

EuroPEX's Views on Internal Electricity Market Development

12th Florence Forum
September 2005

Main messages

- Effective wholesale markets are critical to the successful development of the IEM
- A number of factors should be addressed to encourage an effective wholesale market
- Power exchanges can and do play a vital role in providing solutions to the challenges faced

Wholesale markets are critical to security of supply

Timescale	Role of Wholesale Markets
Long term (5-15 years)	<p>Enable funding of new investment</p> <p><i>Current market liquidity is inadequate, but strengthened medium-term markets can positively effect long-term liquidity</i></p>
Medium term (-4 years)	<p>Guide generation mothballing/re-commissioning decisions</p> <p><i>Prices provide market view on future security of supply</i></p>
Day ahead	<p>Efficient physical asset utilisation & demand response</p> <p><i>Day ahead markets provide optimal tradeoff between information availability and the ability to physically respond, hence best possible liquidity is delivered</i></p>
Intra day	<p>Enable broad market response to short term issues (e.g., outages, wind) and lower imbalance exposure</p> <p><i>Organised intra day markets are not widely available yet, but in regions where such markets are freely allowed and have been established experiences are generally very positive</i></p>

They are also critical to successful retail markets

- Facilitate retail competition by providing access to fairly priced energy:
 - Short-term to continuously balance electricity requirements and to cover imbalance risk
 - Medium-term to cover new and also changed contracts, production resources and consumption needs
- Reduce barriers to entry for independent suppliers, large and medium sized end-customers, and increase potential for competition
- Provide transparent reference prices for customers

A number of factors would help national markets to develop

Retail Markets

- Barriers to switching
- Demand side response

Other Markets

- Gas liberalisation
- Market links (gas and renewables)
- Appropriate financial markets regulation

National Wholesale Markets

- Intra-day markets
- Market access for small-scale renewables and consumers
- Timely system information

Regional Integration

- Congestion management
- Cross border competition
- Cross border reserves
- Political and regulatory direction

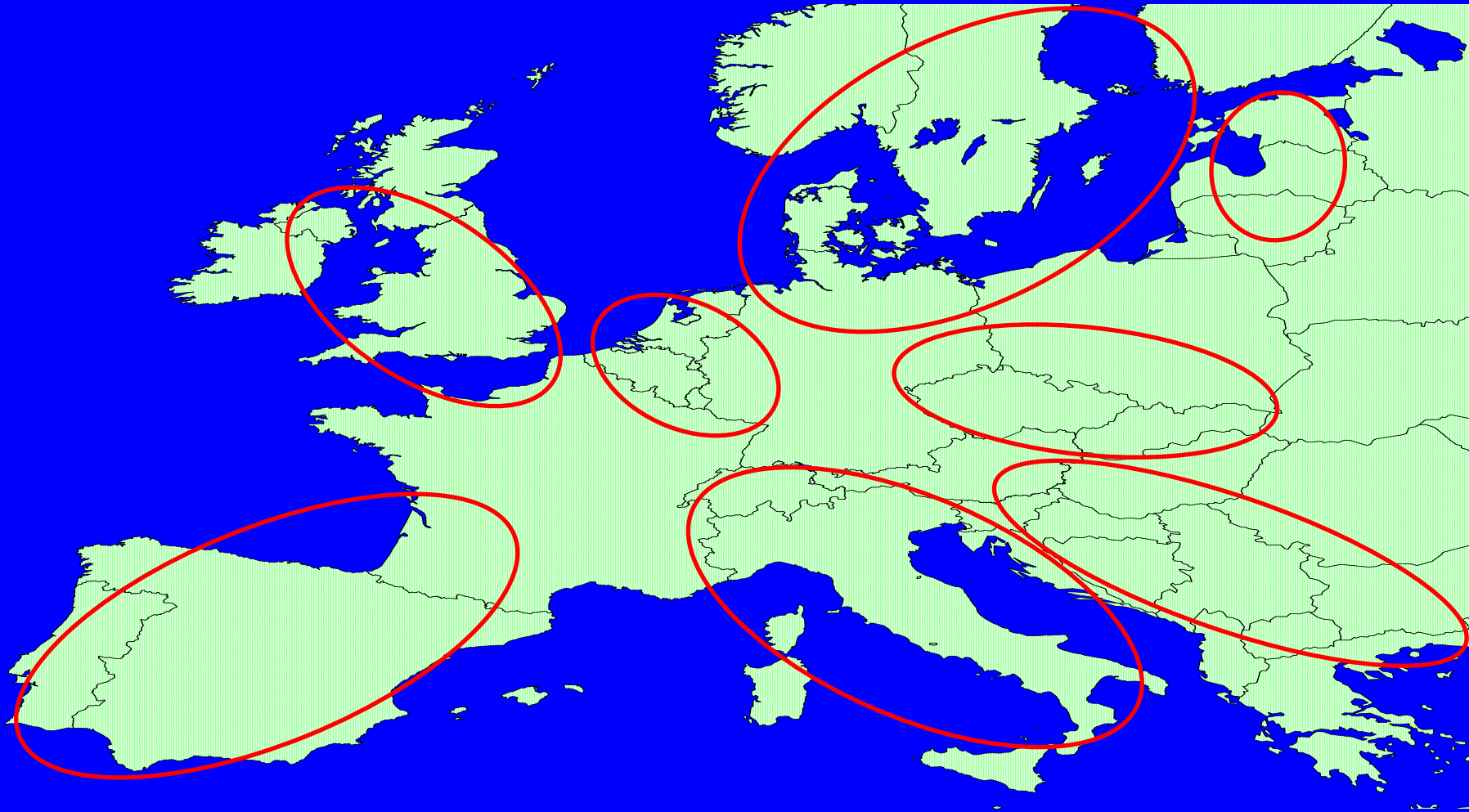
Power exchanges play a vital role in wholesale markets

- Market access for all types & sizes of companies based on clear rules and efficient & secure clearing
- Market transparency and assurance
- Reliable reference prices facilitate derivatives market offering hedging opportunities
- Solutions to new challenges – e.g.:
 - Congestion management
 - Intra-day markets
 - Cross-commodity integration
 - Further development of financial markets for hedging

Exchanges are already integrating markets and active on congestion management

Region	Congestion Mgmt Approach	Transmission Model	Possible Launch
Norway, Sweden, Finland, Denmark	Market splitting	ATCs	done
Germany, Austria	Non-congested cluster	Single price area	done
Denmark, Germany	Market splitting	ATCs (HVDC)	Oct 2005
France, Belgium, Netherlands	Market coupling, PTRs	ATCs	2006
Spain, Portugal	Market splitting	ATCs	2006
France, Spain	Market coupling, PTRs	ATCs	2006
Several Countries within SEE Region	Continuous market splitting	PTDF	2006
Norway, Netherlands	Market coupling	ATCs (HVDC)	2007

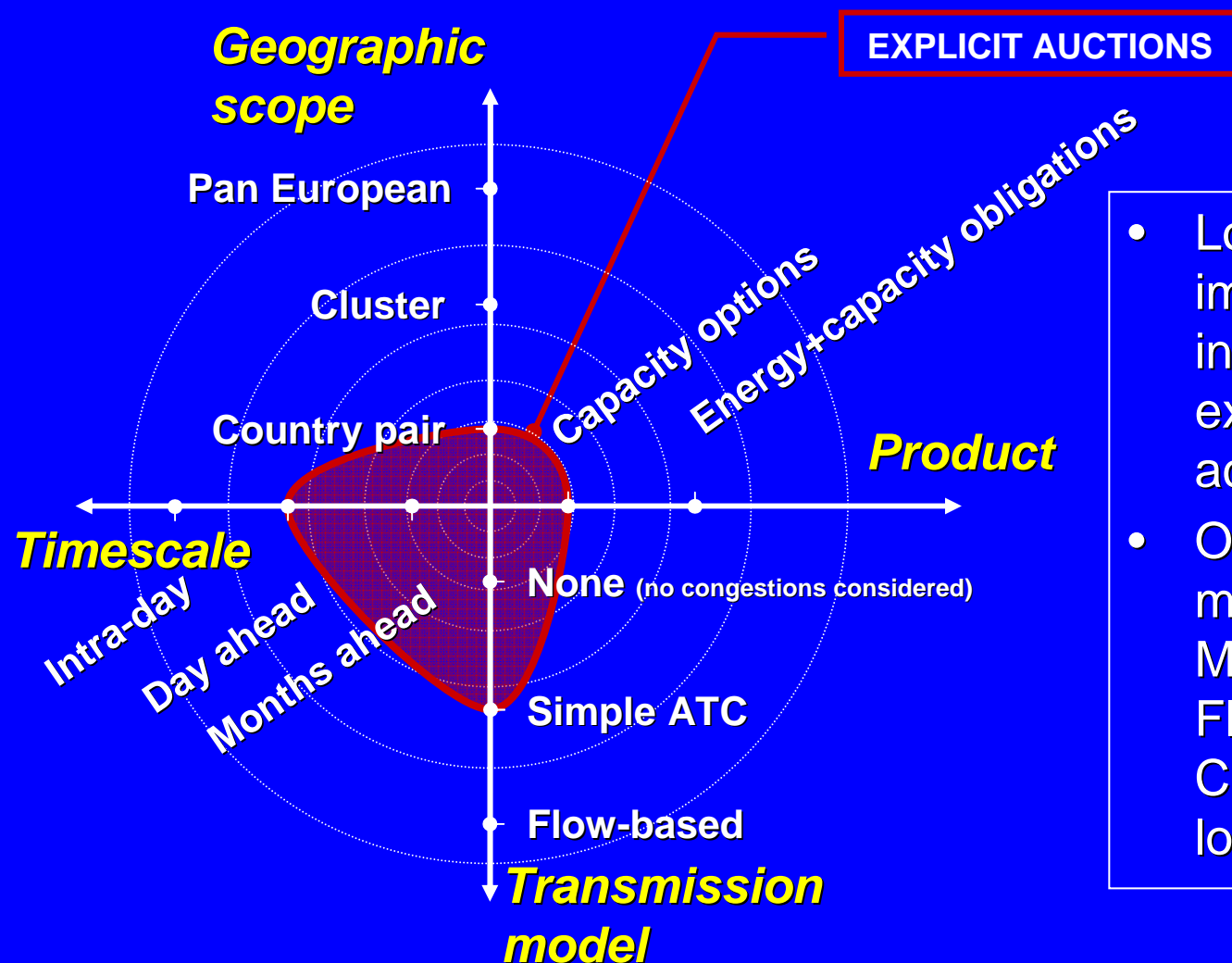
Regional approach should be flexible rather than be forced ...



... since sewing the overlapping initiatives together has to be enabled

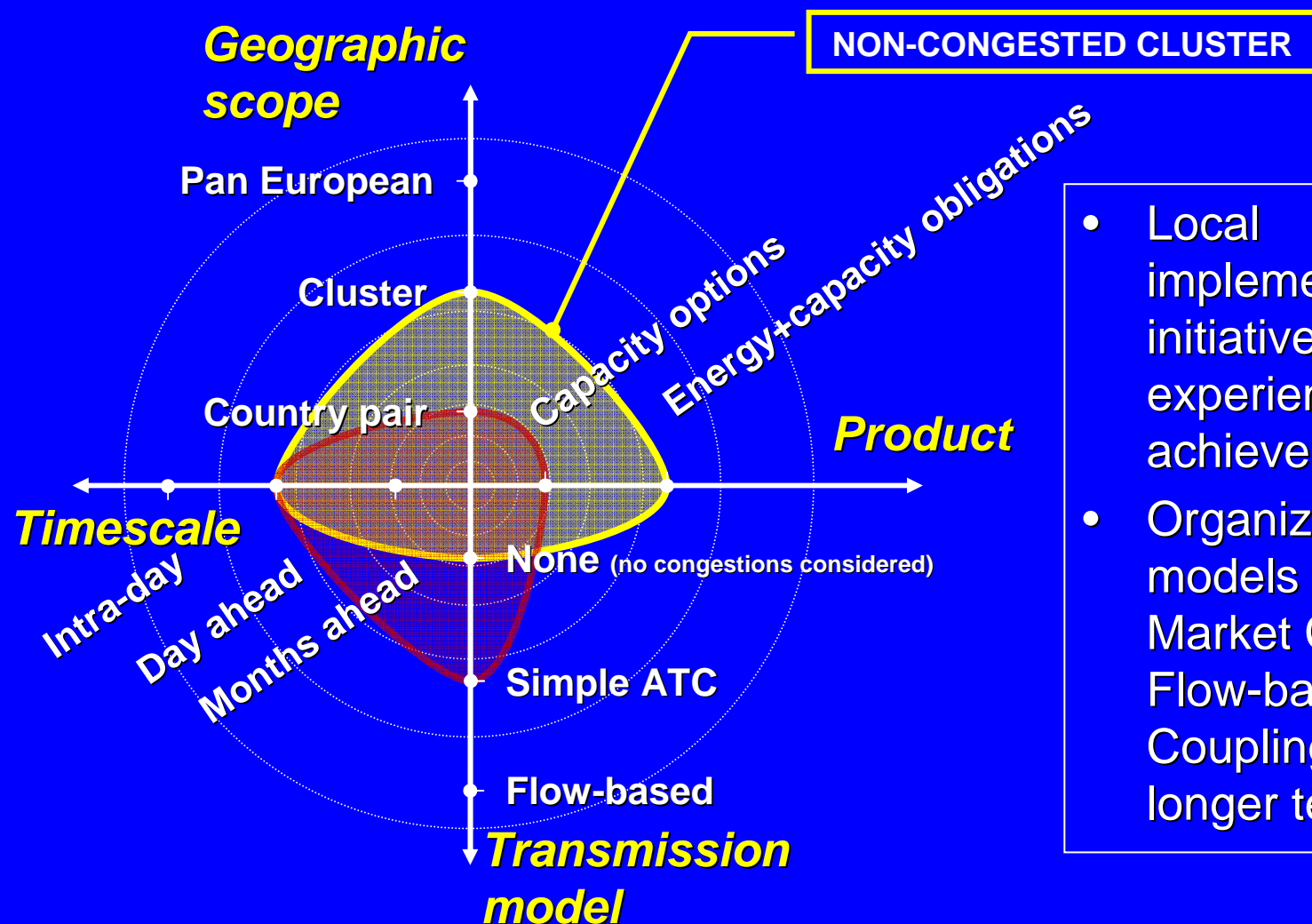


Integration of the markets will need to develop in several ways ¹



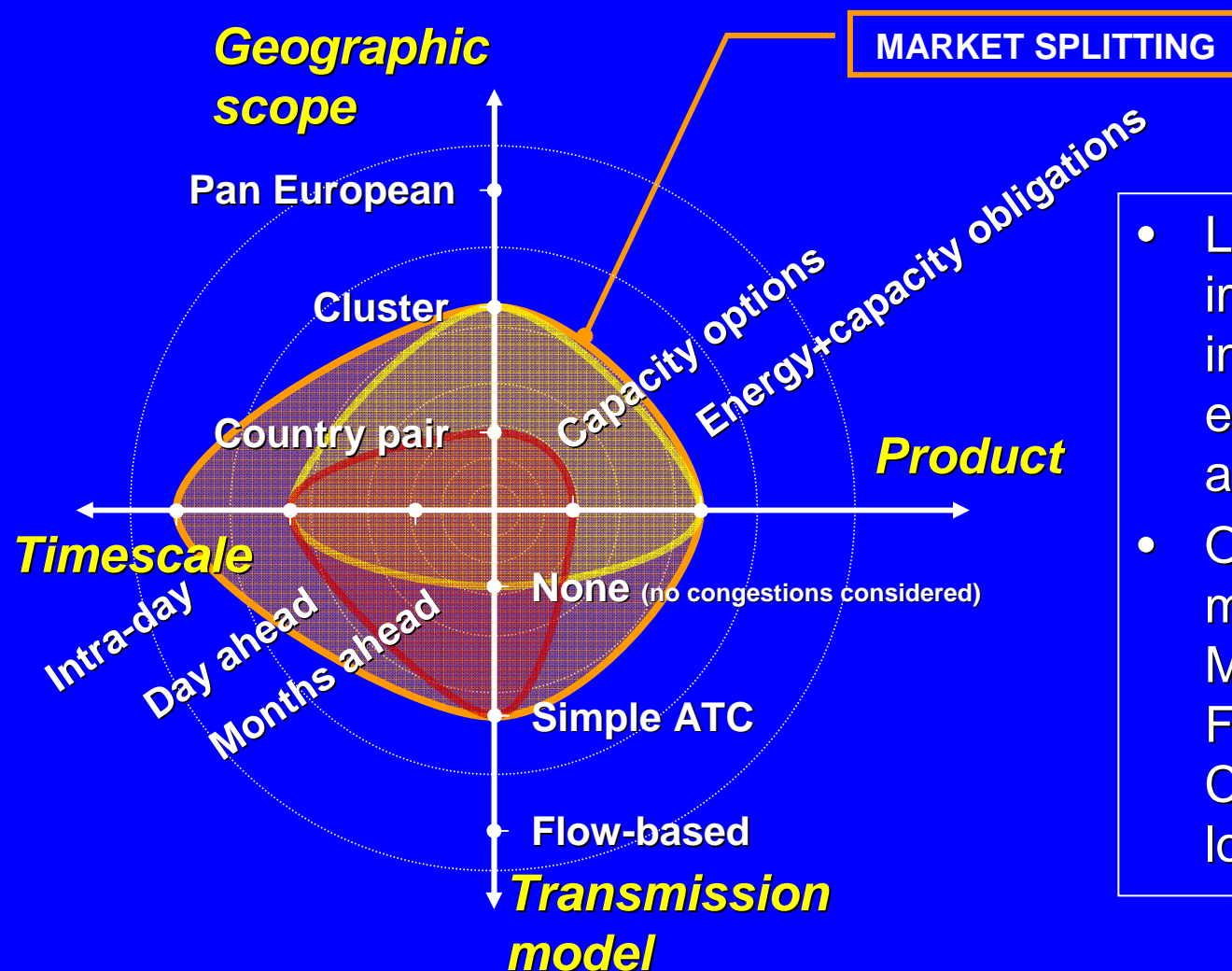
- Local implementation initiatives to gain experience and achieve progress
- Organizational models (Open Market Coupling, Flow-based Market Coupling) to address longer term vision

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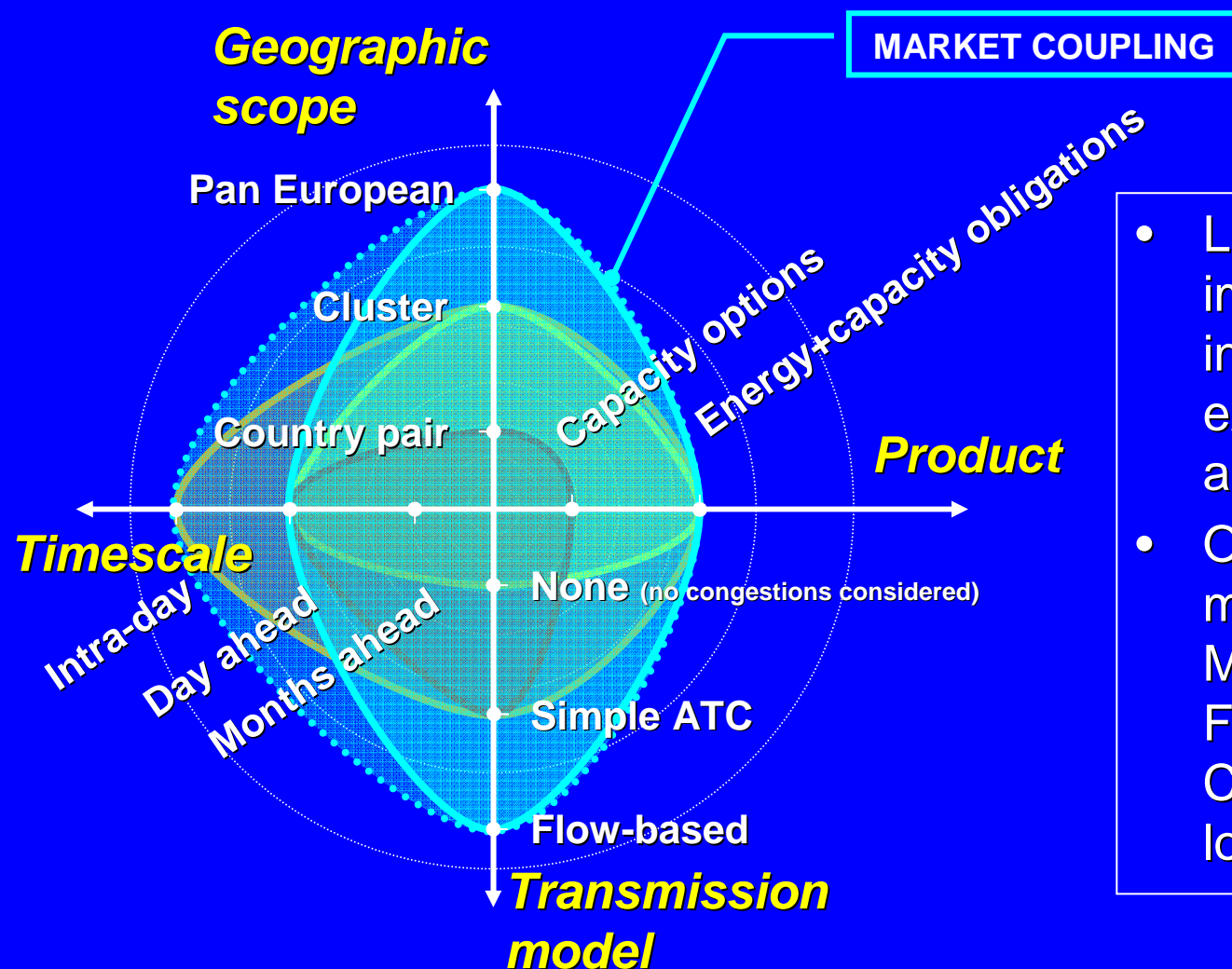
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Longer Term Vision

- Implicit auctions: both market coupling and market splitting
 - Efficient physical network use
 - Ease of access for all to a pan-European market
 - Strengthen development of liquid energy markets
 - Price difference bids/explicit auctions (firm flows)
- Flow-based transmission model
 - Improved network capacity availability
- Financial instruments
 - Financial transmission rights
 - Financial national/regional forward hedging instruments with mainly spot prices as underlying reference
 - Efficient forward price difference hedging (CFD)

Conclusions

- Development of IEM depends on existence of effective wholesale markets
- Power exchanges are to be supported in providing market-based solutions to the Pan European electricity market