



**UCTE Comments on  
The Creation of Regional Electricity Markets  
An ERGEG Discussion Paper for Public Consultation (8 June 2005)**

**28 July 2005**

**1.9:** The statement that a common wholesale price area has developed in relation to Austria and some parts of France and Germany is not entirely correct. The German Electricity market forms one single price area. Therefore, only the entire German market can be part of a supra-national market area (as this is the case with Austria) but not single parts of it. In terms of consumption and traded volume, the German market consisting of four TSOs and one independent power exchange constitutes to date the largest existing European region as defined in this document.

**2.1.** As described in the ERGEG paper the fact that there are numerous TSOs across Europe requires effective interaction and communication processes which are continuously enhanced but still need to be improved. There are, however, significant benefits resulting from the existence of several TSOs across Europe. The most significant advantage is that each grid forms one independent system and therefore a security cell which can back up other electrical systems in emergency situations leading to a higher overall degree of security. This is the fundamental principle of the European interconnected electricity system which should be recognized in the ERGEG Report.

**2.2.** Live network operation: Of course the precise way of operating a network may differ. However, it should be not forgotten that TSOs of one synchronous interconnected network created a common basis of how to operate their grid. For that reason, the last sentence should be amended in a way that activities such as the UCTE Operation Handbook and similar documents of NORDEL, UKTSOA, ATSOI and the Baltic states are taken into account. The aspect of a TSO acting as market facilitator is omitted and should be mentioned. *Network planning:* TSOs are responsible to develop the network for future requirements coming from the market. Moreover, guaranteeing the system security for the IEM is a high-priority task of each TSO.

**2.4.** Article 10 of the Directive 2003/54/EC sets out unbundling principles which are overseen by national Regulators and guarantee the independence and objectivity of TSOs. Therefore, even though the question of how information is managed by TSOs is fundamental to the IEM it is not of essential relevance whether or not TSOs have market related affiliations as long as information handling is non-discriminatory.

**2.7.** The part of the sentence “that the network does not become gold plated and” should be deleted – it sounds like an insinuation.

**2.10** It must not be omitted that the present UCTE concept is based on TSOs as security cells, being able to fulfil independently all requirements on system security one by one. Relying on cross-border interconnection could be contradictory to this philosophy and jeopardise the pre-

sent high level of system security. Recent blackouts have proven the danger of depending too strongly on cross border exchange, albeit in a slightly different context.

**2.18.** Market based rates of return should not only be allowed in case of merchant investments but for all transmission assets. Acquiring capital is essential to TSOs in order to finance their grid infrastructure investments. Therefore, they have to be in the position to offer a competitive rate of return to those who give capital to TSOs.

**2.24.** The requirement that TSOs should be incentivised to maximise interconnector capacities is not compliant with the EC Regulation 1228/2003. In Article 6 the Regulation sets out three possible uses for congestion management income none of which is aimed at incentivising TSOs (e.g. by awarding additional profit for increasing interconnector capacity).

**2.25** It should be mentioned that as part of TRM TSOs must retain a part of the transmission capacity for reasons of system security. Therefore, the maximisation of ATC for the market is limited by an absolutely necessary part of TRM.

**2.31.** The ERGEG paper states that the existence of locationally different grid charges in one market could lead to a competitive advantage (or disadvantage) of market participants in adjacent markets. This, however, is only true in absence of congestions managed by market based approaches between the two areas. Whenever market based congestion management is applied the competitive advantage (or disadvantage) is neutralized as producers in low price areas face high congestion management fees for exporting their electricity (this is only true for explicit auctions – with implicit auctions producers get their regional price and do not have competitive advantages compared to other regions, either).

**2.36:** This description of the constant balancing between generation and loads should be made more carefully. Currently, it describes certain aspects correctly - albeit briefly - but omits or misrepresents others. We suggest adding the following text at the end of the paragraph:

"In the UCTE area, the Operating Handbook sets down detailed standards for the international sharing of the balancing responsibilities. The above mentioned automatic frequency response at the generator's governor is called primary control. Secondary control acts automatically as well, in that a computer in the control centre is electronically connected to a number of fast response units and automatically adjusts their output up and down following a formula including deviations in frequency and in the sum of all the control area's exchange programs from their respective pre-defined values. The amount of capacity of secondary control follows formulas recommended by UCTE that are sufficient to even out load fluctuations. Capacity on tertiary control is activated (up or down) by manual intervention of the dispatchers. The sum of capacity on secondary and tertiary control must be sufficient to reduce differences in the exchange schedules following a major generating unit outage to zero within 15 minutes. After those 15 minutes, the control area itself must be in balance; within those 15 minutes, all of UCTE shares their reserve capacities on primary and secondary control in order to cover the mismatches. This helps reduce the reserve capacities needed overall, and the costs of balancing services. In that sense, the heart of the UCTE rules, i.e. the control rules, already provide for very well organised international "trade" of balancing services across the continent and beyond."

**2.38:** In Germany as well.

**2.39:** Such comparisons must be made with utmost caution. Storage hydro-dominated systems tend to be able to provide balancing services for significantly lower costs than thermal systems or even those with highly fluctuating wind power generation. Also one should define carefully which services are borne by the system operator and charged to all network users, vs. which costs are borne by the individual network user that causes a mismatch between demand and supply.

In order to make clear how the figures (shares of balancing costs) have been calculated it would be appreciated to give more details and particularly sources for the calculation.

**2.40:** As described under 2.36, TSOs in the UCTE area co-operate already very successfully in their balancing responsibilities. This leads to a certain amount of transmission capacity that needs to be reserved for the automatic international flows that follow a large generation unit outage. Purchasing tertiary reserves outside one's own control area is possible in principle, but if done, it undermines the continent-wide control strategy of UCTE, making the system significantly less robust, and it also requires even higher reservations of tie line capacities, removing them from the market.

**2.43:** Explicit auctions should also be mentioned as a well-proven, easy-to-implement and market-based instrument of congestion management legitimized by Regulation 1228/2003 and recognized in the same manner as implicit auctions during mini-fora.

2.43 lacks a clear differentiation between

- preventive congestion management such as implicit and explicit auctions as only accepted market based methods by the Regulation
- and curative congestion management such as redispatch or constraining off users.

Curative congestion management should be largely avoided by proper preventive measures.

**2.44:** Again, such comparisons should be made with utmost caution. The potential for congestions depend on the variety of exogenous factors such as network topology and the average distance between generation and load centres. Also, some congestion costs are paid by the traders (explicitly or implicitly), others are borne by all network users. Additionally, it would be appreciated to indicate a source of several figures.

**2.48:** If there was an allocation for non-firm transmission rights, the price would therefore end up lower than for firm rights. Given that result of the market, non-firm rights might be less convenient for traders to evaluate and to handle, but they are nonetheless market-oriented.

**2.49:** Numerous issues must be considered by a TSO when designing an allocation method for a particular congestion. Among them are the technical possibility and ease of defining the transactions subject to the allocation. Control area to control area transactions are particularly easy to define technically since such transactions must be registered with the TSO in any case - without the TSO including each transaction in their exchange programs, no net power flows can exist between control areas. Defining a smaller congested area out of which, into which or through which flows need to be allocated is usually much harder or may be impossible without significant investment in metering equipment and very complex schedule registration procedures. Also the relative sizes of the market areas need to be taken into consideration. Therefore one must be very careful not to jump to conclusions about the precise definitions of congestion. Furthermore: TSOs permanently observe their grids and operate them as efficiently as possible without jeopardizing operational security. If congestions inside their control areas limit the inter-connection capacity, it must be only to the extent that is justifiable from the technical viewpoint and for reasons of operational security. Due to the strong public opposition against new overhead lines (there is no difference if internal or cross-border lines) it is always very difficult to solve congestions in the short run. Therefore we recommend to ERGEG to follow the process of granting licences for new overhead lines in Member States in order to better understand how the real practice is. Until the realization of new overhead lines is completed congestion management procedures have to keep in action.

Offering unlimited (or e.g. the thermal) transmission capacity at borders would inevitably lead to curative measures within a TSO that would have to be paid by national users. Thus, national users would be discriminated against the international use of the grid.

**2.57:** This shows how well the TSOs themselves, co-operating in UCTE, NORDEL, UKTSOA and ATSOI, manage technical interactions.

UCTE Operation Handbook includes among others a chapter on emergency procedures as system security is the core business of TSOs and their association. Therefore a regulatory oversight over technical aspects is not necessary and would cause additional bureaucracy. In this light regulation should be limited on its core business: watching on non-discrimination and incorporating investment and operation costs into tariffs.

**2.58:** The signature process for the Multi-Lateral Agreement has been completed so that the para needs to be updated.

**2.59:** Additional frameworks such as those mentioned in the four last lines are not needed. Technical rules for the secure operation of a network are driven by the physical grid characteristics and may vary between different synchronous zones. Those rules cannot be limited to certain regional markets if those regional markets are part of the same synchronous area.

**2.64:** That TSOs should treat information non-discriminatorily is indeed important. But whether or not a certain piece of information should be public, is a rather complex question, especially where explicit or implicit auctions are concerned. The potential for gaming by market participants should be minimised, and often this can imply publishing less information, or publishing it later. The insinuation that TSOs will be mistrusted if they do not give complete information to the market seems to draw the discussion away from objective considerations of pros and cons and into a mud-slinging battle of emotions. It should be omitted.

**2.65:** Similar insinuations that should be omitted.

**3.3:** As mentioned in 3.1 the size of the overall market may be a factor for the market design decision. In this context it would be beneficial to include the largest market and its design into the discussion than to limit the discussion to so many examples of small markets only. The German market serves as a good example for a four-TSO-market with liquid OTC trade and an independent, non-statal and not-TSO-owned power exchange where trade is not mandatory such as in some pool systems or in the case of cross-border trade by implicit auctions only.

**3.5:** Pool arrangements should not be described in detail, and certainly not mentioned first, since the UK experience with the England/Wales Pool has been bad enough to dramatically alter the system.

**3.7:** Contracts only need to be registered with the TSO beforehand when they cross control area boundaries - in such cases registering them is necessary for any energy to flow. Contracts within a control area can be registered after-the-fact and do not affect energy flows but only accounting.

**3.11:** Those are some good reasons why mandatory pools are discredited. The Nordpool monopoly on cross-border flows must also be viewed with caution in this context. Further to the above, explicit auctions could be added to Figure 1 as they facilitate e.g. bilateral day-ahead and long term trades across borders.

**3.14:** The list of market imperfections should be amended as market power and subsidies of all kind are only two of further more. It has to be considered that taxes on certain energy sources will distort fundamental energy prices. Furthermore, the price of CO2 allowances will affect the order of energy supply coming from different sources.

**3.16:** In general it is preferable to assign the costs to those that cause the imbalances. However, this objective must be balanced against transaction costs that can become unreasonably high. The last two sentences in 3.16 are very hard to follow and should either be omitted or explained more clearly.

**3.17:** We support price signals that incentivise users to stay in balance.

**3.18:** Power exchanges on one hand and over-the-counter markets on the other hand complement each other well. Power exchanges usually provide much information and thus transparency to all market players. Therefore much less information is needed about over-the-counter prices and volumes. In any case the impact of any information on the market has to be assessed carefully before publication requirements are imposed (see also 2.64 above).

**3.19:** This does not seem well-reasoned given out point made with respect to 3.18. 3.19 could be omitted altogether.

**3.20/21:** The transparency and independence of TSOs required under Regulation 1228/2003 and Directive 2003/54/EC is sufficient; none more is needed; see 2.4 and 3.18 above.

**3.29:** Unequal market opening is a much much bigger distortion than any of the other issues addressed in this paper. It would suit the EU well to emphasize this much more, and much earlier in the document (see also 5.7).

**5.6:** Concerns about market affiliations of TSOs are alleviated by the unbundling principles of the Directive 2003/54/EC (see 2.4 above).

**5.7, end of 4th bullet:** Effective trade will be inhibited by unequal market opening, this is the biggest obstacle of all (see also 3.29)!

**5.8:** This reasoning for yet another level of regulation is not convincing. Regulatory co-operation across borders seems indeed needed, but must not be institutionalised by additional legislation; otherwise it could easily become an obstacle in itself on the road to EU-wide integration of the markets.

**5.9:** We are not aware of any cross-border interconnection investments that were delayed in the described way. The entire paragraph should be omitted.

**5.10/11:** An institutionalisation of regional co-operation between regulators might cause excessive administrative expenses which should be assessed against the potential benefits. Alternatively, a less formal process – as currently in place with the different mini-fora- could be pursued.

**5.14:** The difference of the regional market concept on the one hand compared to the present European situation and the focus on the overall integration with the same speed (level playing field) on the other should be worked out explaining the advantages of the regional market approach.

**6.4:** The enhancement of interconnections between EU-countries is generally essential for the creation of a single IEM. Nevertheless, any interconnector construction should be justified from an economic and technical point of view because not every new interconnector supports system stability and has to be economically beneficial for a TSO and all grid users under the framework of decreasing asset costs (stranded investment in the middle and long run). This could be amended to 6.4.

**6.5:** Efficient investment should be explained and emphasized more - given the long economic life of an interconnector, short-lived market conditions may not be enough reason for construction. There has indeed been a well-proven regulatory framework for cross-border lines: In general, each TSO and each regulator is responsible for the portion up to the border. Whether anything else is needed is open to discussion.

**6.7:** We support developments in the ITC mechanism that lead to proper allocation of the costs to those who cause them.

**6.8:** Under the current legislative framework TSOs cannot be incentivised to maximise interconnector capacity (see 2.24 above).

6.9: EU-guideline on congestion manager (- a body?)? Better: «management»

**6.11/12:** The impact of any information on the market and confidentiality provisions have to be assessed carefully before publication requirements are imposed (see also 3.18 and 2.64 above).

**6.13:** Information should be placed in the public domain where that is useful (it is almost always possible but often not at all needed or useful or optimal). Concerns about market affiliations of TSOs are alleviated by the unbundling principles of the Directive 2003/54/EC (see 2.4 and 5.6).

**6.16/21/27/28:** We do not find a regional regulatory framework needed or useful; we consider it dangerous on the road to EU-wide integration. Why concentrate on more layers of regulation on cross-border trade - which is already very well developed - and never even try to address the other important issues mentioned in 6.28?