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Harmonising an Effective Regulation

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Harmonisation of electricity regulation in Europe

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Harmonising effective regulation

1. Introduction

The main motivation for harmonisation of regulation at the national and European levels is to assist in the transition of the electricity sector from the traditional centrally planned framework to a decentralised framework that promotes economically efficient, secure and environmentally sustainable supply of electricity to the European consumers. This calls for the establishment of a single integrated European electricity market based on *competitive market-driven generation* and *regulated transmission and distribution* networks characterised by open and non-discriminatory access that promotes least-cost, reliable, secure and *environmentally responsible* operations and future development of electricity industry across Europe.

The three key elements that determine the extent of market integration and competition in any restructuring of electricity markets are: Network governance, sector structure and regulation. By network *governance* we mean how decisions are made and implemented within organisations[1]. *Sector structure* is determined by which market actor controls what (by ownership or contractually) which in turn affects his conduct (competitive or otherwise) and thus sets the stage for what is realisable by good network governance. *Regulation* is the visible hand that sets the boundaries for decisions made by the networks and the market actors and in this sense is a "back-stop" to governance and sector structure. Regulation in this context refers to both sector specific network regulation and general competition regulation.

Harmonisation of regulation is basically concerned with the establishment of consistent "back-stops" across jurisdictions. Consistency in this context does not necessarily mean uniformity. Regulation activity is economic in content, political in implementation and social in consequence. Needless to say; regulatory forms will depend on history, politics and socio-economics of individual jurisdictions and uniformity is a tight constraint that may not be realisable. Harmonisation is more concerned with restricting rulemaking to choices that are economically efficient and robust in terms of vulnerability to stakeholder and political manipulations.

The objective of this chapter is to examine the status of harmonisation of electricity sector-specific and general competition regulation at the national and the European levels. In this chapter, we identify the criterion for comparisons and present the status using data that is comparable across countries. We will focus on four main areas for harmonisation.

2. Regulatory Design - Robust regulation[2]

A prerequisite for the establishment of competitive markets and efficient network regulation is the presence of an independent competent regulator that enjoys exclusive decision making powers and arms length relationships with government and stakeholders. The European directive of 1996 said very little about role of the regulator, while the directive of 2003 on the

[1] For a general discussion of governance in economic systems, see Williamson O.E. (1996) "Mechanisms of Governance, N.Y., Oxford University Press.

[2] See SESSA paper Larsen, Pedersen, Sørensen and Olsen (2005) for a detail analysis of the issues discussed in this section

other hand is more specific about the contents of the regulatory function, although none of these directives have ventured to make recommendations regarding a concrete organisational form for the regulatory function. The current divergence in organisational forms and functional responsibilities allocated to the regulators observed across Europe is thus not unexpected. Table 1 gives an overview of the current state of affairs with regard to the scope of regulatory activities across Europe.

Table 1 Scope of regulatory activities across Europe

Country	Competition	Market transparency	Consumer protection	Economic efficiency in the supply industry	Environmentally friendly electricity supply	Security of supply	Socially responsible price Policies	Number of objectives (n=7)
Austria	X	X	X		X	X		5
Denmark	X	X	X	X	X			5
Finland	X	X						2
France	X	X	X	X			X	5
Greece	X	X	X	X	X	X	X	7
Ireland	X	X	X	X	X	X	X	7
Italy	X	X	X	X	X		X	6
Luxemburg	X	X	X					3
Netherlands	X	X	X	X		X		5
Northern Ireland	X		X	X	X	X		5
Norway	X	X	X	X	X	X		6
Portugal	X	X	X	X	X		X	6
Spain	X	X	X	X		X		5
Sweden		X						1
GB	X		X	X			X	4
No. of countries with the objective (n=15)	14	13	13	11	8	7	6	

It is important to emphasise that, within each country, the activities may be divided between a number of offices of which the sector specific regulator and the competition regulators are the two most important authorities in this context.

Irrespective of the division of work between the different regulatory authorities, independence from stakeholder intervention -both from market participants and political interference- is an important goal to strive for in the design of regulatory institutions both within and across jurisdictions in Europe. Raison d être for regulation is not only the need to correct for market failures, but also government failures. Independence thus becomes a prerequisite if the decisions of the regulators are to be free of economic and/ or political interest of individual groups. If for the market participants, regulators set the boundaries for their decisions, for politicians and regulators place limits on their political interference and at the same time provide convenient mechanisms to handle unpopular decisions often involving technically complicated issues that demand competencies beyond the realm of politicians.

How do we assess independence? Integrity and impartiality in discharge of regulatory functions is one indicator for assessing the independence of the regulator. However the problem is that metrics of integrity and impartiality is not straightforward and comparisons across jurisdictions on this criterion are not practicable. Other authors emphasise the distance function between the regulator and the stakeholders. In this context, the nature of arms-length relationship of the regulator with the regulated (market participants and the networks) and the government, and the scope of independent decision making are considered as the main criteria to assess independence.

How do we asses the arm-length relationship between the regulator and the government? Stability of tenure, financial autonomy and general good governance rules to avoid conflicts of interest and risk of regulatory capture are the criteria in this context. Table 2 provides a status on the arms length relationship between the regulator and the government.

Table 2: Status on the arms length relationship between the regulator and the government

1. What is the term of the agency head or the commissioners?	*7 years or more:* IT	*4-6 years:* AT, DK, FR,GR, IE, LU, NO, PT, ES, SE, UK	
2. Who appoints the agency head or commissioners?	*A mix of the legislature and the executive:* FR, GR, IT, ES FR, GR, IT, ES	*The executive collectively:* AT, FI, LU, PT, SE	*One or two ministers:* DK, IE, NL, NO, UK
3. What are the provisions regarding dismissal of agency head or commissioners?	*Impossible or only possible for reasons related to policy:* AT, DK, FI, FR, GR, IE, IT, LU, NO, ES, SE, PT, UK	*Possible at the appointer's discretion*	*No specific provisions: NL*
4. May the agency head or the commissioners hold offices in government?	*No:* AT, FI, FR, GR, IE, IT, LU, NL, NO, PT, ES, SE	*Yes* DK	No special provisions: UK
5. Is independence a formal requirement for the appointment?	*Yes:* AT, DK, FR, IE, IT, NL, SE, PT	*No:* FI, GR, LU, NO, ES, UK	
6. Which is the source of the regulatory authority's budget?	*Fees levied on regulated firms:* DK, GR, IE, IT, LU, ES, UK	*Government* FR, NO	*Mixed* AT, FI, NL, PT, SE
7. When budget has been appointed, who controls the budget?	*Regulatory authority* FI, FR, GR, IE, IT, LU, NL, NO, PT, SE, UK	*Government* ES	*Mixed* AT, DK
8. Who decides the regulatory authority's internal organisation?	*Regulatory authority* FI, FR, IE, IT, LU, NL, NO, PT, ES, SE, UK	*Government*	*Mixed* AT, DK, GR
9. Who is in charge of the personnel policy?	*Regulatory authority* AT, FI, FR, IE, IT, NL, NO, PT, ES, SE, UK	*Government* LU	*Mixed* DK, GR

A regulator appointed by legislature on a tenure position with safeguards for dismissal on grounds of disagreements on policy is a preferable choice. Needless to say, the regulator should not be allowed to hold offices in the government. Further, independent financing through levies on market actors would strengthen the budgetary independence of the regulator as compared to direct financing over the annual state budgets. However it may be noted that the importance of independence of appointment and budgets independence is dependent on the political culture of the concerned countries.

In addition to regulatory independence, equally important is also the independence of the transmission system operators as facilitators of competition in the generation markets. Transmission operators through their operations and investment decisions not only affect least-cost transport of electricity but also have important impacts on contestability of spatially and temporally differentiated electricity markets. In the future discussions related to the organisation of the transmission function, it is important to assure that the transmission

operators' role as "proxy" regulators of competition is independent of government and interest group intervention.

3. Efficient regulatory mechanisms

The main objective of restructuring in electricity markets has been to introduce market competition wherever technically feasible and to impose regulation for the rest of the industry. The network activities in this context belong to the latter group and need to be regulated to ensure efficient behaviour. The main objective of the sector-specific regulator has been to regulate the network activities. The main approaches to electricity network regulation include: a) Regulation of conduct, b) Regulation by exposure to competition and c) Regulation by contract. Currently the main approach in use in Europe primarily relies on conduct regulation involving economic incentive mechanisms (price-cap, revenue-cap, rate of return models, etc).

The main guiding principle in the design of conduct *regulatory mechanisms* is to create a system of incentives that reward efficiency and affect the economic conduct of the regulated entities. What distinguishes these mechanisms is the regulatory effort required to implement the mechanism and the strength of the incentives for costs economy inherent in the different mechanisms. The traditional rate of return involving a form of cost-plus regulation can be considered as the least desirable of these mechanisms as it embodies micro management from the regulators' side and, in addition, has weak incentives for costs economy. On the other end of this spectrum is the pure price cap regulation, which involves capping the prices charged by the regulated entity, who is allowed to increase prices in line with some general price index minus a factor X such that its customers have guaranteed prices that fall by X in real terms over time. In between these two extremes there is a flora of mechanisms, the so called "performance based mechanisms" that can be specified to assure efficiency.

There are various alternatives for formulating performance based mechanisms, that may differ with respect to factors such as the target variable that is capped (price and /or revenues), duration of the scheme, variables that are used in determining the target values, etc. However, irrespective of the formulation and structure of the "performance based regime" that is chosen, the critical input is the X factor, that in the end determines the development the prices charged by the regulated entity.

Most of the performance-based mechanisms use *benchmarking* in determination of the X factor. The main focus is on measuring the performance in terms of cost efficiency of the regulated entity against a reference level of performance. In benchmarking applications, the regulator is generally interested in obtaining a relative measure of firms' efficiency in order to reward or punish the regulated entity via the X factor. There is a wide variety of methods to measure inefficiency. The main modus operandi is to identify an optimal reference level or frontier (envelope) that represents the locus of optimal production plans for the regulated activity and then measure inefficiency of the individual firm as the distance from the identified level or frontier. The main decision problem for the regulator is to choose a method to identify the necessary reference level or frontier and to implement the same to measure inefficiency. There are a number of legitimate models to chose from, however the main choice in this context is limited to principal approaches: the econometric (parametric) approach PA and the linear programming (non-parametric) NPA approach. In general, there is no consensus as to the superiority of either approach, however in practice the programming approach and in particular the so called Data Envelopment Analysis DEA is emerging as the

preferred choice among the electricity regulators in Europe and elsewhere. The popularity of DEA is partly due to the limited data and functional specification requirements associated with this method and partly also due to the transparency and simplicity of the method. Table 3 gives an overview of the approaches and methods used in a selected group of countries in Europe.

Table 3: Regulation approaches and methods in Europe

Country	**Regulation Method**	**Ex ante/ ex post**	**Approach/ method**
Finland	Expenditure-cap & Rate of Return	Ex post	NPA-DEA
Netherlands	Yardstick	Ex ante	NPA-DEA
Norway	Revenue-cap	Ex ante	NPA-DEA
Sweden	Yardstick	Ex post	NPA-DEA
United Kingdom	Price-cap	Ex ante	PA

Empirical evidence from Europe and other OECD countries so far suggests that the efficiency measurements are quite sensitive to the approach and method used by the regulator[3]. The variation in estimated efficiency measurements can be substantial both across methods within an approach and across the two different approaches and it is not possible to identify any one method on theoretical grounds. This has important implications for how these measurements are used explicitly in the determination of X factors in the regulation process. Regulators for example in Norway, Netherlands and UK use the results as an explicit part of the regulation process. In Sweden and Finland these measurements are used less directly. The general conclusion is that, irrespective of the methods used for benchmarking, the results of such exercises should be used with care. The emphasis should be on using the empirical results to support rather than dictate the parameterisation of the chosen regime.

Regulatory discretion and commitment are important in this process. An important requirement for a regulatory mechanism is to assure firm-viability and capital attraction possibilities for the regulated firms. Errors in benchmarking that result in stricter price or income caps can jeopardise firm-viability and new investment in the regulated industry. Over ambitious targets with respect to the time period allowed to reduce the gap between the efficient and the less efficient firms may have similar effects and increase the bankruptcy risk of the regulated firms. Regulatory discretion is necessary to assure that both parameterisation and time limits to close the efficiency gaps are realistic and do not jeopardise long-term investment in the industry. Lastly, regulatory commitment and stability in regulatory regimes are important factors given the long-term and irreversible nature investments in the sector.

Regulation of infrastructure (network) activities can take various forms and be approached from various angles. Regulation by contract as an *alternative or supplement to conduct regulation* is of particular interest from a regulatory policy perspective[4]. An important task in this context is to identify to what extent it is possible to regulate network activities through

[3] See SESSA paper Farsi, Fetz and Filippini (2005) for a detailed discussion.
[4] See Fehr, Nils-Henrik M. von der, Kåre P. Hagen and Einar Hope (2002) for a discussion of regulation by contracts.

establishment and enforcement of rights and responsibilities that facilitate market based contracts, and to identify what is the ultimate "core" of natural monopoly network activities that needs to be regulated, e.g. by means of a regulatory mechanism like rate of return or price-cap regulation.

The natural starting point for a discussion of regulation by contract is the Coase Theorem: *So long as property rights are well defined, and may be transferred without transaction costs, market equilibrium will be efficient.* This generally also holds in the presence of natural monopolies, defined by economies of scale and scope. The regulatory policy task is to determine when the conditions for regulation by contract under the Coase theorem hold and focus on allocation and enforcement of property rights that facilitate contracting. Regulation by contract represents an interesting approach to electricity network regulation as an alternative or a supplement to standard regulatory approaches and should be explored further. Issues like security of supply, network system operation, network access, network capacity dimensioning, regulation of tariffs etc. are some of the potential areas for this approach. Much of the current cross-border harmonisation between the transmission networks in the Nordic market is based on voluntary contracts between the transmission operators in the region. It would also be interesting to study the performance of the voluntary agreements between the network system operators in the integrated Nordic electricity market, compared to alternative forms of "formal" regulation. Regulation by contracts provides an interesting option for regulation of network monopolies in the European electricity market.

4. Reliability and security of supply[5]

Reliability and security can be seen as multidimensional attributes of electricity supplies where differences in these attributes map a given electricity service into a spectrum of services that although being similar, are not perfect substitutes as not all consumers value these attributes equally. Reliable and secure supplies are a necessary condition for continued political support for transition of electricity sector from the traditional centrally planned framework to a decentralised market driven sector and the reliability and security issues dominate the contemporary policy agenda in Europe. The recent widespread failures in electricity supply, both in Europe and in liberalised markets elsewhere, has further strengthened the resolve of the policy makers to address these issue.

Addressing reliability and security issues calls for a common understanding of these concepts.. In brief, *security* refers to having a adequate volume of generation, storage and network installed capacity to meet demand under normal system operation conditions while *reliability* refers to the short-term static and dynamic response of the existing installed capacity to meet demand in face of short-term contingencies. Both concepts are closely related and they are not independent of one another.

The prevailing opinion is that markets are an efficient delivery mechanism to assure security and that the price signals originating from the electricity markets should govern adequacy of investments in generation and storage capacity. Needless to say, markets can be relied on to discharge this function provided the electricity markets function competitively, there is sufficient price responsiveness on the demand side and suppliers are free to ration non-price responsive demand whenever need arises. However there may be a number of market failures

[5] This section draws on Singh (2005)

that may distort price signals and equity considerations may constrain possibilities for unlimited rationing of demand of the non-price responsive consumer, thus raising doubts about the ability of the markets to handle adequacy of capacity and security of supply.

The prevailing opinion with respect to reliability issues is that at the current level of technology, possibilities for differentiation of electricity supplies along the reliability spectrum are limited and reliability is not a private good. Consequently maintenance of reliability cannot be left to the electricity markets. In addition, the reliability issue has to do with efficient operation and development of capacity of electricity networks, which per definition are natural monopolies and there is general agreement as to the need for regulation to assure reliability in electricity supply. The need for reliability regulation mechanisms is particularly important under the current deregulated frameworks where networks are subject to income or price cap regulation and network companies in the absence of reliability regulation, may meet the cost economy targets through reductions in reliability of supply.

How reliable are the European electricity supplies? EU wide comparisons of service reliability call for an analysis of the frequency of power interruptions across countries. On of the indicators used in this context is "Customers minutes lost per year" (CMLs) which gives the yearly average duration of supply interruption per customer in a given system.

Table 4. Customer minutes lost per year

Total Interruptions: CML/ customer per year			
Countries	1999	2000	2001
Finland	291	199	231
France	59	52	65
UK	69,76	189,27	205,2
Italy	239,2	217,3	179,21
Ireland	424	428	385
Netherlands	26	27	34
Norway	295	340	304
Portugal	0	0	588,07
Spain	0	0	216

However, given the wide diversity in the measurement practices for CMLs across different countries, such comparisons are not meaningful[6]. A more meaningful comparison should focus on the regional level. A comparison of reliability of transmission networks in the Nordel region indicates a wide variation in reliability both with respect to actual levels and trend during the recent years.

[6] See Second Benchmarking Report on Quality of Supply (2003) for a detail discussion

Table 5. Operational disturbances / 00 km network

INDEX: Operational disturbances / 00 km network: 1991-2003 (Base Year 2000 = 100)						
	Denmark	**Finland**	**Island**	**Norway**	**Sweden**	**Nordel**
1991-2000						
400 kv	112	-		70	-	-
220 kv	50	-	-	108	-	-
132 kv	766	-	-	117	-	-
2000						
400 kv	100	100	100	100	100	100
220 kv	100	100	100	100	100	100
132 kv	100	100	100	100	100	100
2001						
400 kv	61	174		42	80	77
220 kv	29	90	128	74	116	89
132 kv	45	97	250	91	105	97
2002						
400 kv	106	56		54	150	105
220 kv	29	131	109	59	123	85
132 kv	62	94	74	65	139	103
2003						
400 kv	100	98		51	94	80
220 kv	0	111	82	83	178	106
132 kv	64	129	126	102	152	121

Notes:

1. Source:.Index constructed on the basis of Nordel Fault Statistics 2000, 2001, 2002, 2003

2. For years 1991-2000, Nordel statistics reports operational disturbances data. For 2001-2003 the data refers to faults. Relationship between faults and operational disturbance depends on a number of factors. To create a comparable data set, fault data for the years 2001-2003 was converted to operational disturbances using ratios between fault and operational disturbances for years 2002 and 2003. In the Nordic systems the range is between 70-97%. For example during 2002-2003, in Norway between 70-75% of the faults led to an operational disturbance, while on the other hand in Finland over 90% of the faults led to an operational disturbance.

What is the status of reliability regulation in Europe? Although there is general agreement as to the need for reliability regulation, the current status in Europe, with few exceptions, indicates that the regulation of reliability is still in its infancy stages. The main exceptions include countries such as Denmark, Norway, Italy, Spain and the UK. A major hurdle in handling the reliability issues in Europe is the multiplicity of definitions and goals, and consequently the lack of agreement both with respect to problem definition and not the least, if, and in what manner the regulatory interventions should be designed. Designing an effective service reliability regulation mechanism calls for: a clear definition of a reliability measure, a benchmark against which reliability is to be compared, and an incentive mechanism that promotes maintenance of network reliability. In addition, distribution considerations would call for minimum and targeted standards to avoid large differentiation in the service-quality across different consumers.

Norway is perhaps the only country with the most advanced reliability regulation schemes where revenue caps facing network companies are adjusted in line with the level of energy not supplied by the regulated utility. Experience with the implementation of the regime in Norway has been positive as the introduction of the scheme is associated with a fall in energy-

not-supplied. However, it is too early to draw general conclusions on the basis of the Norwegian experience, given the short-time period the scheme has been in operation. Another important conclusion is that detailed regulatory mechanisms, as in Norway, are not costless and the Norwegian network regulation mechanism in general is quite costly in terms of implementation costs.

In interconnected power systems, *reliability of supply is a global phenomenon* that is difficult to partition along the geographical borders of the individual power systems. With an increasing trend towards cross border integration of electricity markets, interdependence across the interconnections has increased dramatically. Recent major power outages both in Europe and in the US confirm that power interruptions originating in any particular system may have significant detrimental cross-border impacts. Satisfactory handling of reliability in interconnected systems calls for effective cross border coordination, cooperation and communication among the system operators to develop a comprehensive set of common reliability standards to ensure appropriate reliability of supply in the integrated power markets.

Efficient design and implementation of formal cross-border regulatory mechanisms is a technically and legally demanding activity. Achievement of effective cross-border coordination and harmonisation of reliability rules, standards and procedures through formal regulatory mechanisms is prone to both institutional and informational deficiencies. The policy area is quite suitable for harmonisation through self regulation such as *voluntary arrangements*, which are pragmatic instruments well known from the area of environmental management and policy in the recent years in Europe.

The Nordel system operation agreement among the system operators in the region is a model of such cross-border harmonisation. The main drivers of the Nordel process are favourable historical experience combined with national incentive regulation mechanisms that provide motivation for internalisation of cross-border network externalities. However, equally important has also been the credible threat inherent in the political commitment expressed through the institution of the Nordic Council of Ministers for cross-border integration in the Nordic region.

5. Sector-specific and general competition regulation

A successful transition to a decentralised and integrated electricity sector in Europe implies also the need for coordination and harmonisation of rules and supervisory standards for competition and regulation. What are the main obstacles to competition and market integration? The first and the second SESSA conferences addressed these issues in detail. The two main barriers as mentioned in these conferences are insufficient or ineffective unbundling between transmission and generation, and limited effectiveness of imports as a viable source of competition due to interconnection constraints. Increased interconnection, in particular, may dramatically improve market structure, particularly in smaller Member States. However, efficient interconnection development calls for clear and harmonised rules concerning the allocation of capacity and congestion management across the integrated electricity wholesale markets. Can competition policy at the EU level help reduce such obstacles? The potential is not unlimited. Investigations into capacity reservation can lead to improved access to inter-connectors; however, it is difficult to identify behavioural abusive practices as opposed to

contractual practices. Successful integration of electricity markets also calls for coordination of regulation of the electricity sector and other energy sectors. It appears that, in Europe, most of the competition in the energy markets will be coming from electricity incumbents entering the gas market and vice versa. Thus in the future, a strict policy on mergers involving gas and electricity companies will be crucial.

It is often taken for granted that harmonisation and international coordination of rules and regulation of network activities within a defined market area are always beneficial in terms of improved efficiency performance. There may, however, be cases or situations where this does not necessarily hold. A recent[7] study analyses this issue in a setting where firms in a market must have access to a transportation network which is controlled by national regulators. In particular, they study the issue in terms of merger policy and ask the question whether non-coordinated policies may stimulate cross-border mergers that are overall inefficient and if this is then an argument for international coordination of such policies. Their analysis reveals that non-coordinated regulatory policies may induce cross-border mergers, by allowing the firms in question to play national regulators out against each other, which are overall welfare improving compared to market outcomes under coordinated regulation. However, it may be emphasized that the results are valid in the context of the assumptions and the structure of the theoretical model in the study. One of the important assumptions in the study is related to the ability of the firms in question to play national regulators against each other through threat of moving nationally desirable activities abroad; a possibility that is quite limited in case of the firms in the European electricity market.

The analysis however is interesting in general, as it points to the need in regulatory policy for clarifying the conditions under which international policy coordination in practice may be beneficial or not in terms of overall efficiency outcome. It is also interesting because it analyses a situation where two regulatory policy areas meet and may potentially conflict, i.e. merger policy which is typically within the realm of competition policy regulation, and network access regulation which typically falls within the realm of sector-specific regulation.

Harmonisation between general competition regulation and sector-specific regulation is an important issue in the electricity sector. Various alternative organisational forms are in use in different countries. However, the most common organisation is the division of regulatory responsibilities between the competition and sector specific authorities. One exception in this context is the situation in the Netherlands where sector specific regulation is integrated as divisions within the Competition Authority. Some relevant questions in this context are: What is the “proper” division of labour and responsibility between sector-specific and competition policy regulation? Should this be considered differently for energy markets under deregulation than for “mature” liberalised energy markets?

The contributions made at the SESSA WP 6 workshop have provided useful insights into the regulatory issues that need to be addressed to further the process of establishment of an efficient decentralised delivery mechanism for electricity sector in Europe. Evidence presented indicates that despite diversity of organisational forms and practices, the momentum has been impressive and already some workable benchmark structures are crystallising from this process. In particular, experience from the Nordic model of organisation as a mature benchmark was a subject of discussion in presentations and discussions among the participants. What distinguishes the Nordic model is not only the

[7] See Lommerud, Olsen and Straume (2005).

design details of its individual elements many of which have influenced fine-tuning and development of other organisational structures both in Europe and elsewhere, but also the role that cross-border political cooperation has played in steering institutional development in Nordel. Not to mention the “ownership neutral” stance in the Nordic model, that allows coexistence of public and private ownership in a decentralised market. The organisational and methodological innovation and experience accumulated in the development of the Nordic market framework should provide useful information that can be used in other European countries.

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