

Procedure file

Basic information	
COD - Ordinary legislative procedure (ex-codecision procedure) Regulation	2001/0078(COD) Procedure completed
Energy: internal market in electricity, cross-border exchanges, access to network. 'Electricity Regulation'	
Repealed by 2007/0198(COD)	
Subject 3.60.03 Gas, electricity, natural gas, biogas	

Key players			
European Parliament	Committee responsible	Rapporteur	Appointed
	ITRE Industry, External Trade, Research, Energy		29/05/2001
		PPE-DE MOMBAUR Peter Michael	
	Former committee responsible		
	ITRE Industry, External Trade, Research, Energy		29/05/2001
		PPE-DE MOMBAUR Peter Michael	
	Former committee for opinion		
	BUDG Budgets	The committee decided not to give an opinion.	
	ECON Economic and Monetary Affairs		19/06/2001
		PSE RAPKAY Bernhard	
	JURI Legal Affairs and Internal Market		10/07/2001
		ELDR BEYSEN Ward	
Council of the European Union	Council configuration	Meeting	Date
	General Affairs	2518	16/06/2003
	Transport, Telecommunications and Energy	2465	25/11/2002
	Industry	2433	06/06/2002
	Energy	2347	14/05/2001
European Commission	Commission DG	Commissioner	
	Energy and Transport		

Key events			
13/03/2001	Legislative proposal published	COM(2001)0125	Summary

14/05/2001	Debate in Council	2347	Summary
14/05/2001	Committee referral announced in Parliament, 1st reading		
26/02/2002	Vote in committee, 1st reading		Summary
26/02/2002	Committee report tabled for plenary, 1st reading	A5-0074/2002	
12/03/2002	Debate in Parliament		
13/03/2002	Decision by Parliament, 1st reading	T5-0107/2002	Summary
06/06/2002	Debate in Council	2433	Summary
07/06/2002	Modified legislative proposal published	COM(2002)0304	Summary
03/02/2003	Council position published	15527/2/2002	Summary
13/02/2003	Committee referral announced in Parliament, 2nd reading		
24/04/2003	Vote in committee, 2nd reading		Summary
24/04/2003	Committee recommendation tabled for plenary, 2nd reading	A5-0134/2003	
02/06/2003	Debate in Parliament		
04/06/2003	Decision by Parliament, 2nd reading	T5-0244/2003	Summary
16/06/2003	Act approved by Council, 2nd reading		
26/06/2003	Final act signed		
26/06/2003	End of procedure in Parliament		
15/07/2003	Final act published in Official Journal		

Technical information

Procedure reference	2001/0078(COD)
Procedure type	COD - Ordinary legislative procedure (ex-codecision procedure)
Procedure subtype	Legislation
Legislative instrument	Regulation
	Repealed by 2007/0198(COD)
Legal basis	EC Treaty (after Amsterdam) EC 095
Stage reached in procedure	Procedure completed
Committee dossier	ITRE/5/16092

Documentation gateway

Legislative proposal		COM(2001)0125	13/03/2001	EC	Summary
Economic and Social Committee: opinion, report		CES1311/2001 OJ C 036 08.02.2002, p. 0010	17/10/2001	ESC	
Committee report tabled for plenary, 1st reading/single reading		A5-0074/2002	26/02/2002	EP	

Text adopted by Parliament, 1st reading/single reading	T5-0107/2002 OJ C 047 27.02.2003, p. 0089-0379 E	13/03/2002	EP	Summary
Modified legislative proposal	COM(2002)0304	07/06/2002	EC	Summary
Council statement on its position	05595/2003	24/01/2003	CSL	
Council position	15527/2/2002 OJ C 050 04.03.2003, p. 0001-0014 E	03/02/2003	CSL	Summary
Commission communication on Council's position	SEC(2003)0160	07/02/2003	EC	Summary
Committee recommendation tabled for plenary, 2nd reading	A5-0134/2003	24/04/2003	EP	
Text adopted by Parliament, 2nd reading	T5-0244/2003 OJ C 068 18.03.2004, p. 0148-0262 E	04/06/2003	EP	Summary
Commission opinion on Parliament's position at 2nd reading	COM(2003)0420	23/07/2003	EC	Summary
Follow-up document	COM(2004)0863	05/01/2005	EC	Summary
Follow-up document	COM(2007)0250	15/05/2007	EC	Summary
Follow-up document	COM(2008)0192	15/04/2008	EC	Summary
Follow-up document	SEC(2009)0642	06/05/2009	EC	Summary

Additional information

European Commission

[EUR-Lex](#)

Final act

[Regulation 2003/1228](#)

[OJ L 176 15.07.2003, p. 0001-0010](#) Summary

Energy: internal market in electricity, cross-border exchanges, access to network. 'Electricity Regulation'

PURPOSE: to present a Commission proposal for a Regulation of the European Parliament and of the Council, on conditions for access to the network for cross-border exchanges in electricity. **CONTENT:** the ultimate objective of the Electricity Directive is the creation of a real integrated single market, as opposed to a situation characterised by 15 more or less liberalised but largely national markets. This objective has not yet been achieved. It is true that cross-border trade - in terms of physical exchanges of electricity between countries - has been progressing over time and is currently equivalent to around 8% of total electricity production. However, this figure is still relatively modest when compared to other sectors of the economy. The Electricity Directive does not contain specific rules for cross-border transactions. However, this does not mean that this issue can be solved by relying exclusively on national measures. Against this background, the proposed Regulation includes the following provisions: - with regard to tariffication, provision for compensation payments to be received by transmission system operators hosting transit flows of electricity on their network, financed through contributions of those transmission system operators (TSOs) causing these transit flows; - harmonisation of charges for access to national systems; - principles regarding the allocation of available interconnection capacity; - guidelines detailing further relevant principles and methodologies with regard to tariffication and congestion management; - empowerment of the Commission with certain regulatory competencies. In conclusion, this draft Regulation is an important part of the Commission strategy to complete the internal electricity market. The financial implications of the Regulation for the Community budget would amount to around EUR 850 000 per year. In the year 2002, these financial needs would be made available under the Energy Framework Programme (ETAP programme). As regards subsequent years, a proposal for a new Energy Framework Programme, succeeding the current one which expires in 2002, will be made in 2001, in accordance with the work programme of the Commission for 2001. This new proposal will take into account the financial needs for the action in the coming years.?

Energy: internal market in electricity, cross-border exchanges, access to network. 'Electricity Regulation'

The Council held a debate on completing the internal markets for electricity and gas. The Presidency concluded the debate by noting the following : - there is broad consensus that the market opening concerning both gas and electricity should be actively pursued and accelerated. To this end, the Swedish Presidency, in consultation with the incoming Belgian and Spanish Presidencies, will take initiatives to find ways and means within the existing Council framework to accelerate this process and will come back with appropriate ideas to be presented to the Council; - quantitative measures related to market opening (such as thresholds) and qualitative aspects (such as unbundling, Third Party Access and regulators, potential socio-economic impact) are interdependent; - as always, when deciding on measures to be taken at Community level, the cost of the various options needs to be assessed; - the principle of unbundling meets general agreement, whereas its concrete modalities still have to be clarified; unbundling of the gas sector may not necessarily follow the same model/approach as for electricity; - non discriminatory third party access to the grid without transparent and published tariffs is not feasible; public service obligations need to be taken into account when defining the practical modalities of tariffication systems; - to ensure improved security of supply through further integration at Community level, infrastructure requirements need to be carefully assessed, with particular regard to the revised TEN programme; - benchmarking and monitoring are useful tools for ensuring a proper assessment of progress and follow-up, in particular with respect to public service obligations and security of supply and congestion management, which can be facilitated by increasing the transparency on available interconnection capacity; - a fully functioning integrated single market for gas and electricity cannot be achieved without efficient cross-border trade. Rules to that effect should be sought at an appropriate level, which are based on simplicity, non-discrimination, transparency and effective reflection of costs, allowing for proper allocation signals and ensuring adequate reciprocity; - when deciding on the most appropriate way to deal with trade (in electricity) with third countries proper consideration should be given to environmental aspects, reciprocity and legal implications; - although a legally binding regulatory framework is required to address several of the issues raised by the achievement of the internal market, the Florence and Madrid processes have demonstrated their usefulness and we expect them to continue to do so. ?

Energy: internal market in electricity, cross-border exchanges, access to network. 'Electricity Regulation'

The committee adopted the report by Peter MOMBUR (EPP-ED, D) amending the Commission proposal under the codecision procedure (1st reading). It wanted to ensure that the charges imposed on generators by the relevant system operators for access to the transmission system should be harmonised, in order to avoid distortions in cross-border trade in electricity. Furthermore, while agreeing with the Commission that exporters and importers should not be subject to special charges in addition to the general charge for access to national networks, the committee nevertheless felt that there needed to be exceptions in the case of congestion management. The committee was concerned to ensure that confidential company information obtained by national regulatory authorities and administrations was used purely in order to carry out the tasks set out in the Regulation and would not be transmitted further. MEPs also wanted to ensure coordination between the 15 national regulatory systems to ensure consistency at European level, and therefore called for the Council of European Energy Regulators (CEER) to submit an annual assessment report to Council and Parliament on those national systems. The CEER could also help, where so requested, in the amicable settlement of any cross-border dispute. Lastly, MEPs proposed a series of amendments relating to the advisory committee, which it wanted to be based on the model of the independent advisory group (the "Committee of European Securities Regulators") established by the Commission in the financial services industry. ?

Energy: internal market in electricity, cross-border exchanges, access to network. 'Electricity Regulation'

The European Parliament adopted the report by Mr Peter Michael MOMBUR (EPP-ED, D) on the conditions for access to the network for cross-border exchanges of energy. In order to avoid distortions in cross-border trade in electricity, the charges imposed on generators by the relevant system operators for access to the transmission system should be harmonised. The charges for access to the networks should be neither distance-related nor transaction-based. It would not be appropriate to apply a specific tariff to be paid only by exporters or importers in addition to the general charge for access to the national network. In order to avoid distortions in the cross-border trade in electricity, the charges imposed on generators by the relevant systems operators for access to the transmission system shall be harmonised. In addition, the Committee of European Energy Regulators shall have advisory status and act independently. The Commission shall monitor the implementation of this Regulation. It shall submit to the European Parliament and the Council no more than three years after the entry into force of this Regulation a report on the experience gained in the application of the regulation, to enable the European Parliament and the Council to examine whether provisions should be adopted for the further improvement of trading in electricity.?

Energy: internal market in electricity, cross-border exchanges, access to network. 'Electricity Regulation'

The Council held a policy debate on the key elements of the proposal for a Directive aimed at accelerating the liberalisation of the electricity and gas sectors. It was informed of progress on the proposal for a Regulation on conditions for access to the network for cross-border exchanges in electricity. Following the discussion, the Council asked the Permanent Representatives Committee to examine the proposed Directive further so that it could be adopted if possible by the end of the year. The discussion also covered the following issues: - protection of final customers and universal service; - legal separation between the different activities; - activities in regard to non-eligible customers prior to total market opening; - principles relating to market opening; - regulatory tasks.?

Energy: internal market in electricity, cross-border exchanges, access to network. 'Electricity Regulation'

The European Parliament agrees with the main elements of the Commission's proposal but has formulated a number of amendments. Out of

the 34 amendments adopted, the Commission has accepted 6 in the form proposed by the Parliament or with some redrafting. Two amendments were accepted in part. The remaining 16 were rejected. A large number of the changes made to the initial text to reflect developments in the Council are clarification of or additions to the wording of provisions, without changing their substance. More substantial changes are, however, the following: - in the initial Commission proposal the inter transmission system operator compensation mechanism (Article 3) was based on the concept of "transit flows" of electricity, whereas in the amended proposal the concept is "cross-border flows". Work undertaken in the context of the European Electricity Regulator Forum has demonstrated that this concept is likely to produce results that are more cost-reflective. - article 3 (2) provided for compensation payments to be made by exporting and/or importing transmission system operators. This has been changed to exporting and importing transmission system operators. - in Article 3(6) the description of the method to calculate "costs of transits" (now: costs of cross-border flows, see above) has been further detailed. This changes reflects the outcome of the 8th European Electricity Regulatory Forum. - in Article 4(4) it is now stated clearly that export/import tariffs are excluded, provided that appropriate and efficient locational signals are in place. In the initial proposal the concept of locational signals formed already part of the provision, through a reference to paragraph 2 of Article 4. The substance of the two Articles dealing with Comitology Committees (Articles 12 and 13) has remained unchanged. However, the two Articles have merged into one Article 12. Among the amendments accepted in part or in principle by the Commission, these: - concern the recital stating that there should be no specific network access charges on exporters and importers and suggests some clearer wording; - concern the treatment of so-called "merchant interconnectors" in the Regulation; - setting up a Committee of European Energy Regulators, which would have an advisory status and would have respective advisory competencies; - this amendment suggests a monitoring and reporting requirement for the Commission and can be accepted in substance. Finally, the Commission rejects the amendments relating to: - the amendments seeking to take out all references to "national regulatory authorities" in the Regulation, suggesting to chose a more neutral terminology, such as "competent authority"; - the exemption of embedded generation, i.e. generation directly connected to the distribution network, from certain network charges under national tariffication systems; - allowing operators of interconnectors to use rents resulting from the allocation of interconnector capacities to compensate market operators for capacity curtailments; - the amendment that suggests that the regulatory committee procedure foreseen in the Regulation would be applicable only for four years and that after this period the issue would be reconsidered by Parliament and Council, on the basis of a Commission proposal; - the amendment suggests linking the entry into force of the Regulation to the entry into force of the directive amending the existing gas and electricity directives.?

Energy: internal market in electricity, cross-border exchanges, access to network. 'Electricity Regulation'

All amendments of the European Parliament accepted by the Commission in its amended proposal are included in the common position. The main changes made by the Council are as follows: 1) Recitals : the Council added two recitals, one on the importance of third countries complying with the rules of the Regulation, the other outlining the basic principle of locational signals; 2) Subject-matter and scope : the Council has slightly changed the description of the subject and scope of the text. This Regulation shall apply to cross-border flows of electricity (instead of transit flows). This definition applies to physical flows on a transmission network of a member State resulting from the impact of the activity of generators and/or consumers outside of that Member State on its transmission network. The Council also adds that the specificities of national and regional markets shall be taken into account; 3) Definitions : the common position brings more precision to the definitions, without changing their substance, and includes a few further definitions in order to bring greater clarity to the text. Furthermore, it has complemented the definition of "cross-border-flows" by adding the possibility of an exemption to be applicable in case the transmission networks of two or more Member States form part of a single control block; 4) Compensation mechanism : the Council considered necessary to provide for payments to be made by both exporting and importing TSOs. The common position stipulates that compensations for cross-border flows, which transmission system operators will receive, shall be calculated on the basis of the costs of the infrastructure "used" for cross-border flows. The Commission had proposed "build" for cross-border flows; 5) Charges for access to networks : access charges shall be transparent and reflect the costs incurred in so far as corresponding to an efficient and structurally comparable network which notably reflect amendment made by the European Parliament. The provisions of this Article are not substantially changed, except for some useful clarification with regard to the provision of locational signals by network access charges. In particular, the text makes it clear that, firstly, the Regulation only deals with signals "at the European level" and, secondly, the principle of locational signals shall not prevent Member States from applying charges on consumers which are identical throughout the country; 6) Principles of congestion management : - curtailment procedures have to be applied in a non-discriminatory manner; - market participants must inform the relevant TSOs a reasonable time ahead of the operational period whether they intend to use allocated capacity and allocated capacity not used shall be reattributed to the market in an open, transparent and non-discriminatory manner; - transactions that relieve the congestion shall be taken under due consideration of security of supply. 7) New interconnectors : in order to facilitate new infrastructure investments, the Council made clear, by analogy with the relevant provisions of the common position on the (new) Gas Directive (see COD/2001/0077A), that the new direct current interconnectors may, under certain strict conditions, be granted exemptions from Article 6, paragraph 6, from the requirements of third party access and the fixing of tariffs/methodologies by regulatory authorities. The provision also strengthens the Commission's role in vetting Member States' decisions on exemptions. The restrictive way of interpreting these provisions is confirmed by a Commission statement; 8) Guidelines : - details of methodologies have to be set as regards the quantity of cross-border flows hosted and the designation of the amounts of such flows; - details of the treatment in the context of the inter-TSO compensation mechanism of electricity flows originating or ending in countries outside the EEA have to be set; - they shall make provision for appropriate and efficient harmonised locational signals at European level. 9) Provision of information and confidentiality : the only change in substance concerns the right of the Commission to seek necessary information directly from undertakings concerned: the Council felt that the Commission should have this right only in case the Member State concerned, or its regulatory authority, fails to provide the information in a time limit fixed by the Commission. Furthermore, the Council limits the possible addressee of a request for information to "undertakings" only, whilst the Commission proposal included also "associations of undertakings" It should also be noted that : - the Council has clarified the role of Member States in the further development of the Regulation by retaining a regulatory procedure for the adoption and amendment of various guidelines, related to the mechanism of compensation between TSOs, capacity allocation, harmonisation of the principles for the setting of charges; - the Commission shall monitor closely the implementation of this Regulation, in particular as regards non-discriminatory and cost-reflective network access conditions and the putting into place of effective locational signals; - this Regulation shall apply from the same date as the first stage of market opening provided for in the common position on the Gas and Electricity Directives, i.e. 1 July 2004.?

Energy: internal market in electricity, cross-border exchanges, access to network. 'Electricity

Regulation'

The Commission supports the common position of the Council, which was adopted unanimously. The main elements of the Commission proposal are retained in the common position. Furthermore, most changes introduced by the Council strengthen or clarify the Commission proposal, without changing its substance. All amendments of the European Parliament accepted by the Commission in its amended proposal are included in the common position. Of the amendment retained, there have been partial adjustments which, however, maintain in all cases the underlying objective of the European Parliament's revisions.?

Energy: internal market in electricity, cross-border exchanges, access to network. 'Electricity Regulation'

The committee adopted the report by Michael MOMBUR (EPP-ED, D) broadly approving the Council's common position under the 2nd reading of the codecision procedure, subject to a few amendments. These dealt with (1) the involvement of regulatory authorities in the development of rules and mechanisms for the completion of the internal electricity market and (2) cross-border control zones. For reasons of consistency, the committee also amended the wording of Article 6(1) dealing with congestion management and the relevant paragraph of the Guidelines set out in the Annex. ?

Energy: internal market in electricity, cross-border exchanges, access to network. 'Electricity Regulation'

The European Parliament passed a resolution based on the report by Michael MOMBUR (EPP-ED, Germany). Compromise amendments were agreed with the Council. These include: - with regard to cross-border flows, the regulatory authorities of the Member States concerned may decide which of the Member States concerned will be the one of whom the control block will be considered a part; - network congestion problems will preferably be solved with non-transaction based methods, that is, methods which do not involve a selection between the contracts of individual market participants.?

Energy: internal market in electricity, cross-border exchanges, access to network. 'Electricity Regulation'

PURPOSE : to set the rules for cross-border exchanges in electricity. COMMUNITY MEASURE : Regulation 1228/2003/EC of the European Parliament and of the Council on conditions for access to the network for cross-border exchanges in electricity. CONTENT : this Directive aims to enhance competition within the internal electricity market. This involves the establishment of a compensation mechanism for cross border flows of electricity and the setting of harmonised principles on cross-border transmission charges and the allocation of available capacities of interconnection between national transmission systems. This Regulation lays down basic principles with regard to tariffication and capacity allocation, whilst providing for the adoption of guidelines detailing further relevant principles and methodologies, in order to allow rapid adaptation to changed circumstances. The main points are as follows: - transmission system operators should be compensated for costs incurred as a result of hosting cross-border flows of electricity on their networks by the operators of the transmission systems from which cross-border flows originate and the systems where those flows end; - payments and receipts resulting from compensation between transmission system operators should be taken into account when setting national network tariffs; - charges for access to the network must be transparent and reflect actual costs incurred and be applied in a non-discriminatory manner. The charges must not be distance-related; - the precondition for effective competition in the internal market is non- discriminatory and transparent charges for network use including interconnecting lines in the transmission system. The available capacities of these lines must be set at the maximum levels consistent with the safety standards of secure network operation; - it is important to avoid distortion of competition resulting from different safety, operational and planning standards used by transmission system operators in Member States. Moreover, there must be transparency for market participants concerning available transfer capacities and the security, planning and operational standards that affect the available transfer capacities; - there are rules on the use of revenues flowing from congestion-management procedures, unless the specific nature of the interconnector concerned justifies an exemption from these rules; - methods to deal with congestion problems must provide correct economic signals to transmission system operators and market participants and be based on market mechanisms; - decisions and guidelines on tariffication and capacity allocation will be made by the Commission with the involvement of Member States' regulatory authorities. ENTRY INTO FORCE : 04/08/03. DATE APPLICABLE : 01/07/04.?

Energy: internal market in electricity, cross-border exchanges, access to network. 'Electricity Regulation'

The Commission states that it can accept all four of the Parliament's amendments since they provide helpful clarification to the text and leave the substance basically intact. The Council on 16 June 2003 adopted by unanimity all four of the amendments voted by Parliament.?

Energy: internal market in electricity, cross-border exchanges, access to network. 'Electricity Regulation'

In presenting this report the Commission is fulfilling Article 14 of Regulation (EC) No1228/2003 to publish a report on the application of the Regulation. To recall, the Regulation's aim is to set fair rules for cross-border exchanges in electricity in a bid to enhance competition within

the internal electricity market. In order to achieve this objective the Regulation establishes a compensation mechanism for cross-border flows of electricity, it sets harmonised principles on transmission charges and it establishes rules on the allocation of available capacities of interconnections between national transmission systems.

The development of cross-border trade volumes: Cross-border electricity flows in Europe have increased modestly year on year since market opening. On average, only 10% of electricity consumed in the EU crosses Member States' borders. Analysis indicates that there is scope for further integration of the regions towards a European market. Such a move will lead to a higher price convergence between regions with similar generation mixes and to a better use of arbitrage possibilities between regions with different generation mixes. Overall cross-border trade opportunities are far from being fully utilised.

Development of cross-border trading methods: New guidelines have split the EU into seven regions plus South East Europe. The guidelines oblige transmission system operators (TSOs) to operate a common co-ordinated capacity calculation and allocation system. A lot of effort is still needed in order to implement new arrangements, including those set out in the amended congestion management guidelines. Some progress has been made in developing access to intra-day cross-border trade. Both national regulators and the Commission will monitor closely implementation of the amended congestion management guidelines. The report also points out that the Commission is prepared to start infringement procedures in cases of non-compliance of the new guidelines.

Inter-TSO compensation mechanism: Progress on the inter-TSO compensation mechanism has been made on a voluntary basis through the Florence forum process with the first voluntary agreement being concluded in March 2002. The voluntary agreement between TSOs is based on a simplified method based on the reality of cross-border flows. The European Regulators' Group for Electricity and Gas (ERGEG) has worked on guidelines on ITC to be adopted by the Commission. However, by the end of 2006 no agreed method has been approved. The Commission is still considering whether the work of the ERGEG provides a sufficient basis to adopt guidelines with the assistance of the electricity cross-border committee.

Network access tariff harmonisation: Network tariffs for accessing the transmission network vary enormously. The average network tariff for a load connected to the transmission network (the L-charge) ranges from ca. 2/MWh (in Sweden) to ca. 27/MWh (Denmark East). Several factors explain these differences. In addition to differing infrastructure costs, these tariffs may or may not include losses, location signals, system services or charges not directly related to TSO activities. These other charges are mostly related to public service obligations such as support to renewable energy sources and combined head and power as well as stranded costs. Further tariff harmonisation is needed in order to have a better level playing field for the electricity market and it is one of the main issues addressed by Regulation 1228/2003. The draft guideline on transmission tariffs seeks to gradually diminish the spread of the G-charge. This is because the G-charge is more important regarding the level playing field than the L-charge.

Congestion: Congestion patterns have become more volatile, even if there is no uniform method to collect and publish data on the appearance of congestion. In the past the flows, often dominated by long-term contracts, remained relatively stable. Increased volatility can be seen as a sign of a better functioning market leading to increased trade in both direction over the interconnections. According to the Regulation, congestion revenues can only be used for guaranteeing capacity, building infrastructure or lowering the network tariff. Unfortunately, lowering the tariff has been the most common use of congestion revenues. Only in some cases have network investments been preferred as in the Nordic countries and the Netherlands.

Access to cross-border electricity to end users: Borders between countries and control areas continue to act as important obstacles to true market integration. To address this problem a medium term target has been set the aim of which is to foster regional harmonisation of the market and to ensure that any new infrastructures is built in such a way as to ensure that market participants will be less hindered by borders than they are today. One example of an integrated, wholesale market is Germany and Austria.

Security of supply: The first year in which the Regulation entered into force, namely 2003, proved to be a difficult year for the security of the electricity supply. Italy suffered a major black-out in September 2003 due to problems in the inter-connection lines with Switzerland caused by a failure to limit the spread of the fault. A major black-out also occurred in Sweden and eastern Denmark. Less far-reaching blackouts occurred in 2003 in London and in Helsinki. The most recent black-out (November 2006) affected the whole Union for the Co-ordination for the Transmission of Electricity (UCTE) synchronous area. The incident originated in northern Germany but led to the splitting of the UCTE area into three parts and to approximately 10% of load shedding in the western area in order to preserve the integrity of the transmission networks. A recent ETSO report on generation adequacy indicates that there is no major concern for most of the European network until 2012. After 2012, the situation might become critical if investments are too slow.

Conclusions: The report concludes by noting that there has been a steady but modest increase in cross-border flows. The main driver for this increase is the possibility to trade between price areas with price differentials. The capacity calculation and allocation methods have developed, with possible further improvement to come as a result of the amended guidelines for congestion management as adopted in November 2006. However, there are signs that the transmission network sometimes operates close to its physical limits. The blackout in Italy in 2003 and in UCTE in 2006 showed how costly any incident in the European-wide transmission network can be.

The European market is increasingly based on a regional concept. This first developed naturally, following the physical realities of the network. With the establishment of the regions in the amended congestion management guidelines and with the development of the Electricity Regional Initiatives by ERGEG, the regional approach has received an official status. The regional approach should be viewed as a pragmatic tool to achieve an overall European market. There is no major reason why the implementation of the electricity market should vary a lot between the regions.

On a final point the Commission lists seven of issues that need to be addressed in future:

- 1) Security and reliability rules: rules between the TSOs to ensure the safe operation of the grid.
- 2) Connection rules: governing the relationship between the TSOs and the customers (generators, distribution system operators and big end-customers).
- 3) Rules for trading electricity: harmonisation of trading arrangements, timetables and products, including intra-day trade.
- 4) Transparency rules: detailed rules on data exchange and publication between market participants. Transparency rules are already addressed in the amended congestion management guidelines.
- 5) Balancing and reserve power rules: the aim of which is to seek further integration of the balancing and reserve power markets.
- 6) Data exchange and settlement rules: the aim of which is to seek further integration of the retail market through sufficiently

harmonised data exchange and settlement rules.

- 7) Investment incentive rules including location signals: providing a European framework for efficient investment signals for both generation and network investments.

The need for and the level of detail of these rules is still to be discussed and further studies are needed in order to provide the necessary input. However, it has become evident that further integration of the internal market needs a coherent set of rules. Many of these rules already exist ? but on a national basis or a company basis, with a differing oversight by national regulators. The incompatibility of these rules may be one of the biggest obstacles to market integration.