to ensure the independence of the transmission system operator referred to in paragraph 1, the following minimum criteria shall apply:	In order to ensure the independence of the transmission system operator referred to in paragraph 1, the following minimum criteria shall apply:
>>	(a) those persons responsible for the management of the transmission system operator may not participate in company structures of the integrated electricity undertaking responsible, directly or indirectly, for the day-to-day operation of the generation, distribution and supply of electricity;	(a) persons responsible for the management of the transmission system owner shall not participate in company structures of the integrated electricity undertaking responsible, directly or indirectly, for the day-to-day operation of the generation, distribution and supply of electricity;
>>	(b) appropriate measures must be taken to ensure that the professional interests of the persons responsible for the management of the transmission system operator are taken into account in a manner that ensures that they are capable of acting independently;	(b) appropriate measures shall be taken to ensure that the professional interests of persons responsible for the management of the transmission system owner are taken into account in a manner that ensures that they are capable of acting independently; and
>>	(c) the transmission system operator shall have effective decision-making rights, independent from the integrated electricity undertaking, with respect to assets necessary to operate, maintain or develop the network. This should not prevent the existence of appropriate coordination mechanisms to ensure that the economic and management supervision rights of the parent company in respect of return on assets, regulated indirectly in accordance with Article 23(2), in a subsidiary are protected. In particular, this shall enable the parent company to approve the annual financial plan, or any equivalent instrument, of the transmission system operator and to set global limits on the levels of indebtedness of its subsidiary. It shall not permit the parent company to give instructions regarding day-to-day operations, nor with respect to individual decisions concerning the construction or upgrading of transmission lines, that do not exceed the terms of the approved financial plan, or any equivalent instrument;	
>>	(d) the transmission system operator shall establish a compliance programme, which sets out measures taken to ensure that discriminatory conduct is excluded, and ensure that observance of it is adequately monitored. The programme shall set out the specific obligations of employees to meet this objective. An annual report,setting out the measures taken, shall be submitted by the person or body responsible for monitoring the compliance programme to the regulatory authority referred to in Article 23(1) and shall be published.	(c) the transmission system owner shall establish a compliance programme, which sets out measures taken to ensure that discriminatory conduct is excluded, and ensure that observance of it is adequately monitored. The compliance programme shall set out the specific obligations of employees to meet those objectives. An annual report, setting out the measures taken, shall be submitted by the person or body responsible for monitoring the compliance programme to the regulatory authority and shall be published. Also see Article 21!
		The Commission may adopt Guidelines to ensure full and effective compliance of the transmission system owner with paragraph 2 of this Article. Those measures, designed to amend nonessential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 46(2).

Article 8	Article 11	Article 15
	Dispatching and balancing	**Dispatching and balancing**
Without prejudice to the supply of electricity on the basis of contractual obligations, including those which derive from the tendering specifications, the transmission system operator shall, where it has this function, be responsible for dispatching the generating installations in its area and for determining the use of interconnectors with other systems.		
Without prejudice to the supply of electricity on the basis of contractual obligations, including those which derive from the tendering specifications, the dispatching of generating installations and the use of interconnectors shall be determined on the basis of criteria which may be approved by the MS and which must be objective, published and applied in a non-discriminatory manner which ensures the proper functioning of the internal market in electricity. They shall take into account the economic precedence of electricity from available generating installations of interconnector transfers and the technical constraints on the system .		
A Member State shall require system operators to act in accordance with Article 16 of Directive 2009/28/EC when dispatching generating installations using renewable energy sources. They also may require the system operator to give priority when dispatching generating installations producing combined heat and power.		
A MS may, for reasons of security of supply, direct that priority be given to the dispatch of generating installations using indigenous primary energy fuel sources, to an extent not exceeding in any calendar year 15% of the overall primary energy necessary to produce the electricity consumed in the Member State concerned.		
>>>	Member States may require transmission system operators to comply with minimum standards for the maintenance and development of the transmission system, including interconnection capacity.	
>>>	Transmission system operators shall procure the energy they use to cover energy losses and reserve capacity in their system according to transparent, non-discriminatory and market-based procedures, whenever they have this function.	
>>>	Rules adopted by transmission system operators for balancing the electricity system shall be objective, transparent and non-discriminatory, including rules for the charging of system users of their networks for energy imbalance. Terms and conditions, including rules and tariffs, for the provision of such services by transmission system operators shall be established pursuant to a methodology compatible with Article 23(2) in a non-discriminatory and cost-reflective way and shall be published.	
		Article 13
	>>>	**Independent system operator**
		Where the transmission system belongs to a vertically integrated undertaking on 3 September 2009, Member States may decide not to apply Article 9(1) and designate an independent system operator upon a proposal from the transmission system owner. Such designation shall be subject to approval by the Commission.
		The Member State may approve and designate an independent system operator only where: (a) the candidate operator has demonstrated that it complies with the requirements of Article 9(1)(b), (c) and (d); (b) the candidate operator has demonstrated that it has at its disposal the required financial, technical, physical and human resources to carry out its tasks under Article 12; (c) the candidate operator has undertaken to comply with a tenyear network development plan monitored by the regulatory authority; (d) the transmission system owner has demonstrated its ability to comply with its obligations under paragraph 5. To that end, it shall provide all the draft contractual arrangements with the candidate undertaking and any other relevant entity; and (e) the candidate operator has demonstrated its ability to comply with its obligations under Regulation (EC) No 714/2009 including the cooperation of transmission system operators at European and regional level.
		Undertakings which have been certified by the regulatory authority as having complied with the requirements of Article 11 and paragraph 2 of this Article shall be approved and designated as independent system operators by Member States. The certification procedure in either Article 10 of this Directive and Article 3 of Regulation (EC) No 714/2009 or in Article 11 of this Directive shall be applicable.
		Each independent system operator shall be responsible for granting and managing third-party access, including the collection of access charges, congestion charges, and payments under the inter-transmission system operator compensation mechanism in compliance with Article 13 of Regulation (EC) No 714/2009, as well as for operating, maintaining and developing the transmission system, and for ensuring the long-term ability of the system to meet reasonable demand through investment planning. When developing the transmission system, the independent system operator shall be responsible for planning (including authorisation procedure), construction and commissioning of the new infrastructure. For this purpose, the independent system operator shall act as a transmission system operator in accordance with this Chapter. The transmission system owner shall not be responsible for granting and managing third-party access, nor for investment planning.
		Where an independent system operator has been designated, the transmission system owner shall:provide all the relevant cooperation and support to the independent system operator for the fulfilment of its tasks, including in particular all relevant information;finance the investments decided by the independent system operator and approved by the regulatory authority, or give its agreement to financing by any interested party including the independent system operator. The relevant financing arrangements shall be subject to approval by the regulatory authority. Prior to such approval, the regulatory authority shall consult the transmission system owner together with the other interested parties;provide for the coverage of liability relating to the network assets, excluding the liability relating to the tasks of the independent system operator; andprovide guarantees to facilitate financing any network expansions with the exception of those investments where, pursuant to point (b), it has given its agreement to financing by any interested party including the independent system operator.
		In close cooperation with the regulatory authority, the relevant national competition authority shall be granted all relevant powers to effectively monitor compliance of the transmission system owner with its obligations under paragraph 5.
		Article 16
		Confidentiality for transmission system operators and transmission system owners
		Without prejudice to Article 30 or any other legal duty to disclose information, each transmission system operator and each transmission system owner shall preserve the confidentiality of commercially sensitive information obtained in the course of carrying out its activities, and shall prevent information about its own activities which may be commercially advantageous from being disclosed in a discriminatory manner. In particular it shall not disclose any commercially sensitive information to the remaining parts of the undertaking, unless this is necessary for carrying out a business transaction. In order to ensure the full respect of the rules on information unbundling, Member States shall ensure that the transmission system owner and the remaining part of the undertaking do not use joint services, such as joint legal services, apart from purely administrative or IT functions.
		Transmission system operators shall not, in the context of sales or purchases of electricity by related undertakings, misuse commercially sensitive information obtained from third parties in the context of providing or negotiating access to the system.
		Information necessary for effective competition and the efficient functioning of the market shall be made public. That obligation shall be without prejudice to preserving the confidentiality of commercially sensitive information.

	>>	**CHAPTER V**
		Independent Transmission Operator
		Article 17
		Assets, equipment, staff and identity
		Transmission system operators shall be equipped with allhuman, technical, physical and financial resources necessary forfulfilling their obligations under this Directive and carrying outthe activity of electricity transmission, in particular: (a) assets that are necessary for the activity of electricity transmission, including the transmission system, shall be ownedby the transmission system operator; (b) personnel, necessary for the activity of electricity transmission, including the performance of all corporate tasks, shallbe employed by the transmission system operator; (c) leasing of personnel and rendering of services, to and fromany other parts of the vertically integrated undertaking shallbe prohibited. A transmission system operator may, however, render services to the vertically integrated undertakingas long as: (i) the provision of those services does not discriminatebetween system users, is available to all system users onthe same terms and conditions and does not restrict, distort or prevent competition in generation or supply; and (ii) the terms and conditions of the provision of those services are approved by the regulatory authority;
		The activity of electricity transmission shall include at leastthe following tasks in addition to those listed in Article 12: (a) the representation of the transmission system operator andcontacts to third parties and the regulatory authorities; (b) the representation of the transmission system operatorwithin the European Network of Transmission SystemOperators for Electricity (ENTSO for Electricity); (c) granting and managing third-party access on a non-discriminatory basis between system users or classes of system users; (d)the collection of all the transmission system related chargesincluding access charges, balancing charges for ancillary services such as purchasing of services (balancing costs, energyfor losses); (e) the operation, maintenance and development of a secure,efficient and economic transmission system; (f) investment planning ensuring the long-term ability of thesystem to meet reasonable demand and guaranteeing security of supply; (g) the setting up of appropriate joint ventures, including withone or more transmission system operators, powerexchanges, and the other relevant actors pursuing the objectives to develop the creation of regional markets or to facilitate the liberalisation process; and
		Transmission system operators shall be organised in a legalform as referred to in Article 1 of Council Directive68/151/EEC
		The transmission system operator shall not, in its corporateidentity, communication, branding and premises, create confusion in respect of the separate identity of the vertically integratedundertaking or any part thereof.
		The transmission system operator shall not share IT systemsor equipment, physical premises and security access systems withany part of the vertically integrated undertaking nor use the sameconsultants or external contractors for IT systems or equipment,and security access systems.
		The accounts of transmission system operators shall beaudited by an auditor other than the one auditing the verticallyintegrated undertaking or any part thereof.
		Article 18
		Independence of the transmission system operator
		Without prejudice to the decisions of the Supervisory Body under Article 20, the transmission system operator shall have: (a) effective decision-making rights, independent from the vertically integrated undertaking, with respect to assets necessary to operate, maintain or develop the transmission system;and (b) the power to raise money on the capital market in particularthrough borrowing and capital increase.
		The transmission system operator shall at all times act so asto ensure it has the resources it needs in order to carry out theactivity of transmission properly and efficiently and develop andmaintain an efficient, secure and economic transmission system.
		Subsidiaries of the vertically integrated undertaking performing functions of generation or supply shall not have anydirect or indirect shareholding in the transmission system operator. The transmission system operator shall neither have anydirect or indirect shareholding in any subsidiary of the verticallyintegrated undertaking performing functions of generation orsupply, nor receive dividends or any other financial benefit fromthat subsidiary.
		The overall management structure and the corporate statutes of the transmission system operator shall ensure effectiveindependence of the transmission system operator in compliancewith this Chapter. The vertically integrated undertaking shall notdetermine, directly or indirectly, the competitive behaviour of thetransmission system operator in relation to the day to day activities of the transmission system operator and management of thenetwork, or in relation to activities necessary for the preparationof the ten-year network development plan developed pursuant toArticle 22.
		In fulfilling their tasks in Article 12 and Article 17(2) of thisDirective, and in complying with Articles 14, 15 and 16 of Regulation (EC) No 714/2009, transmission system operators shall notdiscriminate against different persons or entities and shall notrestrict, distort or prevent competition in generation or supply.
		Any commercial and financial relations between the vertically integrated undertaking and the transmission system operator, including loans from the transmission system operator to thevertically integrated undertaking, shall comply with market conditions. The transmission system operator shall keep detailedrecords of such commercial and financial relations and makethem available to the regulatory authority upon request.
		The transmission system operator shall submit for approvalby the regulatory authority all commercial and financial agreements with the vertically integrated undertaking.
		The transmission system operator shall inform the regulatory authority of the financial resources, referred to inArticle 17(1)(d), available for future investment projects and/orfor the replacement of existing assets.
		The vertically integrated undertaking shall refrain from anyaction impeding or prejudicing the transmission system operatorfrom complying with its obligations in this Chapter and shall notrequire the transmission system operator to seek permission fromthe vertically integrated undertaking in fulfilling those obligations.
		An undertaking which has been certified by the regulatoryauthority as being in compliance with the requirements of thisChapter shall be approved and designated as a transmission system operator by the Member State concerned. The certificationprocedure in either Article 10 of this Directive and Article 3 ofRegulation (EC) No 714/2009 or in Article 11 of this Directiveshall apply.

		Article 19
		Independence of the staff and the managementof the transmission system operator
		Decisions regarding the appointment and renewal, workingconditions including remuneration, and termination of the termof office of the persons responsible for the management and/ormembers of the administrative bodies of the transmission systemoperator shall be taken by the Supervisory Body of the transmission system operator appointed in accordance with Article 20.
		The identity and the conditions governing the term, theduration and the termination of office of the persons nominatedby the Supervisory Body for appointment or renewal as personsresponsible for the executive management and/or as members ofthe administrative bodies of the transmission system operator,and the reasons for any proposed decision terminating such termof office, shall be notified to the regulatory authority. Those conditions and the decisions referred to in paragraph 1 shall becomebinding only if the regulatory authority has raised no objectionswithin three weeks of notification. The regulatory authority may object to the decisions referred toin paragraph 1 where: (a) doubts arise as to the professional independence of a nominated person responsible for the management and/or member of the administrative bodies; or (b) in the case of premature termination of a term of office,doubts exist regarding the justification of such prematuretermination.
		No professional position or responsibility, interest or business relationship, directly or indirectly, with the vertically integrated undertaking or any part of it or its controlling shareholdersother than the transmission system operator shall be exercised fora period of three years before the appointment of the personsresponsible for the management and/or members of the administrative bodies of the transmission system operator who are subject to this paragraph.
		The persons responsible for the management and/or members of the administrative bodies, and employees of the transmission system operator shall have no other professional position orresponsibility, interest or business relationship, directly or indirectly, with any other part of the vertically integrated undertakingor with its controlling shareholders.
		The persons responsible for the management and/or members of the administrative bodies, and employees of the transmission system operator shall hold no interest in or receive anyfinancial benefit, directly or indirectly, from any part of the vertically integrated undertaking other than the transmission systemoperator. Their remuneration shall not depend on activities orresults of the vertically integrated undertaking other than those ofthe transmission system operator.
		Effective rights of appeal to the regulatory authority shall beguaranteed for any complaints by the persons responsible for themanagement and/or members of the administrative bodies of thetransmission system operator against premature terminations oftheir term of office.
		After termination of their term of office in the transmissionsystem operator, the persons responsible for its managementand/or members of its administrative bodies shall have no professional position or responsibility, interest or business relationshipwith any part of the vertically integrated undertaking other thanthe transmission system operator, or with its controlling shareholders for a period of not less than four years.
		Paragraph 3 shall apply to the majority of the personsresponsible for the management and/or members of the administrative bodies of the transmission system operator. The persons responsible for the management and/or members ofthe administrative bodies of the transmission system operatorwho are not subject to paragraph 3 shall have exercised no management or other relevant activity in the vertically integratedundertaking for a period of at least six months before theirappointment. The first subparagraph of this paragraph and paragraphs 4 to 7shall be applicable to all the persons belonging to the executivemanagement and to those directly reporting to them on mattersrelated to the operation, maintenance or development of thenetwork.
		Article 20
		Supervisory Body
		The transmission system operator shall have a Supervisory Body which shall be in charge of taking decisions which may havea significant impact on the value of the assets of the shareholderswithin the transmission system operator, in particular decisionsregarding the approval of the annual and longer-term financialplans, the level of indebtedness of the transmission system operator and the amount of dividends distributed to shareholders. Thedecisions falling under the remit of the Supervisory Body shallexclude those that are related to the day to day activities of thetransmission system operator and management of the network,and to activities necessary for the preparation of the ten-year network development plan developed pursuant to Article 22.
		The Supervisory Body shall be composed of members representing the vertically integrated undertaking, members representing third party shareholders and, where the relevantlegislation of a Member State so provides, members representingother interested parties such as employees of the transmission system operator.
		The first subparagraph of Article 19(2) and Article 19(3)to (7) shall apply to at least half of the members of the Supervisory Body minus one. Point (b) of the second subparagraph of Article 19(2) shall applyto all the members of the Supervisory Body.

		Article 21
		Compliance programme and compliance officer
		Member States shall ensure that transmission system operators establish and implement a compliance programme whichsets out the measures taken in order to ensure that discriminatoryconduct is excluded, and ensure that the compliance with thatprogramme is adequately monitored. The compliance programmeshall set out the specific obligations of employees to meet thoseobjectives. It shall be subject to approval by the regulatory authority. Without prejudice to the powers of the national regulator,compliance with the program shall be independently monitoredby a compliance officer.
		The compliance officer shall be appointed by the Supervisory Body, subject to the approval by the regulatory authority.The regulatory authority may refuse the approval of the compliance officer only for reasons of lack of independence or professional capacity. The compliance officer may be a natural or legalperson. Article 19(2) to (8) shall apply to the compliance officer.
		The compliance officer shall be in charge of: (a) monitoring the implementation of the complianceprogramme; (b) elaborating an annual report, setting out the measures takenin order to implement the compliance programme and submitting it to the regulatory authority; (c) reporting to the Supervisory Body and issuing recommendations on the compliance programme and its implementation; (d) notifying the regulatory authority on any substantial breacheswith regard to the implementation of the compliance programme; and (e) reporting to the regulatory authority on any commercial andfinancial relations between the vertically integrated undertaking and the transmission system operator.
		The compliance officer shall submit the proposed decisionson the investment plan or on individual investments in the network to the regulatory authority. This shall occur at the latestwhen the management and/or the competent administrative bodyof the transmission system operator submits them to the Supervisory Body.
		Where the vertically integrated undertaking, in the generalassembly or through the vote of the members of the SupervisoryBody it has appointed, has prevented the adoption of a decisionwith the effect of preventing or delaying investments, whichunder the ten-year network development plan was to be executedin the following three years, the compliance officer shall reportthis to the regulatory authority, which then shall act in accordance with Article 22.
		The conditions governing the mandate or the employmentconditions of the compliance officer, including the duration of itsmandate, shall be subject to approval by the regulatory authority.Those conditions shall ensure the independence of the compliance officer, including by providing him with all the resourcesnecessary for fulfilling his duties. During his mandate, the compliance officer shall have no other professional position, responsibility or interest, directly or indirectly, in or with any part of thevertically integrated undertaking or with its controllingshareholders.
		The compliance officer shall report regularly, either orally orin writing, to the regulatory authority and shall have the right toreport regularly, either orally or in writing, to the SupervisoryBody of the transmission system operator.
		The compliance officer may attend all meetings of the management or administrative bodies of the transmission systemoperator, and those of the Supervisory Body and the generalassembly. The compliance officer shall attend all meetings thataddress the following matters: (a) conditions for access to the network, as defined in Regulation (EC) No 714/2009, in particular regarding tariffs, thirdparty access services, capacity allocation and congestionmanagement, transparency, balancing and secondarymarkets; (b) projects undertaken in order to operate, maintain anddevelop the transmission system, including interconnectionand connection investments; (c) energy purchases or sales necessary for the operation of thetransmission system.
		The compliance officer shall monitor the compliance of the transmission system operator with Article 16.
		The compliance officer shall have access to all relevantdata and to the offices of the transmission system operator and toall the information necessary for the fulfilment of his task.
		After prior approval by the regulatory authority, the Supervisory Body may dismiss the compliance officer. It shall dismissthe compliance officer for reasons of lack of independence or professional capacity upon request of the regulatory authority.
		The compliance officer shall have access to the offices ofthe transmission system operator without prior announcement.
		Article 22
		Network development and powers to make investment decisions
		Every year, transmission system operators shall submit to the regulatory authority a ten-year network development plan based on existing and forecast supply and demand after having consulted all the relevant stakeholders. That network development plan shall contain efficient measures in order to guarantee the adequacy of the system and the security of supply.
		The ten-year network development plan shall in particular: (a) indicate to market participants the main transmission infrastructure that needs to be built or upgraded over the next ten years; (b) contain all the investments already decided and identify new investments which have to be executed in the next three years; and (c) provide for a time frame for all investment projects.
		When elaborating the ten-year network development plan, the transmission system operator shall make reasonable assumptions about the evolution of the generation, supply, consumption and exchanges with other countries, taking into account investment plans for regional and Community-wide networks.

		The regulatory authority shall consult all actual or potential system users on the ten-year network development plan in an open and transparent manner. Persons or undertakings claiming to be potential system users may be required to substantiate such claims. The regulatory authority shall publish the result of the consultation process, in particular possible needs for investments.
		The regulatory authority shall examine whether the ten-year network development plan covers all investment needs identified during the consultation process, and whether it is consistent with the non-binding Community-wide ten-year network development plan (Community-wide network development plan) referred to in Article 8(3)(b) of Regulation (EC) No 714/2009. If any doubt arises as to the consistency with the Community-wide network development plan, the regulatory authority shall consult the Agency. The regulatory authority may require the transmission system operator to amend its ten-year network development plan
		The regulatory authority shall monitor and evaluate the implementation of the ten-year network development plan.
		In circumstances where the transmission system operator, other than for overriding reasons beyond its control, does not execute an investment, which, under the ten-year network development plan, was to be executed in the following three years, Member States shall ensure that the regulatory authority is required to take at least one of the following measures to ensure that the investment in question is made if such investment is still relevant on the basis of the most recent ten-year network development plan: (a) to require the transmission system operator to execute the investments in question; (b) to organise a tender procedure open to any investors for the investment in question; or (c) to oblige the transmission system operator to accept a capital increase to finance the necessary investments and allow independent investors to participate in the capital.
		Where the regulatory authority has made use of its powers under the first subparagraph of paragraph 7, the relevant tariff regulations shall cover the costs of the investments in question.
		Article 23
		Decision-making powers regarding the connection of new power plants to the transmission system
		The transmission system operator shall establish and publish transparent and efficient procedures for non-discriminatory connection of new power plants to the transmission system. Those procedures shall be subject to the approval of national regulatory authorities.
		The transmission system operator shall not be entitled to refuse the connection of a new power plant on the grounds of possible future limitations to available network capacities, such as congestion in distant parts of the transmission system. The transmission system operator shall supply necessary information.
		The transmission system operator shall not be entitled to refuse a new connection point, on the ground that it will lead to additional costs linked with necessary capacity increase of system elements in the close-up range to the connection point.

1996	2003	2009
DISTRIUTION SYSTEM OPERATION		
CHAPTER V		**CHAPTER VI**
	Designation of Distribution System Operators	
Article 10	Article 13	Article 24
Member States may impose on distribution companies an obligation to supply customers located in a given area. The tariff for such supplies may be regulated, for instance to ensure equal treatment of the customers concerned.	<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<	
Member States shall designate or shall require undertakings which own or are responsible for distribution systems to designate a system operator to be responsible for operating, ensuring the maintenance of and, if necessary, developing the distribution system in a given area and its interconnectors with other systems.	Member States shall designate or shall require undertakings that own or are responsible for distribution systems to designate, for a period of time to be determined by Member States having regard to considerations of efficiency and economic balance, one or more distribution system operators. Member States shall ensure that distribution system operators act in accordance with Articles 14 to 16. / in accordance with Articles 25, 26 and 27 (in 2009).	
Member States shall ensure that the system operator acts in accordance with Articles 11 and 12.		
	Tasks of Distribution System Operators	
Article 11	Article 14	Article 25
The distribution system operator shall maintain a secure, reliable and efficient electricity distribution system in its area, with due regard for the environment.		The distribution system operator shall be responsible for ensuring the long-term ability of the system to meet reasonable demands for the distribution of electricity, for operating, maintaining and developing under economic conditions a secure, reliable and efficient electricity
In any event, it must not discriminate between system users or classes of system users, particularly in favour of its subsidiaries or shareholders.	In any event, it must not discriminate between system users or classes of system users, particularly in favour of its related undertakings.	
>>	The distribution system operator shall provide system users with the information they need for efficient access to the system.	
A Member state may require the distribution system operator, when dispatching generating installations, to give priority to generating installations using renewable energy sources or waste or producing combined heat and power.		
>>	Distribution system operators shall procure the energy they use to cover energy losses and reserve capacity in their system according to transparent, non-discriminatory and market based procedures, whenever they have this function. This requirement shall be without prejudice to using electricity acquired under contracts concluded before 1 January 2002	
>>	Where distribution system operators are responsible for balancing the electricity distribution system, rules adopted by them for that purpose shall be objective, transparent and non discriminatory, including rules for the charging of system users of their networks for energy imbalance. Terms and conditions, including rules and tariffs, for the provision of such services by distribution system operators shall be established in accordance with Article 23(2) in a non discriminatory and cost-reflective way and shall be published.	
>>	When planning the development of the distribution network, energy efficiency/demand-side management measures and/or distributed generation that might supplant the need to upgrade or replace electricity capacity shall be considered by the distribution system operator.	

>>	**Unbundling of Distribution System Operators**	
	Article 15	Article 26
	Where the distribution system operator is part of a vertically integrated undertaking, it shall be independent at least in terms of its legal form, organisation and decision making from other activities not relating to distribution. These rules shall not create an obligation to separate the ownership of assets of the distribution system operator from the vertically integrated undertaking.	
	In addition to the requirements of paragraph 1, where the distribution system operator is part of a vertically integrated undertaking, it shall be independent in terms of its organisation and decision making from the other activities not related to distribution. In order to achieve this, the following minimum criteria shall apply: (a) those persons responsible for the management of the distribution system operator may not participate in company structures of the integrated electricity undertaking responsible, directly or indirectly, for the day-to-day operation of the generation, transmission or supply of electricity; (b) appropriate measures must be taken to ensure that the professional interests of the persons responsible for the management of the distribution system operator are taken into account in a manner that ensures that they are capable of acting independently; (c) the distribution system operator shall/ must have effective decision-making rights, independent from the integrated electricity undertaking, with respect to assets necessary to operate, maintain or develop the network. In order to fulfill those tasks, the distribution system operator shall have at its disposal the necessary resources including human, technical, physical and financial resources. This should not prevent the existence of appropriate coordination mechanisms to ensure that the economic and management supervision rights of the parent company in respect of return on assets, regulated indirectly in accordance with Article 23(2), in a subsidiary are protected. In particular, this shall enable the parent company to approve the annual financial plan, or any equivalent instrument, of the distribution system operator and to set global limits on the levels of indebtedness of its subsidiary. It shall not permit the parent company to give instructions regarding day-to-day operations, nor with respect to individual decisions concerning the construction or upgrading of distribution lines, that do not exceed the terms of the approved financial plan, or any equivalent instrument. (d) the distribution system operator shall / must establish a compliance programme, which sets out measures taken to ensure that discriminatory conduct is excluded, and ensure that observance of it is adequately monitored. The programme shall set out the specific obligations of employees to meet this objective. An annual report, setting out the measures taken, shall be submitted by the person or body responsible for monitoring the compliance programme to the regulatory authority referred to in Article 23(1) and published. The compliance officer of the distribution system operator shall be fully independent and shall have access to all the necessary information of the distribution system operator and any affiliated undertaking to fulfil his task.	
	>>	Where the distribution system operator is part of a vertically integrated undertaking, the Member States shall ensure that the activities of the distribution system operator are monitored by regulatory authorities or other competent bodies so that it cannot take advantage of its vertical integration to distort competition. In particular, vertically integrated distribution system operators shall not, in their communication and branding, create confusion in respect of the separate identity of the supply branch of the vertically integrated undertaking.
	Member States may decide not to apply paragraphs 1 and 2 to integrated electricity undertakings serving less than 100 000 connected customers, or serving small isolated systems.	
	Confidentiality obligation for Distribution System Operators	
Article 9	Article 16	Article 27
The transmission system operator must preserve the confidentiality of commercially sensitive information obtained in the course of carrying out its business.	Without prejudice to Article 18 / Article 30 or any other legal duty to disclose information, the distribution system operator must preserve the confidentiality of commercially sensitive information obtained in the course of carrying out its business, and shall prevent information about its own activities which may be commercially advantageous being disclosed in a discriminatory manner.	
	>>	**Closed distribution systems**
		Article 28
		Member States may provide for national regulatory authorities or other competent authorities to classify a system which distributes electricity within a geographically confined industrial, commercial or shared services site and does not, without prejudice to paragraph 4, supply household customers, as a closed distribution system if: (a) for specific technical or safety reasons, the operations or the production process of the users of that system are integrated; or (b) that system distributes electricity primarily to the owner or operator of the system or their related undertakings.

	>>	**Closed distribution systems**
		Article 28
		Member States may provide for national regulatory authorities or other competent authorities to classify a system which distributes electricity within a geographically confined industrial, commercial or shared services site and does not, without prejudice to paragraph 4, supply household customers, as a closed distribution system if: (a) for specific technical or safety reasons, the operations or the production process of the users of that system are integrated; or (b) that system distributes electricity primarily to the owner or operator of the system or their related undertakings.
		Member States may provide for national regulatory authorities to exempt the operator of a closed distribution system from: (a) the requirement under Article 25(5) to procure the energy it uses to cover energy losses and reserve capacity in its system according to transparent, non-discriminatory and market based procedures; (b) the requirement under Article 32(1) that tariffs, or the methodologies underlying their calculation, are approved prior to their entry into force in accordance with Article 37.
		Where an exemption is granted under paragraph 2, the applicable tariffs, or the methodologies underlying their calculation, shall be reviewed and approved in accordance with Article 37 upon request by a user of the closed distribution system.
		Incidental use by a small number of households with employment or similar associations with the owner of the distribution system and located within the area served by a closed distribution system shall not preclude an exemption under paragraph 2 being granted.
	Combined operator	
	Article 17	Article 29
	The rules in Articles 10(1) and 15(1) do not prevent the operation of a combined transmission and distribution system operator, which is independent in terms of its legal form, organisation and decision making from other activities not relating to transmission or distribution system operation and which meets the requirements set out in points (a) to (d). These rules shall not create an obligation to separate the ownership of assets of the combined system from the vertically integrated undertaking: (a) those persons responsible for the management of the combined system operator may not participate in company structures of the integrated electricity undertaking responsible, directly or indirectly, for the day-to-day operation of the generation, or supply of electricity;	Article 26(1) shall not prevent the operation of a combined transmission and distribution system operator provided that operator complies with Articles 9(1), or 13 and 14, or Chapter V or falls under Article 44(2).
	(b) appropriate measures must be taken to ensure that the professional interests of the persons responsible for the management of the combined system operator are taken into account in a manner that ensures that they are capable of acting independently;	
	(c) the combined system operator shall have effective decision-making rights, independent from the integrated electricity undertaking, with respect to assets necessary to operate, maintain and develop the network. This should not prevent the existence of appropriate coordination mechanisms to ensure that the economic and management supervision rights of the parent company in respect of return on assets, regulated indirectly in accordance with Article 23(2), in a subsidiary are protected. In particular, this shall enable the parent company to approve the annual financial plan, or any equivalent instrument, of the combined system operator and to set global limits on the levels of indebtedness of its subsidiary. It shall not permit the parent company to give instructions regarding day-to-day operations, nor with respect to individual decisions concerning the construction or upgrading of transmission and distribution lines, that do not exceed the terms of the approved financial plan, or any equivalent instrument;	

	(d) the combined system operator shall establish a compliance programme which sets out measures taken to ensure that discriminatory conduct is excluded, and ensure that observance of it is adequately monitored. The programme shall set out the specific obligations of employees to meet this objective. An annual report, setting out the measures taken, shall be submitted by the person or body responsible for monitoring the compliance programme to the regulatory authority referred to in Article 23(1) and published.	

1996	2003	2009
	CHAPTER VI / VII in 2009	
	UNBUNDLING AND TRANSPARENCY OF ACCOUNTS	
	Right of access to accounts	
Article 13	Article 18	Article 30
Member States or any competent authority they designate as well as the dispute settlement authorities referred to in Article 20 (3) shall have right of access to the accounts of generation, transmission or distribution undertakings which they need to consult in carrying out their checks.	Member States or any competent authority they designate, including the regulatory authorities referred to in Article 23, shall, insofar as necessary to carry out their functions, have right of access to the accounts of electricity undertakings as set out in Article 19.	
	Member States and any designated competent authority, including the regulatory authorities referred to in Article 23, shall preserve the confidentiality of commercially sensitive information. Member States may provide for the disclosure of such information where this is necessary in order for the competent authorities to carry out their functions.	
	Unbundling of accounts	
Article 14	Article 19	Article 31
Member States shall take the necessary steps to ensure that the accounts of electricity undertakings are kept in accordance with paragraphs 2 to 5. (2 and 3)		
Electricity undertakings, whatever their system of ownership or legal form, shall draw up, submit to audit and publish their annual accounts in accordance with the rules of national law concerning the annual accounts of limited liability companies adopted pursuant to the fourth Council Directive 78/660/EEC of 25 July 1978 based on Article 54 (3) (g) of the Treaty on the annual accounts of certan types of companies ('). Undertakings which are not legally obliged to publish their annual accounts shall keep a copy of these at the disposal of the public in their head office .		
Integrated electricity undertakings shall, in their internal accounting, keep separate accounts for their generation, transmission and distribution activities, and, where appropriate, consolidated accounts for other, nonelectricity activities, as they would be required to do if the activities in question were carried out by separate undertakings, with a view to avoiding discrimination, crosssubsidization and distortion of competition. They shall include a balance sheet and a profit and loss account for each activity in notes to their accounts.	Electricity undertakings shall, in their internal accounting, keep separate accounts for each of their transmission and distribution activities as they would be required to do if the activities in question were carried out by separate undertakings, with a view to avoiding discrimination, cross subsidisation and distortion of competition. They shall also keep accounts, which may be consolidated, for other electricity activities not relating to transmission or distribution. Until 1 July 2007, they shall keep separate accounts for supply activities for eligible customers and supply activities for non-eligible customers. Revenue from ownership of the transmission/distribution system shall be specified in the accounts. Where appropriate, they shall keep consolidated accounts for other, non-electricity activities. The internal accounts shall include a balance sheet and a profit and loss account for each activity.	
Undertakings shall specify in notes to the annual accounts the rules for the allocation of assets and liabilities and expenditure and income which they follow in drawing up the separate accounts referred to in paragraph 3 . These rules may be amended only in exceptional cases. Such amendments must be mentioned in the notes and must be duly substantiated .	The audit referred to in paragraph 2 shall, in particular, verify that the obligation to avoid discrimination and cross-subsidies referred to in paragraph 3, is respected	
Article 15		
Member States which designate as a single buyer a vertically integrated electricity undertaking or part of a vertically integrated electricity undertaking shall lay down provisions requiring the single buyer to operate separately from the generation and distribution activities of the integrated undertaking.	<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<	
Member States shall ensure that there is no flow of information between the single buyer activities of vertically integrated electricity undertakings and their generation and distribution activities, except for the in-formation necessary to conduct the single buyer responsibilities.	<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<	

1996	2003	2009
	CHAPTER VII / VIII in 2009	
	ORGANISATION OF ACCESS TO THE SYSTEM	
Article 16		
For the organization of access to the system, Member States may choose between the procedures referred to in Article 17 and/or in Article 18. Both sets of procedure shall operate in accordance with objective, transparent and non-discriminatory criteria.	<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<	
	Third party access	
Article 17	Article 20	Article 32
In the case of negotiated access to the system, Member States shall take the necessary measures for electricity producers and, where Member States authorize their existence, supply undertakings and eligible customers either inside or outside the territory covered by the system to be able to negotiate access to the system so as to conclude supply contracts with each other on the basis of voluntary commercial agreements.	Member States shall ensure the implementation of a system of third party access to the transmission and distribution systems based on published tariffs, applicable to all eligible customers and applied objectively and without discrimination between system users. Member States shall ensure that these tariffs, or the methodologies underlying their calculation, are approved prior to their entry into force in accordance with Article 23 and that these tariffs, and the methodologies — where only methodologies are approved — are published prior to their entry into force.	
Where an eligible customer is connected to the distribution system, access to the system must be the subject of negotiation with the relevant distribution system operator and, if necessary, with the transmission system operator concerned.	<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<	
To promote transparency and facilitate negotiations for access to the system, system operators must publish, in the first year following implementation of this Directive, an indicative range of prices for use of the transmission and distribution systems. As far as possible, the indicative prices published for subsequent years should be based on the average price agreed in negotiations in the previous 12-month period.	<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<	
Member States may also opt for a regulated system of access procedure, giving eligible customers a right of access, on the basis of published tariffs for the use of transmission and distribution systems, that is at least equivalent, in terms of access to the system, to the other procedures for access referred to in this Chapter.	<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<	
The operator of the transmission or distribution system concerned may refuse access where he lacks the necessary capacity. Duly substantiated reasons must be given for such refusal, in particular having regard to Article 3.	The operator of a transmission or distribution system may refuse access where it lacks the necessary capacity. Duly substantiated reasons must be given for such refusal, in particular having regard to Article 3. Member States shall ensure, where appropriate and when refusal of access takes place, that the transmission or distribution system operator provides relevant information on measures that would be necessary to reinforce the network. The party requesting such information may be charged a reasonable fee reflecting the cost of providing such information.	The transmission or distribution system operator may refuse access where it lacks the necessary capacity. Duly substantiated reasons must be given for such refusal, in particular having regard to Article 3, and based on objective and technically and economically justified criteria. The regulatory authorities where Member States have so provided or Member States shall ensure that those criteria are consistently applied and that the system user who has been refused access can make use of a dispute settlement procedure. The regulatory authorities shall also ensure, where appropriate and when refusal of access takes place, that the transmission or distribution system operator provides relevant information on measures that would be necessary to reinforce the network. The party requesting such information may be charged a reasonable fee reflecting the cost of providing such information.
Article 18	<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<	
In the case of the **single buyer procedure**, Member States shall designate a legal person to be the single buyer within the territory covered by the system operator. Member States shall take the necessary measures for: (i) the publication of a non-discriminatory tariff for the use of the transmission and distribution system; (ii) eligible customers to be free to conclude supply contracts to cover their own needs with producers and, where Member States authorize their existence, with supply undertakings outside the territory covered by the system; (iii) eligible customers to be free to conclude supply contracts to cover their own needs with producers inside the territory covered by the system; (iv) independent producers to negotiate access to the system with the transmission and distribution systems operators so as to conclude supply contracts with eligible customers outside the system, on the basis of a voluntary commercial agreement.		
The single buyer may be obliged to purchase the electricity contracted by an eligible customer from a producer inside or outside the territory covered by the system at a price which is equal to the sale price offered by the single buyer to eligible customers minus the price of the published tariff referred to in paragraph 1 (i).		
If the purchase obligation under paragraph 2 is not imposed on the single buyer, Member States shall take the necessary measures to ensure that the supply contracts referred to in paragraph 1 (ii) and (iii) are implemented either via access to the system on the basis of the published tariff referred to in paragraph 1 (i) or via negotiated access to the system according to the conditions of Article 17. In the latter case, there would be no obligation for the single buyer to publish a non-discriminatory tariff for the use of the transmission and distribution system.		
The single buyer may refuse access to the system and may refuse to purchase electricity from eligible customers where he lacks the necessary transmission or distribution capacity. Duly substantiated reasons must be given for such refusal, in particular having regard to Article 3.		
	Market opening and reciprocity	
>>	Article 21	Article 33
	Member States shall ensure that the eligible customers are: (a) until 1 July 2004, the eligible customers as specified in Article 19(1) to (3) of Directive 96/92/EC. Member States shall publish by 31 January each year the criteria for the definition of these eligible customers; (b) from 1 July 2004, at the latest, all non-household customers; (c) from 1 July 2007, all customers.	
	To avoid imbalance in the opening of electricity markets: (a) contracts for the supply of electricity with an eligible customer in the system of another Member State shall not be prohibited if the customer is considered as eligible in both systems involved (b) in cases where transactions as described in point (a) are refused because of the customer being eligible only in one of the two systems, the Commission may oblige, taking into account the situation in the market and the common interest, the refusing party to execute the requested supply at the request of the Member State where the eligible customer is located.	

Member States shall lay down the criteria for the grant of authorizations for the construction of direct lines in their territory. These criteria must be objective and non-discriminatory.

The possibility of supplying electricity through a direct line as referred to in paragraph 1 shall not affect the possibility of contracting electricity in accordance with Articles 17 and 18.

Member States may make authorization to construct a direct line subject either to the refusal of system access on the basis, as appropriate, of Article 17 (5) or Article 18 (4) or to the opening of a dispute settlement procedure under Article 20.

Member States may refuse to authorize a direct line if the granting of such an authorization would obstruct the provisions of Article 3. Duly substantiated reasons must be given for such refusal.

CHAPTER IX
NATIONAL REGULATORY AUTHORITIES

	Regulatory authorities	**Designation and independence of regulatory authorities**
Article 22	Article 23	Article 35
Member States shall create appropriate and efficient mechanisms for regulation, control and transparency so as to avoid any abuse of dominant position, in particular to the detriment of consumers, and any predatory behaviour. These mechanisms shall take account of the provisions of the Treaty, and in particular Article 86 thereof.	Member States shall designate one or more competent bodies with the function of regulatory authorities. These authorities shall be wholly independent from the interests of the electricity industry. They shall, through the application of this Article, at least be responsible for ensuring non-discrimination, effective competition and the efficient functioning of the market, monitoring in particular: (a) the rules on the management and allocation of interconnection capacity, in conjunction with the regulatory authority or authorities of those Member States with which interconnection exists; (b) any mechanisms to deal with congested capacity within the national electricity system; (c) the time taken by transmission and distribution undertakings to make connections and repairs; (d) the publication of appropriate information by transmission and distribution system operators concerning interconnectors, grid usage and capacity allocation to interested parties, taking into account the need to treat non-aggregated information as commercially confidential; (e) the effective unbundling of accounts, as referred to in Article 19, to ensure that there are no cross subsidies between generation, transmission, distribution and supply activities; (f) the terms, conditions and tariffs for connecting new producers of electricity to guarantee that these are objective, transparent and non-discriminatory, in particular taking full account of the costs and benefits of the various renewable energy sources technologies, distributed generation and combined heat and power; (g); (h).	Each Member State shall designate a single national regulatory authority at national level. [also see article 37l]
	The regulatory authorities shall be responsible for fixing or approving, prior to their entry into force, at least the methodologies used to calculate or establish the terms and conditions for: (a) connection and access to national networks, including transmission and distribution tariffs. These tariffs, or methodologies, shall allow the necessary investments in the networks to be carried out in a manner allowing these investments to ensure the viability of the networks; (b) the provision of balancing services	Paragraph 1 of this Article shall be without prejudice to the designation of other regulatory authorities at regional level within Member States, provided that there is one senior representative for representation and contact purposes at Community level within the Board of Regulators of the Agency in accordance with Article 14(1) of Regulation (EC) No 713/2009.
	Notwithstanding paragraph 2, Member States may provide that the regulatory authorities shall submit, for formal decision, to the relevant body in the Member State the tariffs or at least the methodologies referred to in that paragraph as well as the modifications in paragraph 4. The relevant body shall, in such a case, have the power to either approve or reject a draft decision submitted by the regulatory authority. These tariffs or the methodologies or modifications thereto shall be published together with the decision on formal adoption. Any formal rejection of a draft decision shall also be published, including its justification.	
	Regulatory authorities shall have the authority to require transmission and distribution system operators, if necessary, to modify the terms and conditions, tariffs, rules, mechanisms and methodologies referred to in paragraphs 1, 2 and 3, to ensure that they are proportionate and applied in a non-discriminatory manner.	
	Any party having a complaint against a transmission or distribution system operator with respect to the issues mentioned in paragraphs 1, 2 and 4 may refer the complaint to the regulatory authority which, acting as dispute settlement authority, shall issue a decision within two months after receipt of the complaint. This period may be extended by two months where additional information is sought by the regulatory authority. This period may be further extended with the agreement of the complainant. Such a decision shall have binding effect unless and until overruled on appeal. Where a complaint concerns connection tariffs for major new generation facilities, the two-month period may be extended by the regulatory authority.	
	Any party who is affected and has a right to complain concerning a decision on methodologies taken pursuant to paragraphs 2, 3 or 4 or, where the regulatory authority has a duty to consult, concerning the proposed methodologies, may, at the latest within two months, or a shorter time period as provided by Member States, following publication of the decision or proposal for a decision, submit a complaint for review. Such a complaint shall not have suspensive effect.	
	Member States shall take measures to ensure that regulatory authorities are able to carry out their duties referred to in paragraphs 1 to 5 in an efficient and expeditious manner.	
	Member States shall create appropriate and efficient mechanisms for regulation, control and transparency so as to avoid any abuse of a dominant position, in particular to the detriment of consumers, and any predatory behaviour. These mechanisms shall take account of the provisions of the Treaty, and in particular Article 82 thereof. Until 2010, the relevant authorities of the Member States shall provide, by 31 July of each year, in conformity with competition law, the Commission with a report on market dominance, predatory and anti competitive behaviour. This report shall, in addition, review the changing ownership patterns and any practical measures taken at national level to ensure a sufficient variety of market actors or practical measures taken to enhance interconnection and competition. From 2010 onwards, the relevant authorities shall provide such a report every two years.	
	Member States shall ensure that the appropriate measures are taken, including administrative action or criminal proceedings in conformity with their national law, against the natural or legal persons responsible where confidentiality rules imposed by this Directive have not been respected.	

	Complaints referred to in paragraphs 5 and 6 shall be without prejudice to the exercise of rights of appeal under Community and national law.	
	National regulatory authorities shall contribute to the development of the internal market and of a level playing field by cooperating with each other and with the Commission in a transparent manner.	
	>>	By way of derogation from paragraph 1 of this Article, a Member State may designate regulatory authorities for small systems on a geographically separate region whose consumption, in 2008, accounted for less than 3 % of the total consumption of the Member State of which it is part. This derogation shall be without prejudice to the appointment of one senior representative for representation and contact purposes at Community level within the Board of Regulators of the Agency in compliance with Article 14(1) of Regulation (EC) No 713/2009.
	>>	Member States shall guarantee the independence of the regulatory authority and shall ensure that it exercises its powers impartially and transparently. For this purpose, Member State shall ensure that, when carrying out the regulatory tasks conferred upon it by this Directive and related legislation, the regulatory authority: (a) is legally distinct and functionally independent from any other public or private entity; (b) ensures that its staff and the persons responsible for its management: (i) act independently from any market interest; and (ii) do not seek or take direct instructions from any government or other public or private entity when carrying out the regulatory tasks. This requirement is without prejudice to close cooperation, as appropriate, with other relevant national authorities or to general policy guidelines issued by the government not related to the regulatory powers and duties under Article 37.
	>>	In order to protect the independence of the regulatory authority, Member States shall in particular ensure that: (a) the regulatory authority can take autonomous decisions, independently from any political body, and has separate annual budget allocations, with autonomy in the implementation of the allocated budget, and adequate human and financial resources to carry out its duties; and (b) the members of the board of the regulatory authority or, in the absence of a board, the regulatory authority's top management are appointed for a fixed term of five up to seven years, renewable once
		General objectives of the regulatory authority
		Article 36
		measures in pursuit of the following objectives within the framework of their duties and powers as laid down in Article 37, in close consultation with other relevant national authorities including competition authorities, as appropriate, and without prejudice to their competencies: A TO H For instance, (a) promoting, in close cooperation with the Agency, regulatory authorities of other Member States and the Commission, a competitive, secure and environmentally sustainable internal market in electricity within the Community, and effective market opening for all customers and suppliers in the Community and ensuring appropriate conditions for the effective and reliable operation of electricity networks, taking into account long-term objectives (e) facilitating access to the network for new generation capacity, in particular removing barriers that could prevent access for new market entrants and of electricity from renewable energy sources;
		Duties and powers of the regulatory authority
		Article 37
		The regulatory authority shall have the following duties: (a) fixing or approving, in accordance with transparent criteria, transmission or distribution tariffs or their methodologies; (b) ensuring compliance of transmission and distribution system operators and, where relevant, system owners, as well as of any electricity undertakings, with their obligations under this Directive and other relevant Community legislation, including as regards cross-border issues; (c) cooperating in regard to cross-border issues with the regulatory authority or authorities of the Member States concerned and with the Agency **UNTIL U**
		Where a Member State has so provided, the monitoring duties set out in paragraph 1 may be carried out by other authorities than the regulatory authority. In such a case, the information resulting from such monitoring shall be made available to the regulatory authority as soon as possible. While preserving their independence, without prejudice to their own specific competencies and consistent with the principles of better regulation, the regulatory authority shall, as appropriate, consult transmission system operators and, as appropriate, closely cooperate with other relevant national authorities when carrying out the duties set out in paragraph 1. Any approvals given by a regulatory authority or the Agency under this Directive are without prejudice to any duly justified future use of its powers by the regulatory authority under this Article or to any penalties imposed by other relevant authorities or the Commission.
		has been designated under Article 13, the regulatory authority shall: (a) monitor the transmission system owner's and the independent system operator's compliance with their obligations under this Article, and issue penalties for non-compliance in accordance with paragraph 4(d); (b) monitor the relations and communications between the independent system operator and the transmission system owner so as to ensure compliance of the independent system operator with its obligations, and in particular approve contracts and act as a dispute settlement authority between the independent system operator and the transmission system owner in respect of any complaint submitted by either party pursuant to paragraph 11; (c) without prejudice to the procedure under Article 13(2)(c), for the first ten-year network development plan, approve the investments planning and the multi-annual network development plan presented annually by the independent system operator; (d) ensure that network access tariffs collected by the independent system operator include remuneration for the network owner or network owners, which provides for adequate remuneration of the network assets and of any new investments made therein, provided they are economically and efficiently incurred; (e) have the powers to carry out inspections, including unannounced inspections, at the premises of transmission system owner and independent system operator; and
		referred to in paragraphs 1, 3 and 6 in an efficient and expeditious manner. For this purpose, the regulatory authority shall have at least the following powers: (a) to issue binding decisions on electricity undertakings; (b) to carry out investigations into the functioning of the electricity markets, and to decide upon and impose any necessary and proportionate measures to promote effective competition and ensure the proper functioning of the market. Where appropriate, the regulatory authority shall also have the power to cooperate with the national competition authority and the financial market regulators or the Commission in conducting an investigation relating to competition law; (c) to require any information from electricity undertakings relevant for the fulfilment of its tasks, including the justification for any refusal to grant third-party access, and any information on measures necessary to reinforce the network; (d) to impose effective, proportionate and dissuasive penalties on electricity undertakings not complying with their obligations under this Directive or any relevant legally binding decisions of the regulatory authority or of the Agency, or to propose that a competent court impose such penalties. This shall include the power to impose or propose the
		In addition to the duties and powers conferred on it under paragraphs 1 and 4 of this Article, when a transmission system operator has been designated in accordance with Chapter V, the regulatory authority shall be granted at least the following duties and powers: (a) to issue penalties in accordance with paragraph 4(d) for discriminatory behaviour in favour of the vertically integrated undertaking; (b) to monitor communications between the transmission system operator and the vertically integrated undertaking so as to ensure compliance of the transmission system operator with its obligations; **UNTIL H**
		The regulatory authorities shall be responsible for fixing or approving sufficiently in advance of their entry into force at least the methodologies used to calculate or establish the terms and conditions for: (a) connection and access to national networks, including transmission and distribution tariffs or their methodologies. Those tariffs or methodologies shall allow the necessary investments in the networks to be carried out in a manner allowing those investments to ensure the viability of the networks; (b) the provision of balancing services which shall be performed in the most economic manner possible and provide appropriate incentives for network users to balance their input and off-takes. The balancing services shall be provided in a fair and non-discriminatory manner and be based on objective criteria; and (c) access to cross-border infrastructures, including the procedures for the allocation of capacity and congestion management.

		The methodologies or the terms and conditions referred to in paragraph 6 shall be published.
		In fixing or approving the tariffs or methodologies and the balancing services, the regulatory authorities shall ensure that transmission and distribution system operators are granted appropriate incentive, over both the short and long term, to increase efficiencies, foster market integration and security of supply and support the related research activities.
		The regulatory authorities shall monitor congestion management of national electricity systems including interconnectors, and the implementation of congestion management rules. To that end, transmission system operators or market operators shall submit their congestion management rules, including capacity allocation, to the national regulatory authorities. National regulatory authorities may request amendments to those rules.
		Regulatory authorities shall have the authority to require transmission and distribution system operators, if necessary, to modify the terms and conditions, including tariffs or methodologies referred to in this Article, to ensure that they are proportionate and applied in a non-discriminatory manner. In the event of delay in the fixing of transmission and distribution tariffs, regulatory authorities shall have the power to fix or approve provisional transmission and distribution tariffs or methodologies and to decide on the appropriate compensatory measures if the final transmission and distribution tariffs or methodologies deviate from those provisional tariffs or methodologies.
		Any party having a complaint against a transmission or distribution system operator in relation to that operator's obligations under this Directive may refer the complaint to the regulatory authority which, acting as dispute settlement authority, shall issue a decision within a period of two months after receipt of the complaint. That period may be extended by two months where additional information is sought by the regulatory authority. That extended period may be further extended with the agreement of the complainant. The regulatory authority's decision shall have binding effect unless and until overruled on appeal
		Any party who is affected and who has a right to complain concerning a decision on methodologies taken pursuant to this Article or, where the regulatory authority has a duty to consult, concerning the proposed tariffs or methodologies, may, at the latest within two months, or a shorter time period as provided by Member States, following publication of the decision or proposal for a decision, submit a complaint for review. Such a complaint shall not have suspensive effect.
		Member States shall create appropriate and efficient mechanisms for regulation, control and transparency so as to avoid any abuse of a dominant position, in particular to the detriment of consumers, and any predatory behaviour. Those mechanisms shall take account of the provisions of the Treaty, and in particular Article 82 thereof.
		Member States shall ensure that the appropriate measures are taken, including administrative action or criminal proceedings in conformity with their national law, against the natural or legal persons responsible where confidentiality rules imposed by this Directive have not been respected.
		Complaints referred to in paragraphs 11 and 12 shall be without prejudice to the exercise of rights of appeal under Community or national law
		Decisions taken by regulatory authorities shall be fully reasoned and justified to allow for judicial review. The decisions shall be available to the public while preserving the confidentiality of commercially sensitive information.
		Member States shall ensure that suitable mechanisms exist at national level under which a party affected by a decision of a regulatory authority has a right of appeal to a body independent of the parties involved and of any government
		Regulatory regime for cross-border issues
		Article 38
		Regulatory authorities shall closely consult and cooperate with each other, and shall provide each other and the Agency with any information necessary for the fulfilment of their tasks under this Directive. In respect of the information exchanged, the receiving authority shall ensure the same level of confidentiality as that required of the originating authority.
		Regulatory authorities shall cooperate at least at a regional level to: (a) foster the creation of operational arrangements in order to enable an optimal management of the network, promote joint electricity exchanges and the allocation of cross-border capacity, and to enable an adequate level of interconnection capacity, including through new interconnection, within the region and between regions to allow for development of effective competition and improvement of security of supply, without discriminating between supply undertakings in different Member States; (b) coordinate the development of all network codes for the relevant transmission system operators and other market actors; and (c) coordinate the development of the rules governing the management of congestion.
		National regulatory authorities shall have the right to enter into cooperative arrangements with each other to foster regulatory cooperation.
		The actions referred to in paragraph 2 shall be carried out, as appropriate, in close consultation with other relevant national authorities and without prejudice to their specific competencies
		The Commission may adopt Guidelines on the extent of the duties of the regulatory authorities to cooperate with each other and with the Agency. Those measures, designed to amend nonessential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 46(2).
		Compliances with the Guidelines
		Article 39
		Any regulatory authority and the Commission may request the opinion of the Agency on the compliance of a decision taken by a regulatory authority with the Guidelines referred to in this Directive or in Regulation (EC) No 714/2009.
		The Agency shall provide its opinion to the regulatory authority which has requested it or to the Commission, respectively, and to the regulatory authority which has taken the decision in question within three months from the date of receipt of the request.
		Where the regulatory authority which has taken the decision does not comply with the Agency's opinion within four months from the date of receipt of that opinion, the Agency shall inform the Commission accordingly.
		Any regulatory authority may inform the Commission where it considers that a decision relevant for cross-border trade taken by another regulatory authority does not comply with the Guidelines referred to in this Directive or in Regulation (EC) No 714/2009 within two months from the date of that decision.
		Where the Commission, within two months after having been informed by the Agency in accordance with paragraph 3, or by a regulatory authority in accordance with paragraph 4, or on its own initiative, within three months from the date of the decision, finds that the decision of a regulatory authority raises serious doubts as to its compatibility with the Guidelines referred to in this Directive or in Regulation (EC) No 714/2009, the Commission may decide to examine the case further. In such a case, it shall invite the regulatory authority and the parties to the proceedings before the regulatory authority to submit observations
		Where the Commission takes a decision to examine the case further, it shall, within four months of the date of such decision, issue a final decision: (a) not to raise objections against the decision of the regulatory authority; or (b) to require the regulatory authority concerned to withdraw its decision on the basis that that the Guidelines have not been complied with.
		Where the Commission has not taken a decision to examine the case further or a final decision within the time-limits set in paragraphs 5 and 6 respectively, it shall be deemed not to have raised objections to the decision of the regulatory authority.
		The regulatory authority shall comply with the Commission decision to withdraw their decision within a period of two months and shall inform the Commission accordingly.
		The Commission may adopt Guidelines setting out the details of the procedure to be followed for the application of this Article. Those measures, designed to amend non-essential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 46(2).

		Regulatory regime for cross-border issues
		Article 38
		Regulatory authorities shall closely consult and cooperate with each other, and shall provide each other and the Agency with any information necessary for the fulfilment of their tasks under this Directive. In respect of the information exchanged, the receiving authority shall ensure the same level of confidentiality as that required of the originating authority.
		Regulatory authorities shall cooperate at least at a regional level to: (a) foster the creation of operational arrangements in order to enable an optimal management of the network, promote joint electricity exchanges and the allocation of cross-border capacity, and to enable an adequate level of interconnection capacity, including through new interconnection, within the region and between regions to allow for development of effective competition and improvement of security of supply, without discriminating between supply undertakings in different Member States; (b) coordinate the development of all network codes for the relevant transmission system operators and other market actors; and (c) coordinate the development of the rules governing the management of congestion.
		National regulatory authorities shall have the right to enter into cooperative arrangements with each other to foster regulatory cooperation.
		The actions referred to in paragraph 2 shall be carried out, as appropriate, in close consultation with other relevant national authorities and without prejudice to their specific competencies
		The Commission may adopt Guidelines on the extent of the duties of the regulatory authorities to cooperate with each other and with the Agency. Those measures, designed to amend nonessential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 46(2).
		Compliances with the Guidelines
		Article 39
		Any regulatory authority and the Commission may request the opinion of the Agency on the compliance of a decision taken by a regulatory authority with the Guidelines referred to in this Directive or in Regulation (EC) No 714/2009.
		The Agency shall provide its opinion to the regulatory authority which has requested it or to the Commission, respectively, and to the regulatory authority which has taken the decision in question within three months from the date of receipt of the request.
		Where the regulatory authority which has taken the decision does not comply with the Agency's opinion within four months from the date of receipt of that opinion, the Agency shall inform the Commission accordingly.
		Any regulatory authority may inform the Commission where it considers that a decision relevant for cross-border trade taken by another regulatory authority does not comply with the Guidelines referred to in this Directive or in Regulation (EC) No 714/2009 within two months from the date of that decision.
		Where the Commission, within two months after having been informed by the Agency in accordance with paragraph 3, or by a regulatory authority in accordance with paragraph 4, or on its own initiative, within three months from the date of the decision, finds that the decision of a regulatory authority raises serious doubts as to its compatibility with the Guidelines referred to in this Directive or in Regulation (EC) No 714/2009, the Commission may decide to examine the case further. In such a case, it shall invite the regulatory authority and the parties to the proceedings before the regulatory authority to submit observations
		Where the Commission takes a decision to examine the case further, it shall, within four months of the date of such decision, issue a final decision: (a) not to raise objections against the decision of the regulatory authority; or (b) to require the regulatory authority concerned to withdraw its decision on the basis that that the Guidelines have not been complied with.
		Where the Commission has not taken a decision to examine the case further or a final decision within the time-limits set in paragraphs 5 and 6 respectively, it shall be deemed not to have raised objections to the decision of the regulatory authority.
		The regulatory authority shall comply with the Commission decision to withdraw their decision within a period of two months and shall inform the Commission accordingly.
		The Commission may adopt Guidelines setting out the details of the procedure to be followed for the application of this Article. Those measures, designed to amend non-essential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 46(2).
		Record keeping
		Article 40
		Member States shall require supply undertakings to keep at the disposal of the national authorities, including the national regulatory authority, the national competition authorities and the Commission, for the fulfilment of their tasks, for at least five years, the relevant data relating to all transactions in electricity supply contracts and electricity derivatives with wholesale customers and transmission system operators.
		The data shall include details on the characteristics of the relevant transactions such as duration, delivery and settlement rules, the quantity, the dates and times of execution and the transaction prices and means of identifying the wholesale customer concerned, as well as specified details of all unsettled electricity supply contracts and electricity derivatives.
		The regulatory authority may decide to make available to market participants elements of that information provided that commercially sensitive information on individual market players or individual transactions is not released. This paragraph shall not apply to information about financial instruments which fall within the scope of Directive 2004/39/EC.
		To ensure the uniform application of this Article, the Commission may adopt Guidelines which define the methods and arrangements for record keeping as well as the form and content of the data that shall be kept. Those measures, designed to amend non-essential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 46(2).
		With respect to transactions in electricity derivatives of supply undertakings with wholesale customers and transmission system operators, this Article shall apply only once the Commission has adopted the Guidelines referred to in paragraph 4
		The provisions of this Article shall not create additional obligations towards the authorities referred to in paragraph 1 for entities falling within the scope of Directive 2004/39/EC.
		In the event that the authorities referred to in paragraph 1 need access to data kept by entities falling within the scope of Directive 2004/39/EC, the authorities responsible under that Directive shall provide them with the required data.

1996	2003	2009
	CHAPTER VIII / XI in 2009	
	Final provisions	
	Safeguard measures	
Article 23	Article 24	Article 42
In the event of a sudden crisis in the energy market and where the physical safety or security of persons, apparatus or installations or system integrity is threatened, a Member State may temporarily take the necessary safeguard measures. Such measures must cause the least possible disturbance in the functioning of the internal market and must not be wider in scope than is strictly necessary to remedy the sudden difficulties which have arisen. The Member State concerned shall without delay notify these measures to the other Member States, and to the Commission, which may decide that the Member State concerned must amend or abolish such measures, insofar as they distort competition and adversely affect trade in a manner which is at variance with the common interest.		
>>>	**Monitoring of imports of electricity**	<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<
	Article 25	
	Member States shall inform the Commission every three months of imports of electricity, in terms of physical flows, that have taken place during the previous three months from third countries	
	>>>	**Level playing field**
		Article 43
		Measures that the Member States may take pursuant to this Directive in order to ensure a level playing field shall be compatible with the Treaty, notably Article 30 thereof, and with Community law.
		The measures referred to in paragraph 1 shall be proportionate, non-discriminatory and transparent. Those measures may be put into effect only following the notification to and approval by the Commission.
		The Commission shall act on the notification referred to in paragraph 2 within two months of the receipt of the notification. That period shall begin on the day following receipt of the complete information. In the event that the Commission has not acted within that two-month period, it shall be deemed not to have raised objections to the notified measures.
	Derogations	
Article 24	Article 26	Article 44
Those Member States in which commitments or guarantees of operation given before the entry into force of this Directive may not be honoured on account of the provisions of this Directive may apply for a transitional regime which may be granted to them by the Commission, taking into account, amongst other things, the size of the system concerned, the level of interconnection of the system and the structure of its electricity industry. The Commission shall inform the Member States of those applications before it takes a decision, taking into account respect for confidentiality. This decision shall be published in the Official Journal of the European Communities.	<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<	
The transitional regime shall be of limited duration and shall be linked to expiry of the commitments or guarantees referred to in paragraph 1. The transitional regime may cover derogations from Chapter IV, VI and VII of this Directive. Applications for a transitional regime must be notified to the Commission no later than one year after the entry into force of this Directive.	<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<	
Member States which can demonstrate, after the Directive has been brought into force, that there are substantial problems for the operation of their small isolated systems, may apply for derogations from the relevant provisions of Chapter IV, V, VI, VII, which may be granted to them by the Commission. The latter shall inform the Member States of those applications prior to taking a decision, taking into account respect for confidentiality. This decision shall be published in the Official Journal of the European Communities. This paragraph shall also be applicable to Luxembourg.	Member States which can demonstrate, after the Directive has been brought into force, that there are substantial problems for the operation of their small isolated systems, may apply for derogations from the relevant provisions of Chapters IV, V, VI, VII, as well as Chapter III, in the case of micro isolated systems, as far as refurbishing, upgrading and expansion of existing capacity are concerned, which may be granted to them by the Commission. The latter shall inform the Member States of those applications prior to taking a decision, taking into account respect for confidentiality. This decision shall be published in the Official Journal of the European Union. This Article shall also be applicable to Luxembourg.	

	A Member State which, after the Directive has been brought into force, for reasons of a technical nature has substantial problems in opening its market for certain limited groups of the non-household customers referred to in Article 21(1)(b) may apply for derogation from this provision, which may be granted to it by the Commission for a period not exceeding 18 months after the date referred to in Article 30(1). In any case, such derogation shall end on the date referred to in Article 21(1)(c).	Article 9 shall not apply to Cyprus, Luxembourg and/or Malta. In addition, Articles 26, 32 and 33 shall not apply to Malta. For the purposes of Article 9(1)(b), the notion 'undertaking performing any of the functions of generation or supply' shall not include final customers who perform any of the functions of generation and/or supply of electricity, either directly or via undertakings over which they exercise control, either individually or jointly, provided that the final customers including their shares of the electricity produced in controlled undertakings are, on an annual average, net consumers of electricity and provided that the economic value of the electricity they sell to third parties is insignificant in proportion to their other business operations.
	Review procedure	
Article 25	Article 27	Article 45
The Commission shall submit a report to the Council and the European Parliament, before the end of the first year following entry into force of this Directive, on harmonization requirements which are not linked to the provisions of this Directive. If necessary, the Commission shall attach to the report any harmonization proposals necessary for the effective operation of the internal market in electricity.	In the event that the report referred to in Article 28(3) reaches the conclusion whereby, given the effective manner in which network access has been carried out in a Member State — which gives rise to fully effective, non-discriminatory and unhindered network access — the Commission concludes that certain obligations imposed by this Directive on undertakings (including those with respect to legal unbundling for distribution system operators) are not proportionate to the objective pursued, the Member State in question may submit a request to the Commission for exemption from the requirement in question. The request shall be notified, without delay, by the Member State to the Commission, together with all the relevant information necessary to demonstrate that the conclusion reached in the report on effective network access being ensured will be maintained. Within three months of its receipt of a notification, the Commission shall adopt an opinion with respect to the request by the Member State concerned, and where appropriate, submit proposals to the European Parliament and to the Council to amend the relevant provisionsof the Directive. The Commission may propose, in the proposals to amend the Directive, to exempt the Member State concerned from specific requirements, subject to that Member State implementing equally effective measures as appropriate.	
The Council and the European Parliament shall give their views on such proposals within two years of their submission.		
		Committee
		Article 46
		The Commission shall be assisted by a committee.
		Where reference is made to this paragraph, Article 5a(1) to (4), and Article 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.
	Reporting	
Article 26	Article 28	Article 47
The Commission shall review the application of this Directive and submit a report on the experience gained on the functioning of the internal market in electricity and the implementation of the general rules mentioned in Article 3 in order to allow the European Parliament and the Council, in the light of experience gained, to consider, in due time, the possibility of a further opening of the market which would be effective nine years after the entry into force of the Directive taking into account the coexistence of systems referred to in Articles 17 and 18.	The Commission shall monitor and review the application of this Directive and submit an overall progress report to the European Parliament and the Council before the end of the first year following the entry into force of this Directive, and thereafter on an annual basis. The report shall cover at least: (a) the experience gained and progress made in creating a complete and fully operational internal market in electricity and the obstacles that remain in this respect, including aspects of market dominance, concentration in the market, predatory or anti-competitive behaviour and the effect of this in terms of market distortion; **UNTIL H** Where appropriate, this report may include recommendations especially as regards the scope and modalities of labelling provisions including e.g. the way in which reference is made to existing reference sources and the content of these sources, and notably on the manner in which the information on the environmental impact in terms of at least emissions of CO2 and the radioactive waste resulting from the electricity production from different energy sources could be made available in a transparent, easily accessible and comparable manner throughout the European Union and on the manner in which the measures taken by the Member States to control the accuracy of the information provided by suppliers could be streamlined, and measures to counteract negative effects of market dominance and market concentration.	
	Every two years, the report referred to in paragraph 1 shall also cover an analysis of the different measures taken in the Member States to meet public service obligations, together with an examination of the effectiveness of those measures and, in particular, their effects on competition in the electricity market. Where appropriate, this report may include recommendations as to the measures to be taken at national level to achieve high public service standards, or measures intended to prevent market foreclosure.	

	>>	The Commission shall, by 3 March 2013, submit, as part of the general review, to the European Parliament and the Council, a detailed specific report outlining the extent to which the unbundling requirements under Chapter V have been successful in ensuring full and effective independence of transmission system operators, using effective and efficient unbundling as a benchmark.
	>>	For the purpose of its assessment under paragraph 3, the Commission shall take into account in particular the following criteria: fair and non-discriminatory network access, effective regulation, the development of the network to meet market needs, undistorted incentives to invest, the development of interconnection infrastructure, effective competition in the energy markets of the Community and the security of supply situation in the Community.
	>>	Where appropriate, and in particular in the event that the detailed specific report referred to in paragraph 3 determines that the conditions referred to in paragraph 4 have not been guaranteed in practice, the Commission shall submit proposals to the European Parliament and the Council to ensure fully effective independence of transmission system operators by 3 March 2014.
	The Commission shall, no later than 1 January 2006, forward to the European Parliament and Council, a detailed report outlining progress in creating the internal electricity market. The report shall, in particular, consider: — the existence of non-discriminatory network access; — effective regulation; — the development of interconnection infrastructure and the security of supply situation in the Community; — the extent to which the full benefits of the opening of markets are accruing to small enterprises and households, notably with respect to public service and universal service standards; — the extent to which markets are in practice open to effective competition, including aspects of market dominance, market concentration and predatory or anti-competitive behaviour; — the extent to which customers are actually switching suppliers and renegotiating tariffs; — price developments, including supply prices, in relation to the degree of the opening of markets; — the experience gained in the application of the Directive as far as the effective independence of system operators in vertically integrated undertakings is concerned and whether other measures in addition to functional independence and separation of accounts have been developed which have effects equivalent to legal unbundling. Where appropriate, the Commission shall submit proposals to the European Parliament and the Council, in particular to guarantee high public service standards. Where appropriate, the Commission shall submit proposals to the European Parliament and the Council, in particular to ensure full and effective independence of distribution system operators before 1 July 2007. When necessary, these proposals shall, in conformity with competition law, also concern measures to address issues of market dominance, market concentration and predatory or anti-competitive behaviour.	
>>	**Repeal**	
	Article 29	Article 48
	Directive 90/547/EEC shall be repealed with effect from 1 July 2004. Directive 96/92/EC shall be repealed from 1 July 2004 without prejudice to the obligations of Member States concerning the deadlines for transposition and application of the said Directive. References made to the repealed Directive shall be construed as being made to this Directive and should be read in accordance with the correlation table in Annex B	Directive 2003/54/EC is repealed from 3 March 2011 without prejudice to the obligations of Member States concerning the deadlines for transposition and application of the said Directive. References to the repealed Directive shall be construed as references to this Directive and shall be read in accordance with the correlation table in Annex II.
	Implementation	**Transposition**
Article 27	Article 30	Article 49
		Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive **by 3 March 2011**. They shall forthwith inform the Commission thereof. They shall apply those measures from 3 March 2011, with the exception of Article 11, which they shall apply from 3 March 2013. When Member States adopt those measures, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. The methods of making such reference shall be laid down by Member States.
Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive **not later than 19 February 1999**. They shall forthwith inform the Commission thereof.	Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive **not later than 1 July 2004**. They shall forthwith inform the Commission thereof.	
Belgium, Greece and Ireland may, due to the specific technical characteristics of their electricity systems, have an additional period of respectively 1 year, 2 years and 1 year to apply the obligations ensuing from this Directive. These Member States, when making use of this option, shall inform the Commission thereof.	Member States may postpone the implementation of Article 15(1) until 1 July 2007. This shall be without prejudice to the requirements contained in Article 15(2).	

When Member States adopt these provisions (measures), they shall contain a reference to this Directive or shall be accompanied by such reference on the occasion of their official publication. The methods of making such reference shall be laid down by Member States.		Member States shall communicate to the Commission the text of the main provisions of national law which they adopt in the field covered by this Directive.
	Entry into force	
Article 28	Article 31	Article 50
This Directive shall enter into force on the 20th day following that of its publication in the Official Journal of the European Communities.		
	Addressees	
Article 29	Article 32	Article 51
This Directive is addressed to the Member States.		

1996	2003	2009
		CHAPTER X
		Retail markets
	>>	Article 41
		In order to facilitate the emergence of well functioning and transparent retail markets in the Community, Member States shall ensure that the roles and responsibilities of transmission system operators, distribution system operators, supply undertakings and customers and if necessary other market participants are defined with respect to contractual arrangements, commitment to customers, data exchange and settlement rules, data ownership and metering responsibility. Those rules shall be made public, be designed with the aim to facilitate customers' and suppliers' access to networks, and they shall be subject to review by the regulatory authorities or other relevant national authorities. Large non-household customers shall have the right to contract simultaneously with several suppliers.