

GUIDELINES ON CONGESTION MANAGEMENT

18. July 2005¹

EXPLANATORY NOTE

1. INTRODUCTION

The Regulation provides in Article 8(4) for the Commission to “... *amend the guidelines on the management and allocation of available transfer capacity of interconnections between national systems set out in the Annex, in accordance with the principles set out in Articles 5 and 6, in particular so as to include detailed guidelines on all capacity allocation methodologies applied in practice and to ensure that congestion management mechanisms evolve in a manner compatible with the objectives of the internal market.* ...”

Article 8(4) states further that “... *where appropriate, in the course of such amendments common rules on minimum safety and operational standards for the use and operation of the network, as referred to in Article 5(2) shall be set. ...*”

The attached draft guidelines therefore propose such an amendment for the management and allocation of interconnection capacity, i.e. the Congestion Management Guidelines. They are based on the following principles arising from the Regulation:

- i. economic efficiency and promotion of competition,
- ii. maximization of capacity available and the use made of it,
- iii. transparency to network users on a non-discriminatory basis,
- iv. secure network operation²,

¹ For the background information, refer to the document: “Discussion Paper: Global Assessment of the Results of the 1st Series of Mini Fora on Congestion Management and Potential Impacts on the Draft Guidelines, approved by ERGEG Board on 02.March 2005” and “ERGEG Public Consultation on Congestion Management Guidelines – Evaluation of the Comments Received, 18 July 2005”, www.ergreg-org

² Secure network operation is characterised by the normal operational state where the operational security criteria (e.g. (N-1) criterion) and constraints (e.g. limitations of frequency, voltage, etc.) are met.

- v. largely revenue neutral mechanisms from the point of view of system operators.

Security and reliability rules will be proposed in separate guidelines.

The Guidelines refer to all congestions as defined by the Regulation, that limit cross border trade.

It is important that national Regulators endeavour to apply the same principles on the non-EU borders respecting the principle of reciprocity, towards the third countries, that form part of the European electric power system.

An interconnection is considered congested when the sum of demand for capacity including the forecasts for physical electric power flows resulting from transactions accepted by the TSOs at a specific allocation timeframe exceeds the capacity available at that interconnection.

Where and when there is no congestion, there shall in general be no restriction of access to the interconnection and no specific procedure for access to transmission service. The information and statement that there is no congestion shall be published and made available to all users. This is particularly important in order to avoid additional costs that would not benefit either the market or any user. Nevertheless, even where there is no congestion, the TSOs must comply with all rules and requirements on information transparency and eventually also perform case studies if a congestion is expected. The final decision on how to proceed and on the actual approach to be followed by the TSOs – i.e. if there are any “preventive” measures needed – must be approved by the responsible Regulators.

The Guidelines define the basic requirements for coordinated congestion management, that is congestion management with a wider scope than a single, bilateral congestion of interconnection capacity between two Member States (TSOs). Nevertheless, the Guidelines do not specify the details of operational procedures to be applied for coordinated congestion management. Therefore, only the basic definitions of key concepts are necessary and these are provided below.

1.1 Structural Congestions

In the context of these Guidelines, structural congestions are those congestions – either at the interconnection between Member States (TSOs) or internal to a Member State (TSO) – that frequently limit the cross-border electricity exchange. Frequent or even systematic congestions within a Member State (TSO), which do not significantly limit cross-border flows, are not considered as structural congestions in these Guidelines. Structural congestions may involve one or more transmission lines³.

³ A simple structural congestion between two Member States (TSOs) would involve one or several interconnection tie-lines that need to be handled in a common manner for congestion management. A more complex structural congestion between several Member States (TSOs) would involve one or several tie-lines on several interconnections that need to be handled in a common manner for congestion management including calculation of capacity, nomination, allocation and operational issues.

1.2 Intermittent Congestions

In the context of these Guidelines, intermittent congestions are sporadic congestions – either at the interconnection between Member States (TSOs) or internal to a Member State (TSO) – that may occasionally limit the cross-border electricity exchange. Intermittent congestions can be solved by the TSOs concerned without permanently and significantly constraining cross-border electricity exchange. Intermittent congestions require the establishment of allocation procedures for the pricing of capacity. Where there is no congestion, prices will fall to zero.

2. ECONOMIC EFFICIENCY AND THE PROMOTION OF COMPETITION

In relation to economic efficiency, the Regulation states in Article 6(1) that: “... *Network congestion problems shall be addressed with non-discriminatory market based solutions which give efficient economic signals to the market participants and transmission system operators involved. ...*”.

The main consequence of this Article is that congestion management mechanisms must include a mechanism whereby potential network users reveal the value they place on gaining access to the part of the network in question. This implies some form of allocation procedure whereby network users must bid for the available capacity in some way, whether directly or indirectly.

Economic efficiency is more likely to be delivered where capacity is used by those who value the capacity the most.

However this simple result is dependent on a number of assumptions relating, in particular, to the market structure of the industry. Since in reality the European market is characterized by instances of market dominance in certain Member States or regions, there is a clear case that the congestion management methods should be designed in such a way that this is taken into account in order to promote the economic efficiency of the electricity market. Accordingly, congestion management methods should not hinder market contestability, should not inhibit the entry of any player, including end users, and should neither facilitate nor consolidate the abuse of any market power.

In addition, in the interests of efficiency in a general sense, the adopted method for congestion management should not result in undue transaction costs to market participants or TSOs.

Finally, in the interests of promoting competition and allowing for a range of different contract structures, any differences in the way different transactions are treated, for example short term trading between organised markets or longer term bilateral contracts, should be permitted only when they are shown not to distort or hinder the development of competition. While it is important to encourage financial markets, it is necessary to ensure that there is a balance between short term capacity allocation (for example for the day ahead market) and the longer term capacity allocation (for example yearly and monthly auctions) where these financial markets are yet to develop.

3. RULES ON MAXIMISING THE AVAILABLE CAPACITY AND CAPACITY USE

Article 6 (3,4,5) of the Regulation specifies the requirements on maximizing the available capacity, information, return of the non-used capacity to the market and netting, referring also to network security.

The need to maximise the use made of available capacity is also interpreted in these guidelines to imply the facilitation by TSOs of integration of organised wholesale day ahead and intraday markets. This is ensured through an appropriate sequencing of allocation procedures and transfer of information.

This is considered particularly relevant where such market integration automatically allows for any un-used capacity to be transferred to other users. However the guidelines do not rule out other avenues to ensure that the use of available capacity is optimised.

4. TRANSPARENCY

The electricity market will not function correctly unless sufficient information is available on a non-discriminatory basis. Therefore, within the relevant legislative framework, Member States and Regulatory Authorities should pay special attention to the transparency of the wholesale markets in all areas affected by any congestion, which includes information on short term forecast and realised system load by market time unit and information on the installed generation capacity.

Article 5(3) of the Regulation includes the requirements relating to transparency. In particular *“... Transmission system operators shall publish estimates of available transfer capacity for each day, indicating any available transfer capacity already reserved. These publications shall be made at specified intervals before the day of transport and shall include, in any case, week-ahead and month-ahead estimates, as well as a quantitative indication of the expected reliability of the available capacity. ...”*

In addition, other information is also required to ensure that the interests of economic efficiency and the promotion of competition are fulfilled. Transparency is indeed a prerequisite for effectively competitive markets – a congestion management method complying with Regulation and Guidelines shall be able to deliver transparency accordingly. National Regulatory Authorities shall regularly evaluate the congestion management methods, with respect to compliance with the principles and rules established in the Electricity Regulation and Guidelines. The evaluation process shall include consultation with relevant parties and stakeholders and it shall pay special attention to the issue of transparency.

5. REVENUE NEUTRALITY

Article 6(6) of Regulation discusses the use to be made of any revenues collected as a result of congestion management mechanisms. Regulators are required to implement the requirements of Article 6(6) and should therefore ensure that revenues are accounted for in a transparent way.

The use of congestion revenues for investments in maintaining or increasing the interconnection capacity should preferably be assigned to specific predefined projects with a clear compromise to accomplish them in a reasonable time. In the case of TSOs belonging to a holding or owned by a state that owns other companies performing

liberalized activities at the same time, complying with this recommendation must be verified and approved by the responsible Regulatory Authority.

6. MERCHANT INTERCONNECTORS

In the case of interconnections operating on a merchant business model, the Regulator will decide on whether or not, on the base of transparent and non discriminatory criteria, an affiliate carrying out merchant line activities is sufficiently separated from any other market activities and from system operator activities according to the Article 7 (1) of Regulation. Concerning this, Regulators may wish to consider any market power issues while making that decision.

GUIDELINES ON CONGESTION MANAGEMENT

NOTE: UNLESS IT IS DIFFERENTLY SPECIFIED, THESE GUIDELINES APPLY TO CONGESTION MANAGEMENT ON ALL INTERCONNECTIONS, INCLUDING MERCHANT INTERCONNECTIONS.

GENERAL PROVISIONS

1. Regulatory powers of the Regulatory Authorities involved must be in line with the requirements on Regulators' duties in the Article 9 of the Regulation (EC) 1228/2003.
2. The regulatory powers referred to in 1 above must be made compatible within the given legal framework and transparently communicated to all the involved parties.
3. Cross-border exchange of information for the purpose of congestion management must be enabled, removing all unnecessary barriers and limitations, by all involved market participants, TSOs and Regulators.

1. EFFICIENT USE OF AVAILABLE TRANSMISSION CAPACITY

- 1.1. TSOs shall endeavour to accept all commercial transactions including those incurred by cross border trade without applying any transaction based distinction.
- 1.2. In case the scheduled commercial transactions are not compatible with secure network operation, the TSOs shall alleviate the congestion complying with the grid operational security while bearing in mind that any associated costs are at an economically efficient level, for example through curative redispatching or countertrading in case other lower cost measures cannot be applied.
- 1.3. The capacity allocation at an interconnection shall be coordinated and implemented using common allocation procedures by the TSOs involved. These common allocation procedures shall be described in detail by TSOs, approved by the responsible Regulators and the description made transparently available to all the users.
- 1.4. Coordination between TSOs shall at least include the secure operation of the grids and the optimisation of the allocations in view of the promotion of fair and efficient competition. This coordination shall take into account the best estimate for the forecast global grid situation with physical flows resulting from all transactions accepted by other TSOs.
- 1.5. Coordination shall also include the exchange of information. The nature, time and frequency of information exchange shall be compatible with the

functioning of the electricity markets. The information exchange shall in particular enable all TSOs affected by the physical electric power flows resulting from transactions accepted by other TSOs to forecast these flows and to take them into account in the assessment of available interconnection capacities.

- 1.6. The best estimate for forecast physical electric power flows, resulting from transactions accepted by other TSOs are best taken into account when at least a regional co-ordination between TSOs covers all the steps from capacity calculation to allocation and includes clear assignments of responsibility for the operation of the different parts of the network. There is a risk, that must be avoided in a cost-effective manner, to have a sub-optimal result for the physical electric power flows and therefore for competition among market participants, if each interconnection is treated only bilaterally between the two TSOs concerned without consideration of transactions and flows elsewhere.
- 1.7. Co-ordinated allocation procedures for allocation of capacity to the market at least yearly, monthly and day-ahead shall be applied at the latest from 1 January 2007 in the following areas:
 - Northern Europe (i.e. Denmark, Norway, Sweden, Finland, Germany, Poland),
 - North-Western Europe (i.e. Benelux, Germany, France),
 - Northern borders of Italy (i.e. Italy, France, Switzerland, Germany, Austria, Slovenia),
 - Central Eastern Europe (i.e. Germany, Poland, Czech Republic, Slovakia, Hungary, Austria and Slovenia),
 - South Western Europe (i.e. Spain, Portugal, France),
 - UK, Ireland and France,
 - Baltic states (i.e. Estonia, Latvia, Lithuania).

These areas are indicative, flexible and can be adapted if necessary for practical reasons (i.e. if market and congestion developments require the re-organization of some area(s) and their members) so that allocation procedures include all the interconnections considered optimal by all concerned TSOs and Regulatory Authorities. The possibility that one or more countries are confronted with incompatible sub-regional systems should be avoided.

Compatibility of the congestion management procedures among these seven areas shall be:

- (1) Foreseen in the overall concept and planned with a migration path for all areas from the outset - i.e. a "global" compatibility between all regions to form a truly integrated IEM must be envisaged. ERGEG will produce a report regarding compatibility issues once the regional approaches are in place.
- (2) In the meantime Regulators shall ensure that specific measures are taken, e.g. concerning timetables and gateclosures, to mitigate any

substantial restrictive impact of differences in congestion management between different areas.

- 1.8. TSOs shall optimise the extent to which capacity is firm – having regard to the obligations and rights of the TSOs involved and the obligations and rights of market parties – in order to facilitate effective and efficient competition.
- 1.9. The congestion management procedure to be followed by the TSOs and network users involved shall be coordinated so that it is carried out on a common timetable across the affected (regional or wider, EU) markets, in order to be most effective in line with Article 6(4,5).
- 1.10. Where organised wholesale electricity markets exist, special attention must be paid to non-discrimination regarding bilateral trade.
- 1.11. The financial consequences of failure to honour obligations associated with the allocation of capacity shall be attributed to those who are responsible for such a failure. Where market participants fail to use the capacity that they have committed to use, or in the case of explicitly auctioned capacity fail to trade on a secondary basis or give the capacity back in due time, they shall be exposed to the loss of rights on such capacity and a cost reflective charge. Any cost reflective charges for the non-use of capacity shall be justified and proportionate. Likewise if a TSO does not fulfil the obligation, it will be liable to compensate the market participant for the loss of capacity rights, always limited to the value of the given capacity right. No consequential losses shall be taken into account for this purpose. The method for the determination of this liability shall be set out in advance considering the financial consequences, and must be subject to approval by the relevant national Regulator or Regulators. The key concepts of liabilities that accrue upon failure to honour obligations shall be described in detail within the description of the actual congestion management method that will be made available transparently to all the users. All these concepts (together with the congestion management method) need to be approved by the involved Regulatory Authorities.
- 1.12. Efficient use of cross-border capacity entails that all unused and non allocated capacity will either be traded on a secondary basis or be made available for re-assignment and that the allocation procedure shall take into account different time horizons. Re-assignments can be made either by the owner of the capacity before the relevant nomination deadline, or by the TSO after the relevant nomination deadline. In order to allow the TSO to re-assign the unused capacity, market participants shall inform the TSO before the closing time of the day-ahead market whether they intend to use allocated capacity or not.
- 1.13. Whenever necessary, re-assignment of unused capacity shall also take into account problems relevant to the degree of competition, market structure and market power issues, including the obligation of netting the predicted flows.
- 1.14. When there is no congestion, there shall be no restriction of access to the interconnection. Where this is usually the case, there need to be no permanent general allocation procedure for access to transmission service. If congestion appears, the appropriate rules and arrangements as defined, agreed upon and implemented in advance shall be used immediately by the TSOs.

2. MECHANISMS FOR CONGESTION MANAGEMENT

2.1. A description of the congestion management methods to be applied under different circumstances together with the security standards shall be published by the TSOs.

- (1) Congestion management method must be market based, in order to facilitate efficient cross-border trade. For this purpose allocation of capacity shall be made only by explicit (capacity) or implicit (capacity and energy) auctions. Both methods can coexist on the same interconnection.
- (2) If congestion involves at least two interconnections, i.e. if transactions on one interconnection significantly affect the physical flows and/or possible transactions on other interconnections (this could occur for example in the areas defined in paragraph 1.7 of these Guidelines), the congestion management method must be coordinated. This means in particular compatibility and common approach for all the congested interconnections in terms of:
 - (a) Use of a transmission model dealing efficiently with interdependent physical loop-flows.
 - (b) Allocation of capacity
 - (c) Obligation on capacity holders to provide information on their intended use of the capacity, i.e. nomination of capacity (for explicit auctions)
 - (d) Timeframes and closing times
 - (e) Products in terms of allocation periods, duration of a specific product (e.g. 1 day, 3 hours, 1 week, etc.), amount of power in MW, MWh, etc.
 - (f) Consistent contractual framework with market participants

2.2. National Regulatory Authorities shall regularly evaluate the congestion management methods, paying particular attention to compliance with the principles and rules established in the Regulation and the Guidelines and terms and conditions set by Regulators themselves in compliance with the aforementioned principles and rules. Such evaluation should include consultation of all market players and dedicated studies.

2.3. In case of structural congestion, the congestion management methods shall ensure that the physical power flows associated with all allocated transmission capacity comply with network security standards. A particular request for transmission service shall only be denied when the physical power flows resulting from its acceptance, in addition to the other accepted requests, lead to an expected situation where secure operation of the power system can no longer be guaranteed, and where that request has an economic value (expressed through willingness to pay) lower than other requests accepted under the same contractual conditions whose rejection would also secure the power system. The capacity forecast shall be based on actual physical load flow forecast.

2.4. Where requests for transmission service do need to be constrained, the following rules shall be applied:

- (1) In situations where there is a high correlation between the capacities available to the market at congested borders, coordination among the involved TSOs is of utmost importance.
- (2) Methods for congestion management adopted shall give efficient economic signals to the market participants and TSOs, promote competition and be suited for regional application.
- (3) Depending on the conditions of competition, it may be necessary that the congestion management mechanisms allow for both long and short term transmission capacity allocation. They may then be implemented for example on an annual, monthly, weekly, daily and intra-day basis. The allocation method may depend on the timeframe, for example long term allocation (yearly, monthly) would require explicit auctions whereas short term allocation (day-ahead or intra-day) would require implicit auctions.
- (4) Mechanisms for an intra-day congestion management of interconnector capacity shall be established in a coordinated way and under secure operational conditions, in order to maximize opportunities for trade and to make provisions for cross-border balancing.
- (5) Each capacity allocation procedure shall allocate a prescribed fraction of the available interconnection capacity plus any remaining capacity that was not allocated in previous allocations and any capacity released by the capacity holders from previous allocations.
- (6) An appropriate allocation of capacity among the different timeframes that may include an option for keeping a minimum percentage of the interconnection capacity for the daily or intra-daily allocation shall be proposed by the relevant TSOs and approved by the respective Regulators. In defining their proposals the TSOs shall take into account:
 - (a) The characteristics of the markets
 - (b) The operational conditions, such as the implications of netting of the firmly declared schedules
 - (c) the level of harmonization of the percentages and timeframes adopted for the different capacity allocation mechanisms in place
- (7) Capacity allocation methods and congestion management mechanisms shall reveal the value placed on capacity (either directly or indirectly) and produce directional price signals to market participants at different time horizons.
- (8) Congestion management mechanisms shall ensure that capacity is allocated to those who place the highest value on capacity together with adequate incentives to ensure its use. This shall apply to each capacity allocation mechanism in place and each timeframe.
- (9) Assignees of transmission capacity shall be required to pay for allocated capacity according to a methodology based on the economic value of that capacity as revealed by the process in (7) and (8) above.
- (10) Other than in the case of merchant lines, establishing reserve prices in capacity allocation methods shall not be allowed.

- (11) In principle, all potential network users will be permitted to participate in the allocation process without restriction. Exceptionally, restrictions may be made for reasons of market dominance. In order not to risk creating or aggravating problems related to any dominant position of market player(s), the relevant Regulatory and/or Competition Authorities, if appropriate, may impose restrictions in general or on an individual company for reasons of market dominance.
 - (12) Priority access rights to interconnection capacity shall not be assigned to those contracts that the Competent Authority considers to be a violation of Articles 81 and 82 of the EC Treaty. Existing long term contracts should have no pre-emption rights when they come up for renewal but the capacity shall be made available through open, market-based mechanisms.
 - (13) To promote the creation of liquid electricity markets, capacity shall be tradable on a secondary basis, provided that the TSO is informed sufficiently in advance. In case of the refusal by a TSO of any secondary trade (transaction) , this must be clearly and transparently communicated and explained to all the market participants by that TSO.
- 2.5. In cases where commercial exchanges between two countries (TSOs) are expected to significantly affect the physical flow conditions in any country (TSO), congestion management methods shall be co-ordinated between the two countries (TSOs) concerned and other countries (TSOs) through a common allocation procedure. National Regulators and TSOs shall ensure that no congestion management procedure with significant effects on physical electric power flows in other networks, be devised unilaterally.

3. CALCULATION OF INTERCONNECTION CAPACITY

- 3.1. The TSOs shall publish a general scheme for calculation of the interconnection capacity for the different timeframes based upon the electrical and physical realities of the network. Such a scheme shall be subject to approval by the Regulatory Authorities of the involved Member States concerned.
- 3.2. The operational and planning security standards should form an integral part of the information that TSOs should publish in an open and public document. This document shall also be submitted to the approval of national Regulators.
- 3.3. TSOs shall offer to the market transmission capacity that is as 'firm' as possible. A reasonable fraction of the capacity may be offered to the market under the condition of decreased firmness, but at all times the exact conditions for transport over cross border lines shall be made known to market participants.
- 3.4. The relevant TSOs shall calculate the interconnection capacities for the different timeframes, using a common network model. The values of these interconnection capacities shall be published together with the corresponding technical assumptions.
- 3.5. When preparing the day-ahead grid operation, the TSOs must exchange information with neighbouring TSOs including their forecast grid topology, availability of generation units, and load flows in order to optimise the use of

the overall network through operational measures in line with the rules for secure grid operation.

- 3.6. When balancing the network inside the control area through operational measures in the network and through redispatching, the TSO must take into account the effect of these measures on neighbouring control areas.
- 3.7. While defining appropriate network parts for congestion management, TSOs shall be guided by cost-effectiveness and the lowest negative impacts on the Internal Electricity Market. In that sense, TSOs shall not limit the interconnection capacity in order to solve congestion inside their own control area, except for the above mentioned reasons and reasons of operational security. If such a situation occurs, this shall be described and transparently presented to all the users by the TSOs. Such a situation can only be tolerated until a long-term solution is found. The methodology and projects to achieve the long-term solution shall be described and transparently presented to all the users by the TSOs.

4. TIMETABLE FOR MARKET OPERATIONS

- 4.1. The involved TSOs shall publish a general description of the method applied for maximising the capacity available to the market based upon the electrical and physical realities of the network. Such a method shall be subject to approval by the Regulatory Authorities of the associated Member States. The coordination procedure between the different TSOs involved in the resolution of a structural congestion may consist in general of the following basic steps according to a common timetable:
 - (1) Allocation of the available transmission capacity of the interconnections that are involved in structural congestions may take place over several timeframes: one year, one or several months, one week, daily or intra-daily.
 - (2) The access rights of long- and medium term allocations shall be firm transmission capacity rights. They shall be subject to the use-it-or-lose(it)-it principles at the time of nomination.
 - (3) Prior to each allocation, the involved TSOs shall jointly publish the capacity which will be allocated as well as the time periods during which the capacity will not be available (for the purpose of maintenance for example). The TSOs shall publish the allocated capacity as soon as possible after each allocation, as well as an indication of prices paid. Such indications shall be subject to approval by Regulatory Authorities.
 - (4) Nomination of transmission rights shall take place sufficiently in advance, before the day-ahead sessions of all the relevant organised markets and before the publication of the capacity to be allocated in the day-ahead or intra-day allocation mechanism. The involved TSOs shall jointly publish the nominated capacity as soon as possible

thereafter⁴. Nominations of transmission rights in opposite directions shall be netted in order to efficiently use the interconnection.

- (5) The allocation of the available transmission capacity shall take place sufficiently in advance. Before the allocation, involved TSOs shall jointly publish the capacity which will be allocated, taking into account where appropriate the capacity released by any long term contracts and the firm transmission rights and where relevant associated netted nominations.
- (6) Depending on the market organization (e.g. existence of organized power exchanges), market structure, and condition of competition in the markets of Member States involved, firm transmission rights can be allocated in the day ahead allocation by implicit or explicit auctioning. Combination of these can be used. In any case, the day-ahead allocation shall not discriminate between agents that want to use the rights to exercise physical bilateral contracts or to bid into power exchanges. The highest value bids, whether implicit or explicit, should be successful.
- (7) In regions where forward financial electricity markets are well developed and have shown their efficiency, Regulatory Authorities may decide to allocate all the interconnection capacity through implicit auctioning. In regions where at present no market based capacity allocation procedures exist, concepts for an immediate introduction of market based congestion management shall be pursued. Striving for more sophisticated methods shall not justify a delay in the introduction of market based methods.
- (8) Successive intra-day allocations of available transmission capacity for day D shall take place on days D-1 and D, after the issuing of the indicated or actual day-ahead production programs. Before the allocation, the TSOs involved shall jointly publish the capacity which will be allocated, taking into account all netted day-ahead nominations and the day-ahead production programs. The TSOs involved shall jointly publish the allocated capacity immediately after the allocation.
- (9) Where no short-term intra-day allocations are possible because of operational or data exchange problems, at least a migration path towards intra-day allocations must be defined and committed to by the involved TSOs, Regulators and other market participants. Monitoring of the migration towards the targeted intra-day solution and where necessary any intervention, shall be done by the responsible Regulators, taking into account the benefits of Europe-wide harmonized allocation methods.

⁴ After this nomination takes place, an amount of transmission capacity in a structural congestion may still be available to be allocated for three reasons: a) capacity may have been left aside for a short-term allocation; b) capacity rights may not have been nominated; c) nominated capacity rights might create opposite flows in the same transmission line.

5. TRANSPARENCY

- 5.1. TSOs shall publish all relevant data related to network availability, network access and network use including a report on where and why congestion exists, the methods applied for managing the congestion and the plans for future management.
- 5.2. TSOs shall publish all relevant data concerning cross-border trade according to the best possible forecast. This includes the procedures for allocating capacity, including the time and procedure for applying for capacity, a description of the products being offered and the obligations and rights of both the TSOs and the party obtaining the capacity. TSOs must publish at least:
 - (1) annually: information on the long term evolution of the transmission infrastructure and its impact on cross border transmission capacity;
 - (2) monthly: month and year-ahead forecasts of the transmission capacity available to the market taking into account all information available to the TSO at the time of the forecast calculation (e.g. impact of summer and winter seasons on the capacity of the lines, maintenance on the grid, availability of the production units, etc.);
 - (3) weekly: week-ahead forecasts of the transmission capacity available to the market, taking into account all information available to the TSOs at the time of calculation of the forecast, such as weather forecast, availability of the production units etc.;
 - (4) daily: day-ahead transmission capacity available to the market for each market time unit;
 - (5) details of volumes and capacities of all contracts predating the EU directive 96/92/CE and having a priority right of access to cross border transmission capacity, the daily values of the total capacity taken by them as well as its provisional evolution in the coming years;
 - (6) total capacity already given out by market time unit and all relevant conditions under which this capacity may be used (e.g. auction clearing price, obligations how to use the capacity, etc.), so that the remaining capacity is revealed;
 - (7) total capacity used by market time unit immediately after the moment of nomination;
 - (8) as soon as possible after real-time, aggregated realised commercial and physical flows by market time unit, including a description of the effects of any corrective actions taken by the TSOs (like curtailment) for solving network or system problems;
 - (9) aggregated information for the previous day on planned and unplanned outages.
- 5.3. All relevant information shall be available for the market in due time for the negotiation of all transactions (such as the moment for negotiation of annual supply contracts for industrial customers or the moment when bids have to be sent into organised markets).

- 5.4. All information published by the TSOs shall be made freely available in an easily accessible form. All data should also be accessible through adequate and standardised means of information exchange, to be defined in close cooperation with market parties. This includes information on past time periods with a minimum of two years, so that new market entrants also have access to this data.
- 5.5. When forecasts are published, the *ex post* realised values of the forecast information shall also be published, in the time period following that to which the forecast applies or at latest on the following day (D+1).
- 5.6. The actual physical electric power flows at the interconnections shall be published accordingly (e.g. on the website) by the TSOs in an appropriately timely manner.
- 5.7. The demand forecast information shall also be published by the TSO according to the timeframes defined in 5.2. and 5.3.
- 5.8. The TSO shall publish also the relevant information on generation according to the timeframes defined in 5.2. and 5.3.
- 5.9. TSOs shall exchange regularly a set of sufficiently accurate network and load flow data in order to enable load flow calculations for each TSO in their relevant area. The same set of data shall be made available to the Regulatory Authorities and to the European Commission upon request. Any TSO collecting information on behalf of other TSOs shall give back to the participating TSO the results of the collection of the data.

6. USE OF CONGESTION INCOME

- 6.1. Congestion management procedures may generate revenue only in case of congestion. The procedure for the distribution of these revenues will be established by the Regulatory Authorities and it shall neither distort the allocation process in favour of any party requesting capacity or energy nor provide a disincentive to decrease the amount of congestion.
- 6.2. National Regulators shall be transparent about the use of revenues (cf. Article 6.6. of the Regulation resulting from the allocation of interconnection capacity).
- 6.3. The congestion income shall be shared among the involved TSOs according to criteria agreed between the TSOs involved and approved by the respective Regulators.
- 6.4. TSOs shall clearly establish beforehand the use they will make of any congestion income they may obtain and report on the actual use of this income. Regulatory authorities shall verify that this use complies with the Regulation and Guidelines and that the total amount of congestion income resulting from the allocation of interconnection capacity are devoted to any of the three purposes described in Article 6.6. of the Regulation.
- 6.5. On an annual basis, and by 31 July each year, the Regulatory Authorities must publish a report setting out the use made of the revenues in question together with a verification that this use complies with the Regulation and these Guidelines and that the total amount of congestion income is devoted to any of the three prescribed purposes.

- 6.6. When taken into account in the process of calculating the network tariffs, congestion income should lead to a reduction of tariffs on top of any other regulatory method (i.e. independently of any such method) used for the calculation of tariffs.
- 6.7. The use of congestion income for investments in maintaining or increasing the interconnection capacity shall preferably be assigned to specific predefined projects which contribute to relieving the existing associated congestion and with a clear view to accomplishing them in a reasonable time with particular reference to the authorisation process. In the case of TSOs belonging to a holding or in ownership of a state that owns other companies that perform liberalized activities at the same time, complying with this recommendation must be verified and approved by the responsible Regulator. In case of an interconnection (or part thereof) operating as a merchant line, the Regulator shall decide on whether or not there is adequate separation between it and other affiliates carrying out any other market activities.

7. TRANSMISSION NETWORK EXPANSION WITH MERCHANT INVESTMENT

- 7.1. There shall be open access to both regulated and merchant network facilities on non-discriminatory conditions unless exempted according to Article 7 of the Regulation. Collection of congestion rents must be set – or determined by market mechanisms - in a non-discriminatory and transparent manner. The regulatory authorities must have the responsibility for ensuring this.
- 7.2. Initial long-term contracts for transmission capacity may be authorized, if they respect the basic principles expressed in the Regulation, these Guidelines and by the Regulators, on congestion management, notably the use-it-or-lose(sell)-it principle.
- 7.3. The remuneration of the owner of an interconnection (or part thereof) operating on the basis of a merchant business model may be regulated on a different basis than the adjoining TSO(s) or may not be subject to the provisions of section 6 of these Guidelines, However, while the remuneration of a regulated network facility is determined a priori on the basis of incurred costs or the results of an open tender for construction, the remuneration of an interconnection (or part thereof) operating on the basis of a merchant business model shall be based on the congestion revenue earned by the facility and long-term contracts and there will be no regulated limit to its value during the exemption period.
- 7.4. The existence of a merchant line cannot prevent the construction of an additional regulated or merchant line, even if it induces a decrease of the congestion revenue levied by the merchant line. Equally, the conditions under which any such additional regulated line may be built need to be set out in advance in order to minimize regulatory risk for the merchant investor. Congestion revenues (of regulated and of interconnections based on the merchant business model) shall be the result of an allocation mechanism compliant with the Regulation and these Guidelines.
- 7.5. Future interconnections that are exempted according to Article 7 of the Regulation will be considered as merchant lines.