



Towards a Standard Market Design for the South-East European Electricity Market

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Standard Market Design and the Role of CEER

- In the 2nd Athens Process Forum in Rome (March 2003) the CEER proposed a strategy for the development of a Regional Electricity Market in South East Europe. The Forum welcomed this proposal and invited CEER to cooperate with the EC and others (ETSO, ...) for the development of SMD for the SEE Regional Electricity Market
- Together with the signature of the 2nd Memorandum of Understanding in Athens, the High Level Group of Governments endorsed the principles for the SMD as proposed by CEER
- In view of the preparations for the legally binding Treaty, the CEER cooperates with the EC, the ETSO and the donors to set up an Action Plan to facilitate decision making for the SMD
- In parallel, CEER cooperates with US-Aid projects for benchmarking new regulatory institutional framework (monitoring activity) and with ETSO to finalize the Cross-Border-Trade and Tariff regime in view of its application in the region by next semester 2004

The main Benefits and Objectives of the SEEEM

- Optimize energy market and infrastructure developments over the broader scale of an integrated market (rather than at the level of each country)
- Attract Investment in Power generation and Transmission by providing a stable regulatory and market environment in a broader single energy market. Facilitate foreign capital inflow also for the privatization process.
- Comply with the vision of future integration into the European Union and as a first step develop an integrated regional energy market ready to join the Internal Energy Market of the EU
- Enhance Security of Supply, deliver energy service with improved quality and reliability, preserve economic competitiveness and affordability for consumers, comply with environmental strategy of the EU
- Establish an infrastructure and market-based link between Western Consumers and Eastern Resources and set up of a SEE Energy Hub

Requirements from the Standard Market Design

1. Attract new investments (and new entry) and assure security of supply while optimizing economic competitiveness of electricity supply
2. Ensure compatibility and consistency between technical operation of the electricity system and the functioning of new financial/commercial mechanisms at a regional level
3. Ensure smooth transition and accommodate the viability of existing national entities and the affordability for consumers, while limiting the use of market distorting mechanisms (stranded cost recovery, excessive public service obligations)
4. Take into account the specificities of the countries of the SEE region, including the progress of the reforms in the energy sector that has already begun in some of the countries

The CEER proposal for SMD: Basic Items - 1

- A. Trading Structure: mixed pool and contract-based market, two levels (regional and national)
- Bilateral contracts with physical delivery
 - **Standardized type, basically non regulated, except if supplier is regulated**
 - **Ex-post control at national level (but harmonised) against excessive dominant positions**
 - **Submit balanced offers to Day Ahead – Subject to balancing arrangements**
 - **Preferably throughout the SEE region – Transmission Quota Reservation**
 - Regional Day-Ahead market, operated by a Regional Market Operator RMO
 - **Partial non mandatory pool – Handles mostly regional trading flows**
 - **Liquidity supported by ad hoc measures (obligations for partial must-buy on regulated suppliers and partial must-offer on certain generation resources, like hydro)**
 - Real-time dispatching and flows managed by the national TSOs and their cooperative regional organisation (SEETSO)
 - **Simple accounting rules for balancing prices**
 - **Two-level clearing: regional and national**
 - **TSOs contract for reserve energy and ancillary services**

The CEER proposal for SMD: Basic Items - 2

B. System access and tariffs for grid use and services

- Regulated third party access in all cases
 - **Owners of grid remunerated through general tariffs for grid use, same for new investments (no separate or risky income flows)**
 - **Regulation of tariffs based on Regulated Asset Basis, operating costs, rate of return on capital and incentives for productivity and investment**
 - **No private or merchant lines – Transmission investment plan approved at national and regional levels – Investment obligations**
- Tariffs for common services (reserve energy, ancillary, etc.) -Cost-reflecting and ex post verified by regulators
- Legal Unbundling of Grid and Network operators and owners
- TSO and DSO responsible for meters, all physical flows, and the clearing of transactions (balancing, losses, services, retail)
 - **Inter-TSO dispatching and clearing center at regional level**
 - **Regional Day Ahead program submitted to SEETSO and handled by the TSOs.**

The CEER proposal for SMD: Basic Items - 3

C. Competition in Supply and Tariff Regimes

- Eligible customers, first all except residential, then all
 - **They can be either under regulated (fixed) tariff regime (RTR) or free tariff regime (FTR) – the former shall be subject to harmonisation and will gradually vanish**
- Regulated Supply: Special license granted at a national basis in order to supply customers under the regulated tariff regime:
 - **Are subject to regulation establishing special capacity obligations for the supply of their own customers, but may have privileged access to generation resources**
 - **The exact terms and conditions of their operation will be subject to national circumstances (e.g. standard bilateral contracts through public tendering, regulated prices to customers, etc.)**
 - **They must purchase a minimum amount of day-ahead energy commonly agreed at a regional level**
- Non regulated Supply or self-Supply: Harmonised “easy” license, tariffs free to fluctuate – backed by financial contracts, free to buy capacity or reserve contracts but non entitled to get last resort services by the TSO.

The CEER proposal for SMD: Basic Items - 4

D. Generation Capacity Support Mechanism

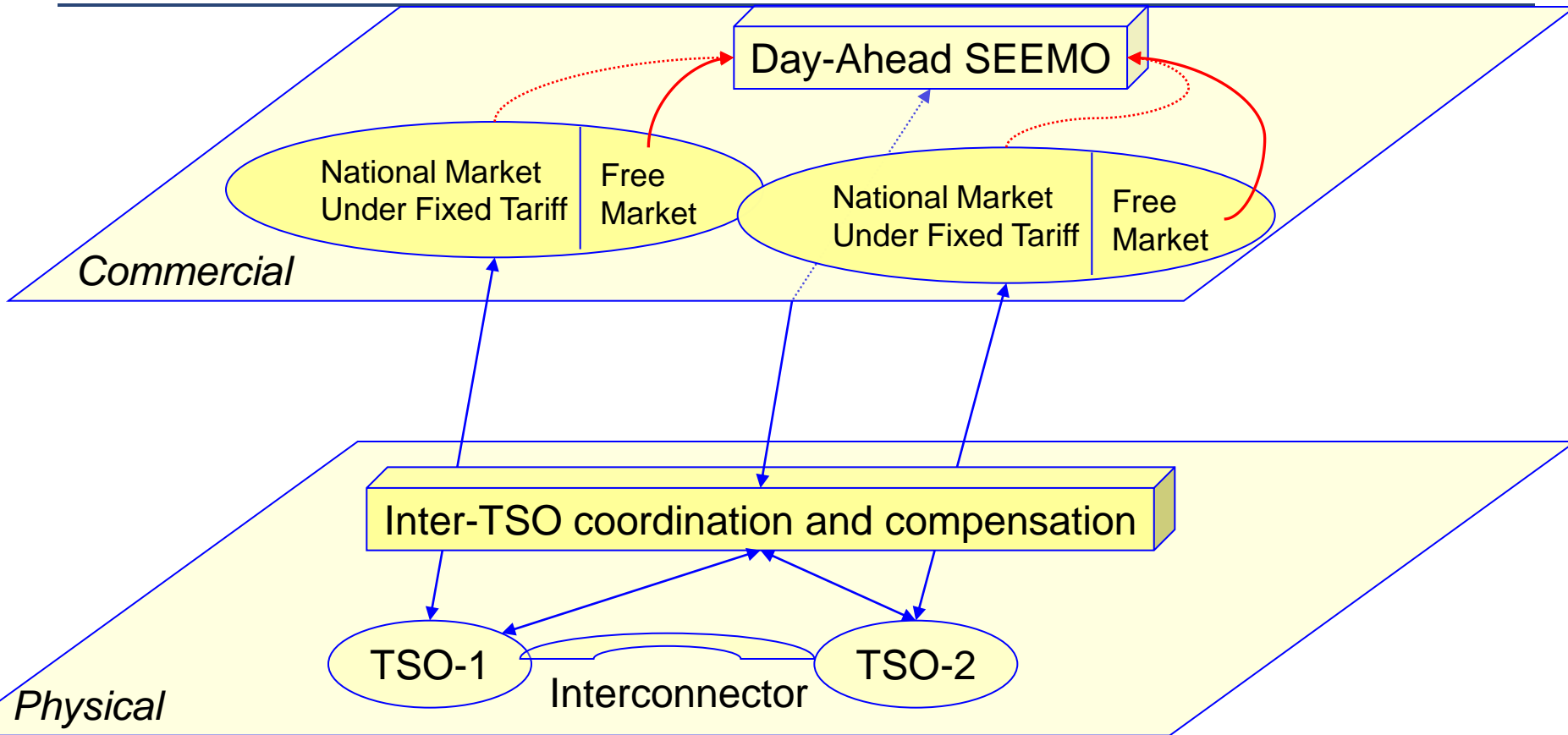
- TSOs and SEETSO carry out periodic Capacity Adequacy Studies, which are approved by the regulators/governments and serve to define the capacity margin and the mandatory reserve energy to be contracted by TSOs
- Regulated Suppliers (under RTR) will have to hold a portfolio of capacity and energy contracts, at a volume depending on capacity margin, their customer basis and their quota on must-buy obligation from regional Day-Ahead. Non regulated Suppliers are not bound but also not covered by TSO's reserve energy offers, unless they contract for such a service.
- In case of forecast about capacity shortages, the TSOs shall be obliged to buy (after a tender) a minimum set of capacity contracts corresponding to new generation plants, costs being recovered partly through the balancing bills, partly through the regional Day Ahead. Similarly, under such circumstances, obligation may be imposed on Regulated Suppliers to conclude off-take contracts with new generation plants. Such measures have to be of limited use and never fully cover all risks related to new generation investment.
- Policy support for the creation of financial power exchange centers, to trade over-the-counter contracts and energy derivatives products. Linkage with Day Ahead as an underlying market.

The CEER proposal for SMD: Basic Items - 5

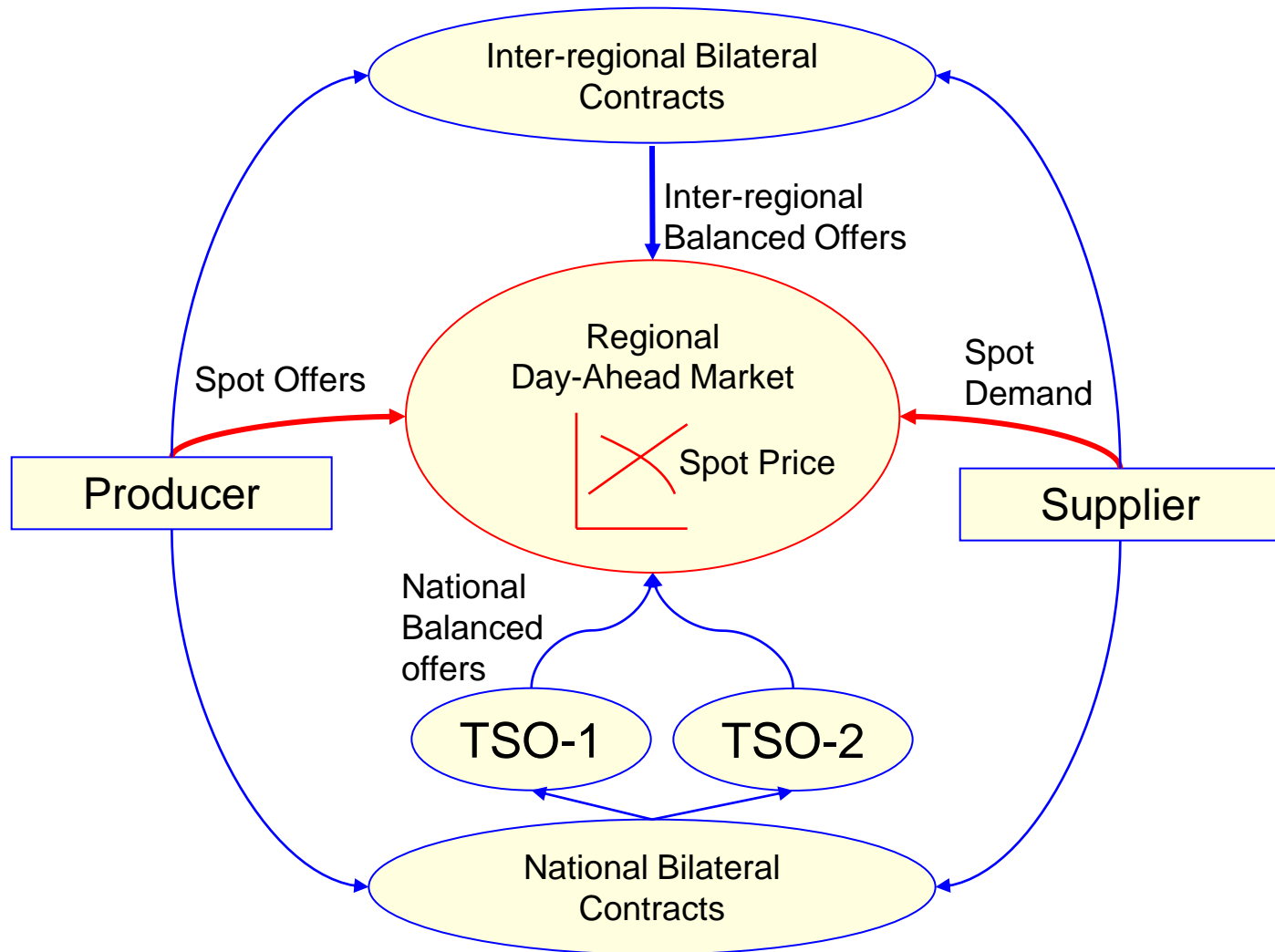
E. Institutional and Policy Support

- Standard institutional framework by country
 - **Independent regulators, legal unbundling, independent TSO, DSO**
 - **Harmonized legal frameworks (basic law, attribution of competences, grid/network code, commercial code, tariff code, licensing code)**
- New regional entities
 - **Governmental regional decisional body (on legislation, general policy and harmonization)**
 - **Regional Regulatory Entity (consisting of country regulators) empowered with specific decision-making competences (third party access and tariffs, fine-tuning of regional Day Ahead, supervision of SEETSO, harmonization of ex post control and market monitoring)**
 - **Regional SEETSO performing coordination of national TSO functions, the handling of regional flows and their settlement**
 - **Regional Day Ahead market operator performing operation and clearing of transactions**
- Other legal and policy aspects
 - **Harmonized environmental standards and law**
 - **Harmonized legislation against discriminatory state-aid to companies**
 - **Harmonized legislation regarding competition and the independent competition authorities**

Market Structure



Market Structure in a Single Price Zone



Ensuring new investment and capital flow

1. Truly large energy market without barriers to trade
 - ✓ Establish the complete connection and operation under UCTE
 - ✓ Apply the European CBT and congestion management
 - ✓ Apply separate transmission tariffs and investment obligations
 - ✓ Build transmission system missing parts, interconnections or components
 - ✓ Operate the grid as if within a single country
 - ✓ Converge towards a Single Price Zone concept
2. Portfolio of securities for new generation investment
 - ✓ Partly covered by long-term contracts with regulated suppliers
 - ✓ Partly covered by Capacity Contracts (e.g. with the TSOs)
 - ✓ Opportunities to get revenues from the Day Ahead market, as liquidity is supported for this market
 - ✓ Opportunities to get contracts with free tariff customers across the region
 - ✓ Opportunities to get contracts with the EU customers and traders
3. Macroeconomic, fiscal and administration prerequisites
 - ✓ Currency for the regional transactions, coverage against inflation/devaluations
 - ✓ Fiscal and administration system reliability and security (for capital flow, taxes, effective collection of payments, effectiveness of metering/billing)

Regional Action Plan on SMD

➤ Following discussions at a regional level, a list of tasks concerning the implementation of the SMD has been identified

➤ A large part of these tasks influences or is influenced by the work on SMD

Activity	Stage A	Stage B	Stage C
1. Long-term planning for generation capacity and infrastructure	Y		Y
2. Transmission system planning and simulation	Y		Y
3. Detailed market rules and the development of a detailed market design	Y		
4. Grid codes and Regional Market Operation Code		Y	
5. Economic analysis of the functioning of the market in view of investment requirements, the development of competition and affordability	Y		Y
6. Benchmarking and monitoring	Y		Y
7. Institutional Building	Y		
8. Harmonized Licensing		Y	
9. Development and provision of software and other necessary real-time tools		Y	
10. Development of financial and hedging markets, and their regulatory instruments		Y	
11. Training and dissemination and promotion of plans and activities to national stakeholders	Y	Y	Y
12. Implementation of the Action Plan	Y	Y	Y

Stage A: urgent/prerequisite, **Stage B:** start after the completion of another activity, **Stage C:** rolling

Conclusions

1. The standard financing scheme based solely on long-term contracts guaranteeing revenue and/or sovereign guarantees is not compatible with the development of market competition and the EU Internal Market model. This is applicable only for transmission investments.
2. The pure merchant-plant financing scheme is not applicable at this stage, as uncertainties of different kinds still persist
 - **The Standard Market Design attempts to propose a hybrid system in which both financing schemes can be combined.**
3. Most of the countries of the region do not have alternative choices, other than joining regional market integration in view of the future to integrate within the EU market. Otherwise, foreign capital financing and privatisation would be jeopardised.
4. Addressing the affordability issue, ensuring smooth transition for national entities and national energy or capacity resources are political conditions for the process to succeed.
 - **The Standard Market Design attempts to accommodate these objectives and the national specificities.**

Conclusions

5. The Standard Market Design is flexible in practice and can accommodate transition. The degree of true market opening and the degree of partial protection of national interests shall depend on the choice of regulatory parameters and the pace of constraint removal.
6. Therefore, still under the same Standard Market Design, the regional decision making bodies (mainly governments and then regulators on specific issues) will have to negotiate so as to define the market development pace and the degree of harmonisation towards a truly single market operation.
7. Of course all these can really start only after the signature of a legally binding Treaty. For the time being only CBT, congestion management and benchmarking of institutional reform can take place.
8. The role of donors and the EC, through the Action Plan, is of utmost importance.
9. The role of banking institutions in the preparation of financing instruments and arrangements that would adequately support business and investment in compliance with the Standard Market Design is one of the key factors.

Transition Management

	<u>Cross-border trade facilitation</u>	<u>Regional Initiatives</u>	<u>Standard market design preparations</u>
<u>2004</u>	<ul style="list-style-type: none">• CBT asap (1.7.2004)	<ul style="list-style-type: none">• Regional Trading Centre	
<u>2005</u>	<ul style="list-style-type: none">• Congestion mgmt• TPA on interconnectors	<ul style="list-style-type: none">• Inter-TSO coordination of operation and settlement	<ul style="list-style-type: none">• Monitoring of institutional compliance
<u>2006</u>	<ul style="list-style-type: none">• Removal of barriers to trade	<ul style="list-style-type: none">• Regional Energy Information Centre	<ul style="list-style-type: none">• Compatibility checking for national market designs
<u>2007</u>			<ul style="list-style-type: none">• Finalization of SMD details
<u>2008</u>			<ul style="list-style-type: none">• Start SMD