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CONGESTION MANAGEMENT



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NETWORK INFRASTRUCTURE

- **ELIMINATE PERMANENT CONGESTION BOTTLENECKS**
 - **New investments**
 - **Improvements to the existing network equipment**
- **INVESTMENTS IN NEW LINES OR EQUIPMENT TO IMPROVE INTERNATIONAL ELECTRICITY COMMERCE SHOULD BE DECIDED ON A PLANNED BASES, AND NOT THINKING ON THE APPARENT INCOME THAT COULD BE RAISED FROM ENERGY PRICE DIFFERENCES**
- **IF TRANSMISSION NETWORK RETRIBUTION IS REGULATED, THERE SHOULD BE NO OTHER INCOME, SPECIALLY COMING FROM ACTIVITIES IN COMPETITION, LIKE ELECTRICITY TRADING**



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NETWORK OPERATION

- **OPERATE THE NETWORK IN A MANNER THAT HAS TO FULFILL TWO OBJECTIVES, THAT NEED TO BE COMPATIBLE**
 - **Network security**
 - **International electricity transactions in the new context of the internal energy market**

INTERCONNECTION CAPACITY ALLOCATION PROCEDURE GUIDELINES (I)

- **THE BEST SOLUTION IS “MARKET SPLITTING”
OR IMPLICIT AUCTIONS**
- **IN CASE THAT INTERMEDIATE STEPS ARE CONSIDERED
NECESSARY SOME PRINCIPLES SHOULD BE RESPECTED**
 - Do not fragment the market
 - Be simple and transparent
 - Allow full use of netting opposite transactions
 - Explode the principle of “use it or loose it”, unused capacity should be available at no cost for other users
 - There should not be a minimum cost for any kind of auction
 - In case there is no congestion, there should be no payments at all



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INTERCONNECTION CAPACITY ALLOCATION PROCEDURE GUIDELINES (II)

- **TEMPORARILY EXPLICIT AUCTIONS COULD BE ACCEPTED ONLY IF THE FOLLOWING ADDITIONAL PRINCIPLES SHOULD BE RESPECTED**
 - Capacity auctions should be performed by Market Operators, combined with energy trading as much as feasible.
 - The objective should always be to promote trading
 - Auctions should not be mandatory
 - The objective is to solve international technical constraints, not to be confused with raising any kind of money (the economic signal will be in the wrong direction “less congestions > Less money raised)
 - Netting possibilities should be exploded to the maximum limit
 - Never explicit auctions should have an objective of maximizing any kind of auction revenues



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INTERCONNECTION CAPACITY ALLOCATION (I)

- **IS IT BETTER TO KEEP ALL THE CAPACITY TOGETHER, OR IS IT POSITIVE TO SPILT THE CAPACITY BETWEEN THE DIFFERENT KIND OF PARTICIPANTS ?**
 - If the capacity is divided, the market is segmented
 - Complex mechanisms need to be developed to transfer unused capacity from one segment where capacity is not going to be used completely to others that are the ones really congested



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INTERCONNECTION CAPACITY ALLOCATION (II)

- **TWO DIFFERENT NETWORK ACCESS TARIFICATION METHODS ARE ACCEPTED BY THE DIRECTIVE: REGULATED (most systems), NEGOTIATED**
 - Explicit auctions are auctions that you need to pay to have the right to pay either the regulated or negotiated tariff on each system. **Are they compatible with the Directive?**



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INTERCONNECTION CAPACITY ALLOCATION (III)

- **TWO VERY DIFFERENT SITUATIONS TO BE SOLVED OFTEN NAMED IN THE SAME WAY**
 - A single market, like NORDPOOL, where the potential congestions are internal to the single market
 - Several markets linked by potentially congested interconnectors



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MARKET SPLITTING (I)

- **USABLE IN THREE SITUATIONS**
 - Single market for potential internal constraints. **NORDPOOL case**
 - Market at one side of the potentially congested interconnector.
Spain to France interconnector
 - Markets at both sides of the potentially congested interconnector.
European single electricity market



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MARKET SPLITTING (II)

- **CONDITIONS FOR MARKET SPLITTING TO SOLVE INTERCONNECTOR CONGESTIONS**
 - An energy spot market is required at one side, at least, of each potentially congested interconnector to be controlled
 - Balancing markets or mechanisms are required on each electrical system



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MARKET SPLITTING (III)

COMPARISON BETWEEN EXPLICIT AUCTIONS AND IMPLICIT AUCTIONS/MARKET SPLITTING

- Similarities
 - Need a unique place to allocate the capacity
 - Capacity can be segmented or not
 - Require risk management mechanisms to hedge risk
 - Risk of being curtailed and the need to use balancing mechanisms (implicit auctions)
 - The explicit auction price
- Differences (I)
 - You can distort trading by leaving capacity unused in explicit auctions. Market power abuse possibilities increase. There is no way of blocking the capacity other than using it
 - Affect free competition on energy markets. Winning the explicit auction for capacity is a prerequisite to participate. Free trading on all different possibilities: OTC, organized markets, etc..



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MARKET SPLITTING (IV)

COMPARISON BETWEEN EXPLICIT AUCTIONS AND IMPLICIT AUCTIONS/MARKET SPLITTING

- Differences (II)
 - Always there is an extra payment involved in explicit auctions. **Is an artificial barrier to trade. Never an extra payment on implicit auctions/market splitting**
 - After the explicit auction takes place, instead of a single market there are several independent markets. **IA/MS works in a single market environment with participants being allowed to participate in all markets**
 - The explicit auction is carried out in advance for most of the interconnectors whether there will be a real congested situation or not. **Minimum payment or management fees. IA/MS only acts when there is a true congestion**



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MARKET SPLITTING (IV)

CONCLUSIONS

- **CONGESTION MANAGEMENT SOLUTION METHODOLOGIES SHOULD ENCOURAGE ELECTRICITY TRADING AND PROMOTE PRICE EQUILIBRIUM BETWEEN THE DIFFERENT MEMBER STATE ELECTRICAL SYSTEMS IN THE CONTEXT OF THE SINGLE ENERGY MARKET**
- **IF THE EXPLICIT AUCTION SOLUTION FULFILLS A MINIMUM OF BASIC PRINCIPLES (LIKE BE AUCTIONED AT THE SAME TIME AS THE ENERGIES INVOLVED), THE SOLUTION WILL BE SIMILAR TO THE IMPLICIT AUCTION MECHANISM**