APPROACH FRAMEWORK
FOR THE CASE STUDY

by
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Basic Case Study Scenario
Basic Case Study Scenario - Assumptions

• The goal of the Case Study Subgroup:
  – Check the current status of preconditions and impediments for market functioning,
  – Check whether these preconditions have been met or not, and, if so
  – Check whether the laws, regulations and rules have sufficiently addressed the issue(s)

• Market design in BiH:
  – bilateral contracts, and
  – balancing market
The Retail Market is part of a Value Chain
Retail Market Structure

The Retail Market Structure

The end customers’ relation to the electricity market
- Customer connects, switches supplier or moves
- Customer gets delivery and invoice
- Information and queries

The retail market is a team effort of all actors within the market
- DSO
- Retail supplier
- TSO: Balance responsible

Wholesale market, common exchange
- Wholesale Exchange

Customer Interface
- Market processes
- Interface to the wholesale market
Market design has three main layers

- Market model
- Processes
- Contracts
Definition of the market model

- The market model:
  - defines the roles and responsibilities of different market participants
  - defines interactions between market actors
  - includes the definition of the customer interface

- Actors in the retail market design are (CEER, Euroelectric, NordReg):
  - Traders
  - Transmission System Operator
  - Distribution System Operator - DSO
  - Generators
  - Balance responsible parties
  - Suppliers, and
  - Customers
Definition of the market model

• In BiH, the market participants are: ISO, Transco, DSOs, suppliers/traders, balance responsible parties, regulatory authorities, and customers

• The basic roles and responsibilities of the main wholesale market actors in BiH are more or less clear and described in the respective documents

• The role and responsibilities of the market actors in the retail market design should be analyzed and discussed in detail

• The results of these analyses will be a part of the gap analysis
Key actors in the RM - DSO

DSO:

• Responsible for connection to the grid and access to the delivery point for both the end-user and the supplier

• Holder of critically important information for the functioning of the retail market, such as:
  – consumption data (including load profiles)
  – customer information, and
  – delivery (metering) point identity
Key actors in the RM – DSO (cont’d)

DSO:
• Facilitates the most retail market transactions
  – between itself and suppliers
  – between the TSO and suppliers, and
  – between customers and suppliers
• has a central role in metering, billing and load profiling
• serves as a contact point for consumers
• essential role in physical delivery
Key actors in the RM – Supplier

Supplier:

– procures energy in the wholesale market

– provides products and services through contracts to final customers

– may also take responsibility for communication with the customer relating to grid connection and network services procurement (based on an agreement with the relevant DSO where applicable)
suppliers are recommended to be the ‘single point of contact’ for customers and serve as the customer interface in processes:

• contracting,
• switching,
• billing,
• queries and counseling, dispute settlement, etc.
See the attached bill.

OGNJEN; 3.2.2012
## DSO Role

<table>
<thead>
<tr>
<th>Role of DSO in Retail Market</th>
<th>RSERC</th>
<th>FERC</th>
<th>SERC</th>
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<tbody>
<tr>
<td>connection to the grid</td>
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<tr>
<td>access to the delivery point for both the end-user and the supplier</td>
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<td>holder of consumption data</td>
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<tr>
<td>holder of customer information and delivery (metering) point identity</td>
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<tr>
<td>the facilitator of most retail market transactions between,</td>
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<td>it self and suppliers</td>
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<td>between customers and suppliers</td>
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<tr>
<td>metering</td>
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<tr>
<td>billing</td>
<td></td>
<td></td>
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<tr>
<td>load profiling</td>
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</table>
## Supplier’s role

<table>
<thead>
<tr>
<th>Role of Supplier in Retail Market</th>
<th>RSERC</th>
<th>FERC</th>
<th>Note</th>
</tr>
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<tbody>
<tr>
<td>procures energy in the wholesale market</td>
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<tr>
<td>single point of contact for customers</td>
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<tr>
<td>customer interface in processes such as</td>
<td>contracting</td>
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<td></td>
<td>switching</td>
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<td></td>
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<td></td>
<td>queries and counseling</td>
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<td></td>
<td>dispute settlement</td>
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<td>billing</td>
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Processes

Definition of the processes:

– Processes define: what each market actor should do and when

– There are two basic components of the processes:
  • Business processes: transactions between business actors operating in wholesale and retail market
  • Customer processes: interactions by the customer with retail market actors
Processes (cont’d)

– Commonly used list of the most important processes in the market are the following:
  • Licensing
  • Making and terminating contracts
  • Billing
  • Switching
  • Moving
  • Balance settlement
  • Metering
  • Access to customer data
Business processes (Euroelectric)

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Core Retail Market Process: Business-to-Business</th>
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</thead>
<tbody>
<tr>
<td><strong>Roles (&amp; related Transactions/ Business Processes)</strong></td>
<td><strong>Actors</strong></td>
</tr>
<tr>
<td>Market information exchange (energy prices, availability of transmission and distribution network capacity)</td>
<td>Generator/Supplier (as market participants); Wholesale Market Trading Platform (primarily Power exchange); TSO (responsible for balancing, as transmission operator); DSO (as distribution operator)</td>
</tr>
<tr>
<td>Procurement of wholesale energy from the wholesale market (trading, spot trading, forward, future contracts)</td>
<td>Supplier (as buyer in wholesale market); Wholesale Market Seller (power exchange, generator, trader, broker)</td>
</tr>
<tr>
<td>Consumer information exchange (consumption data, load profiles, consumer information, delivery and metering point ID)</td>
<td>Supplier (as seller in retail market); DSO (as meter owner, meter operator/reader and meter point registrar)</td>
</tr>
<tr>
<td>Balance Settlement (payment and billing)</td>
<td>Supplier; DSO; Balance responsible supplier</td>
</tr>
<tr>
<td>Contracting with consumer (consumer, consumption and delivery point information exchange, access to delivery point)</td>
<td>Supplier (supply contract); DSO or other metering agent (connection contract);</td>
</tr>
<tr>
<td>Establishing consumption data of consumer for billing purposes</td>
<td>Supplier; DSO or other metering agent (as meter operator/reader); Other meter responsible agent,</td>
</tr>
<tr>
<td>Billing of consumer</td>
<td>Supplier; DSO; Balance responsible party</td>
</tr>
<tr>
<td>Switching of consumer (consumer, consumption and delivery point information exchange, notification of old and new supplier, access to delivery point)</td>
<td>Supplier (old and new); DSO or other metering agent (as meter operator/reader)</td>
</tr>
<tr>
<td>Moving of consumer (consumer, consumption, delivery point information exchange, notification of old and new supplier, access to delivery point)</td>
<td>Supplier (old and new); DSO or other metering agent (as meter operator/reader)</td>
</tr>
<tr>
<td>Termination of contract with consumer (notification if consumer, consumption and delivery point information)</td>
<td>Supplier (supply contract); DSO (connection contract)</td>
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</table>
**Customer processes (Euroelectric)**

<table>
<thead>
<tr>
<th>Table 2</th>
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</thead>
<tbody>
<tr>
<td><strong>Core Retail Market Processes: Electricity Industry-Customer Interface</strong></td>
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<tr>
<td><strong>Queries</strong></td>
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<tr>
<td><strong>Contracting</strong> <em>(including terminating contract)</em></td>
</tr>
<tr>
<td><strong>Establishing consumption data</strong> <em>(metering, self-reading, estimate based on load profile)</em></td>
</tr>
<tr>
<td><strong>Billing</strong></td>
</tr>
<tr>
<td><strong>Switching</strong></td>
</tr>
<tr>
<td><strong>Moving</strong></td>
</tr>
<tr>
<td><strong>Dispute settlement</strong></td>
</tr>
</tbody>
</table>
Requirements for proper retail market

- The requirement for a fully competitive and robust retail market is the existence of sufficiently liquid wholesale markets

- Suppliers will not enter a market if they cannot source energy for their retail customers in a competitive way

- The existence of open and liquid intra-day and balancing markets is another fundamental requirement

Note: Retail market gives clear signal/inputs to the wholesale market

CEER, EUROELECTRIC, NordReg
Characteristics of a proper retail market

Retail market design is characterized by the following features:

- Strong link to an efficient and liquid wholesale market for procurement and balancing
- Retail market facilitates market entry - sufficient number of suppliers active in the market
- Roles of market players are clearly defined
- Ensures that market players have access to the same set of critical information
- Customers have simple access to information on suppliers, prices and terms
Characteristics of a proper retail market (cont’d)

Retail market design have the following features:

- simple and reliable switching processes that are without excessive costs for customers and suppliers
- sharing of critical information efficiently, swiftly and on a large scale
- efficiently harmonized and organized basic information requirements and business processes that allow flawless implementation and data exchange between market participants
Present situation in BiH

- Organized wholesale market does not exist, which is the key precondition for the existence and functioning of the retail market
- New entry in such market (suppliers) is not realistic
- Incumbent suppliers prevail and will prevail in the near future
What to do?

Work in parallel:

– Identify gaps in the retail market model, processes and contracts.
– Thereafter, develop new/update and change existing regulations and contracts to develop the triangle
– Implement (agreed) Regional Wholesale Market Study Recommendations
– Work to establish balancing market
Identify gaps in retail market model, processes and contracts

Through the Case Study analyze the following processes:

- Licensing
- Making and terminating contracts
- Billing
- Switching
- Balance settlement
- Metering
- Access to customer and supplier data
Identify gaps in retail market model, processes and contracts (cont’d)

Check if the present regulations define:

- the roles and responsibilities of different market participants,
- interactions between market actors,
- what each market actor should do and when.
HVALA!