A United Region?

- Regulatory activities in SEE Region
- SEE Regional Action Plan

Nenad Stefanović
ECRB EWG Chairman; Senior Expert for Electricity AERS

4th Annual Energy Trading Week Central and Eastern Europe
Vienna, 17 April 2012
Questions of concern:

- What are the big challenges in creating a CEE-wide and Europe-wide trading market?
- Predictions about the realistic timeframe – is unity up to 15 years away?
- Breakdown of the concerns traders have about the impact connectivity will have on competition
Main Topics:

- Regulatory competences: SEE vs. CEE vs. ... EU level
- Market Rules harmonization - Electricity Market developments
- Regulatory activities on the regional level (ECRB):
  - Licensing issue
  - ITC Mechanism – ITC Guidelines
  - Cross-Border allocation requirements – EU Regulation
  - Transparency
  - SEE Coordinated Auction Office (CAO)
  - Market Monitoring
  - Regional Balancing
  - SEE Regional Action Plan (RAP)
Regulatory competences

Electricity Market developments
Regulatory Competences

Regulators’ competences:

- Approves Electricity Market Rules
- Approves Grid Code
- Approves Distribution Code
- Adopts rules on supplier switch
- Determine System Services prices
- Approves cross-border capacity allocation rules
- Approves Power Exchange rules

Energy prices and services - new regulated prices:

- Electricity prices for system balancing which are calculated according to the Market Rules
- System services prices established by Regulator
Electricity Market in SEE Region

Electricity Market includes:

- Bilateral Electricity Market
- Balancing Electricity Market
- Organized Electricity Market - Power Exchange

Electricity Market Organization and Administration:

Transmission System Operator

- Bilateral Market
- Balancing Market

Market Operator

- Organized Market – Power Exchange
Regulatory activities on the SEE Regional level (ECRB)
Licensing issue

* ECRB recommendation paper concluded that the **preferred option** which should be pursued in the 8th Region is the **Option**:

- **FADE OUT OF LICENSING IN EACH JURISDICTION COMPLEMENTED WITH OTHER MEASURES ENSURING A LEVEL PLAYING FIELD FOR TRADERS WHILE ENSURING FAIR MARKET CONDUCT**

- To be accompanied by additional regulatory oversight powers on traders

- ECRB requested to **streamline** the related ECRB activities with the **developments on the EU level** and more precisely with the ongoing Study commissioned by ERGEG for advice to EC (EU discussions underway)

- The **recommendations** of ECRB paper therefore **remain preliminary** to the extent of possible **alignment** with the **result** of the ongoing discussions on European level

- ECRB will **continue** constant **cooperation** with EC and ACER in this respect and develop a final position after final decision on the EU level
Inter TSO Compensation (ITC) mechanism

- Establish **one single ITC mechanism** within EU
- Single EU-SEE ITC fund was created in **June 2007**
- **Monitor** ITC process
- **Cooperation** with ex-ETSO/SETSO TF
- **ITC Guidelines** introduced

**Regulatory role:**

- **Define loss prices** to calculate value of transit losses (each year for the following year)
- **Infrastructure costs**, value of assets based on regulated costs as covered by national tariffs
- **Commenting** proposed (signed) ITC Agreement
ETSO/ENTSO-E ITC Agreement

- **ITC Clearing and Settlement Agreement** signed by TSOs
- Deadline for regulatory complaints was prescribed by ITC Agreement-approval
- ENTSO-E put in place an **enduring** Inter-TSO Compensation Mechanism
- On **3 March 2011** a new, **legally binding** Inter TSO Compensation (ITC) Mechanism **entered into force** (signed on 9Feb2011)
- It has been signed by **ENTSO-E** and **40** Transmission System Operators from **34** countries **in line** with the requirements of new **EC Guidelines** (Regulation (EU) No 838/2010)
- The ITC contract is now a **multi-year agreement**, and replaces the previous voluntary agreement
- **URL**: www.entsoe.net
Congestion Management
in SEE Region
Legal basis for Cross-Border issues in EU

Legal basis for cross-border issues defined within EU Legislation:


- **EU Legislation implementation within SEE Region** (for Contracting Parties): CPs signing the Energy Community Treaty

- **Task for CPs: Transposition** of EU Legislation provisions within Local / National CPs legislation
The 8th Congestion Management Region (SEE)

- The most pressing issue was the pending definition of a Congestion Management area in the South East European region - Prerequisite for SEE CAO establishment was creation of the 8th Region and definition of consisting countries.

- The need of a definition for South East Europe region became evident during the Action Plan drafting process for the CAO as Regulation 1228/2003 and its Congestion Management Guidelines consists no definition for SEE region.

- At the same time, the definition is essential for the SEE CAO project as it predefines the future participants of the CAO.

- The so called 8th Congestion Management Region was established according to the approach used within the EU (ERGEGG Electricity Regional Initiatives) by the agreement/decision reached at the Ministerial Council in June 2008.
A Project Overview: The 8th Region

- As a result a common Coordinated Congestion Management method, including capacity allocation, is to apply for the following territories:
  - the nine Energy Community Treaty Contracting Parties
  - the neighboring countries Bulgaria, Greece, Hungary, Romania and Slovenia
  - Italy with regard to the interconnections between Italy and the Contracting Parties to the EnC Treaty (DC undersea cables)
  - Austria, as an important supporter of the SEE Coordinated Auction Office project got an observer status

SEE

<table>
<thead>
<tr>
<th>13 contracting parties</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 borders</td>
</tr>
<tr>
<td>Population: 137,12 million</td>
</tr>
</tbody>
</table>

4th Annual Energy Trading Week - Central and Eastern Europe - Vienna, 16-17 April 2012
Congestion Management in SEE: Compliance with Regulation 1228/03 and CMG

• SEE national transmission systems are faced with a complex international electricity market, transits and a growing number of market participants

• Thus Cross-Border congestions occur and create a barrier for international electricity trade within SEE (North → South)

• Therefore it was necessary to implement proper rules for Market-based Congestion Management

• The Basic principles for Cross-Border Congestion Management are described in the Regulation (EC) 1228/2003 (714/2009) and CMG

• Regulation 1228/2003 (714/2009) is applicable in the SEE Region through the Energy Community Treaty

• SEE Region is working on Flow-base explicit coordinated auction scheme since 2004 (dry-run) involving TSOs, Regulators and Traders
Coordinated Explicit Flow-based Auctions in SEE

• TSOs and Regulators are investigating possibility to implement SEE TSOs proposal for transmission capacity allocation, based on better representation on physical behavior of interconnected electric systems than those widely used on most of the European borders until now (bilateral ATC allocation)

• SEE CAO Implementation Group worked on all necessary activities in order to create CAO involving all stakeholders (TSOs, regulators, traders, donors, …)

• Dry-run phase since January 2004

• Based on: Border Capacity, PTDF matrix, traders’ bids procedure

• Introduced Maximum Flows concept concerning interconnection capacity values with aim to make physical limitations more transparent – reporting “critical branches” approach; thermal limits as the only input

• Internet based tool: www.drcat.at

• SEE CAO structure will be owned by SEE TSOs

• Future prospects: SEE CAO establishment in 2012
SEE Coordinated Auction Office

- **CEE and SEE TSOs** decided to implement **Explicit Flow-based** CA mechanism in SEE Region ... *vs.* CWE, SWE and Nordic Region where Implicit NTC based mechanism is implemented (Market Coupling, Market Splitting)

- Coordinated Auctions and SEE **CAO** are **in compliance** with **Regulation 1228/03 (714/2009)** and CMG provisions

- **Majority** of EnC CPs **support** the establishment of a Coordinated Auction Office in the SEE region

- **Steering Committee** for creation the **Project Team for CAO establishment** – underway

- **Project Team** will be established in **May-June 2012**

- **MC supported** **Montenegro** as location for SEE CAO
• **NTC based** approach for SEE CAO as the **first step**
• **ECS studies** related to SEE CAO (technical and legal study)
• **Project Team** will produce SEE CAO relevant documents: Business Plan, Auction Rules, NTC vs. Maximum Flow approach, etc.
• **SEE Regulators** will have to **approve** SEE CAO related rules and **perform** CA and **SEE CAO Monitoring**
• **ECRB** is working on SEE CAO **Monitoring** → proposal for approval of SEE CAO related documents and SEE CAO Monitoring (regional vs. national) – as part of USAID MM Project
Transparency in SEE Region

- Contracting Parties made significant progress towards reaching full compliance with the Regulation 1228/03 (714/2009) within the last year.

- Especially Transparency regarding the Cross-Border Capacity Allocation was increased within the last year: TSOs of the contracting parties take part in the ENTSO-E Vista project which foresees publication of Auction results, CB flows, available capacities, etc. (according to Regulation 1228/03 and CMG provisions).

- Furthermore, the EnC contracting parties increased the number of documents available in English in their web sites.

- Market Rules will be introduced by all EnCT CPs till the end of 2012.

- ENTSO-E Transparency Guidelines implementation.

- All Contracting Parties introduced a Market-based Capacity Allocation scheme (50/50 split).

- Most of the contracting parties perform no Common Auctions (except HR-HU, SRB-HU), but few SEE TSOs recently started negotiations (SRB-CRO, SRB-BUG, etc.) → Possible coexistence of SEE CAO and Market Coupling in SEE as in CEE.
Market Monitoring
in SEE Region
Market Monitoring: General

• **Market Monitoring activities** are **necessary** for each national electricity market in order to **provide** its **well functioning** in line with approved rules and based on non-discrimination and transparency.

• As the **Regulators** are entities which **approve** Market Rules and define guidelines for Market Design, they should also **develop Market Monitoring tools** in order to **check** if these rules and recommendations are **fully respected** and **implemented**.

• Usually the **TSO** or Market Operator is **proposing** the Market Rules or other rules related to organizing or enabling functioning of electricity markets.

• Therefore, Regulators have to **check** if the TSOs have implemented all agreed rules and if they respect and conduct their activities in line with them.
Market Monitoring: Electricity Market in SEE

- SEE region (8th region) is characterized as a region with partially opened and not sufficiently liquid electricity markets, but with very dynamic cross-border trade transactions.

- Due to low tariff prices of electricity in most of the SEE countries, big industrial consumers prefer not to exercise their eligibility and remain tariff consumers, and thus slow down opening of electricity markets.

- Therefore, there is no active and liquid electricity market in SEE which could be fully monitored by regulators, using and implementing usual Market Monitoring schemes, indicators and approaches.

- Only Cross-Border activities in SEE Region could be fully and broadly examined and monitored by regulators at the moment.

- SEE Regulators need to timely acknowledge and learn how to monitor all performances within electricity markets in order to provide non-discriminative and transparent participation for all participants in the electricity markets.
Market Monitoring responsibilities in SEE

• NRAs in SEE are usually given authority to track licensed subjects’ behavior in the electricity market and produce reporting, as the expert bodies for Electricity Market, but …

• NRAs are usually not given any authority to penalize those participants which did not obey to rules in SEE

• EU MS NRAs are given authority to overtake concrete measures against breaches in the market – difference between EU and SEE (CPs)

• The only measure that most of SEE NRAs could raise against those participants that breach rules is withdrawal of the license – but being the radical measure and not very popular…

• In SEE, the Competition Authorities are given authority to performing concrete action (penalties) against participants in cases they get input from NRAs on detected deviations

• Therefore, strong cooperation between Regulatory Authority and Competition Authority must be envisaged and developed
Electricity Market Monitoring

Regulatory Oversight

Market Monitoring
- Focus on competitive ("liberalized") market segment
- Focus on making markets work
- Data analysis more regular and activities more frequent

Other Regulatory Duties
- Monitoring Necessary because of Impediments to Competition
- Transmission Monopoly (Vertical Market Power)
- Generator Dominance (Horizontal Market Power)
South East Europe is (mainly) a Bi-Lateral Market

A key issue is transmission access

Transmission Limits can reduce market activity

Via Constraints

Via Hoarding

Transmission Network

South East Europe
26th Annual Energy Trading Week - Central and Eastern Europe - Vienna, 16-17 April 2012

Dry-Run Market Monitoring Project in SEE Region

What reduces Competition in Generation Markets?

Poor Transmission Access

Dry Run Monitoring Plan

Ensure Accurate NTC Values

Detect and mitigate Participant abuse, e.g. “Hoarding”

Small Portion of Supply Available to Competitive Sector

Dominant Generation Supplier

Dry Run Monitoring Plan

Measure Concentration and monitor conduct

Pending
USAID Market Monitoring Project in SEE Region: History

- **MM Project** was initiated after invitation from the 8\(^{\text{th}}\) Athens Forum in June 2006 to establish a **Market Monitoring Pilot Plan**, which became effective in December 2006.

- 12\(^{\text{th}}\) Athens Forum (May 2008), ECRB and ECRB EWG **recommended continuing** MM Plan under a two-year **transition phase** that would lead to sustainable operations within ECRB, including **extension** of MM project in 2 streams:
  - **SEE CAO Monitoring** modalities, and
  - **General MM - education of SEE regulators** on general MM activities

- **Primarily involves Cross-Border** transmission capacity market - ensuring maximum capacity is available on the interconnections and that this capacity is allocated and used in a **non-discriminatory** manner

- **MM Project** is designed with **goals**:
  - to ensure accurate estimates of cross-border transfer capacity
  - to ensure proper utilization of reserved capacity (i.e., no hoarding or over-scheduling)
USAID Market Monitoring Project in SEE region: History

- **USAID/PE** presented its proposal for **MM indicators** within MM general work-stream:
  - Seven monitoring Indicators to accomplish the objectives for Monitoring Cross-Border transmission capacity market
  - Market Monitoring proposal was supported by **ECRB**
  - **MM Dry-Run** has started successfully with Indicator 1 in **Nov 2009**

- The **MM Project includes** the entire 8th Congestion Management Region

- Project introduces a **single Indicator (1-7) each month** and asks **NRAs to request** from **TSOs** very **specific data** to calculate **specific indicators** in order to be able to **make conclusions** regarding Indicator analysis outcomes

- **SEE regulators (EWG)** were **invited** to participate **ECS Workshop** in May 2010 in order to discuss MM Indicators, make analysis, pose questions and comments and **try to define an appropriate MM procedure** in the 8th Region on common template basis, respecting ex-ERGEG monitoring experiences

- **SEE TSOs** representatives were also **invited** to participate MM Workshop as they are important for MM cooperation between regulators and TSOs
These Indicators have focused only on cross-border transmission capacity as first phase of MM Dry-Run.

Later phases will focus on other aspects of the market, e.g. generation (as electricity market evolves, develop and mature).

With respect to each individual Screen, NRAs and TSOs aimed to determine whether:

- There is agreement on the technical correctness of the Screen?
- There are clear benefits from Screen implementation?
- Regulators should implement the Screen?

After examining all Indicators for which Dry-Run experience was available, all NRAs and all TSOs attending concluded the Indicators are desirable and beneficial for removing obstacles to market competition in the 8th region.

It was also concluded that EWG will continue MM Project in SEE and after the SEEAMMS presentation seek ECRB approval of MMG for the 8th Region based on Indicators accepted at the Workshop (This task would be undertaken by USAID/Potomac Economics.)
Dry Run Market Monitoring Project in SEE

1. Base Case Exchange (BCE) Indicator

2. Already Allocated Capacity (AAC) Indicator

3. Limiting Facility Indicator

4. Load Forecast Indicator

5. Generation Output Indicator

Screens to monitor accuracy of Network Model

Screens to monitor Reservations and Scheduling
8th Region Market Monitoring Guidelines

• It was concluded that, upon ECBR approval, Market Monitoring Guidelines would define the minimum set of commonly introduced MM Indicators (for cross-border issues) for all NRAs of the 8th Congestion Management Region

• At the May 2010 SEE Market Monitoring Workshop, NRAs and TSOs recommended adopting Dry-Run market Monitoring Indicators as the basis for the 8th Region Market Monitoring Guidelines

• ECRB approved drafting of the 8th Region Guidelines and PE submitted this Draft to ECRB EWG in 2010
8th Region Market Monitoring Guidelines:
Status of Market Monitoring Screens

All screens in the Guidelines are concerned with cross-border activity;

**Screen 1:** Base Case Exchange (BCE) Screen. Monitors the accuracy of cross-border transactions forecasts in Network Model;

- Network Model is used to establish cross-border Net Transfer Capacity (NTC);

**Screen 2:** Already Allocated Capacity Screen: Monitors the usages of cross-border reservation (Secondary Hoarding (Hoarding));

**Screen 3:** Critical Facilities Screen: Monitors the accuracy of Network Model outcomes on cross-border limiting facilities;

**Screen 4:** Load Forecast Screen: Monitors the accuracy of load forecasts in Network Model;

**Screen 5:** Generation Output Screen – Monitors the accuracy of generation forecasts in Network Model;

**Screen 6:** TRM Screen – Monitors TRM calculations;

**Screen 7:** Control Area Balance Screen – Monitors imbalances for TRM accuracy and control area exchanges

Already Recommended by EWG to ECRB for 8th Region MM Guidelines

Awaiting EWG action; Most NRAs currently able to provide data

Propose to combine into a single Indicator 6 to address TRM
Table of Contents

1. INTRODUCTION
2. GENERAL PRINCIPLES
3. REGIONAL MARKET MONITORING
4.- 9. INDICATOR 1 – INDICATOR 6
10. AUCTION DATA SCREENING
11. DATA COLLECTION AND REPORTING
ANNEX 1 - DEFINITIONS
ANNEX 2 - TEMPLATES
ANNEX 3 - TECHNICAL ANNEX
ANNEX 4 – EXAMPLES OF REGIONAL COORDINATION
Web-Based Data and Reporting Interface

- **A key element** of the implementation of the 8th Region Market Monitoring Guidelines is the **Web-Based data collection** and **reporting data base System / Interface**;

- **South East Europe Automated Market Monitoring System (SEEAMMS) - SEEAMMS.COM**

  - **This interface** is intended to:
    - **Simplify and Standardize data collection** - Allow Direct Upload of Data
    - **Check errors**, organize data, regulate access
    - **Automate indicator** and threshold calculations;
    - **Report screen results**;
    - **Report indicator violations**;
    - **Provide Regulator access** to the data base

- Potomac Economics/USAID/IRG are continuing to work on development of the scope and structure of the tool

- PE has initiated contact with SEE TSO to assist in identifying standard data structures, and with existing data bases as ENTSO-E.NET
Regional Market Monitoring Structure

1. Request Data based on MM Guidelines
2. Input Market Monitoring Data
3. Highly Automated
   - Stores Data
   - Processes Indicators
   - Produces Reports
4. Reports
5. Regulator Action

EWG

Establish and Amend MM Guidelines

NRAs

1. Request Data based on MM Guidelines

TSOs

NRA Competency

Energy Community Secretariat

Data Interface

Maintain Data Interface

4th Annual Energy Trading Week - Central and Eastern Europe - Vienna, 16-17 April 2012
Regional Balancing Mechanism in SEE Region
Regional Balancing Mechanism in SEE: Main goals

- Based on SEE TSOs concept, the **final aim** of RBM is:
  - To **increase margins of balancing resources** for SEE TSOs
  - TSOs **obtain** Balancing Energy (BE) in **short period** and under **competitive market prices**
  - To **help TSOs** to **provide** necessary tertiary reserve (fast and slow) easily (emergency help)
  - To **ensure safe** and secure system **operation**
  - To **reduce TSOs costs** for providing BE
  - To **give opportunity** to national market **players** to **offer** their **short-term** electricity **surpluses** via BETSEE/TSOs platform with lower prices
SEE regulators’ views on RBM Implementation: National BM vs. Regional BM

- Coexistence of national balancing mechanisms and RBM
- TSOs keep long-term balancing contracts (reservation of production capacity / power)
- RBM/BETSEE represents actual state of play of market participants offers for BE depending on momentarily situation, introduced on BETSEE internet platform
- RBM itself cannot be a reliable source of BE for TSO needs on continuous basis
- Regulator’s obligation is to check if TSO is buying BE at the lowest market price, and TSOs obligation is to chose BE offer at lower price
- RBM is voluntarily based
- Residual cross-border capacities are available for RBM → remaining capacities, not wanted by any other market participant just before the real time (have no value) → free for RBM
- Residual cross-border capacities are assigned on “first come-first serve” basis to involved TSOs at RBM
- To ensure that TSO do not act as “trader” and make profits out of the system (mediator between market participant and other TSOs)
- Could be achieved through close cooperation between involved Regulatory authorities
EU-ACER ERI Initiatives

EU Target Market Model
• EU-ACER: 7 Electricity Regions defined (ex-ERGEG)
  • Each Region is represented by the Leading Regulator within ERI
  • Each Region has its RCC: discussion floor for NRAs

• Each Region chose its own way forward regarding cross-border capacity allocation mechanism (coordinated auctions, market coupling, etc.), which is in line with the Regulation (3rd Package)

• Each Region defined its Regional Action Plan regarding cross-border capacity mechanism

• Elaboration of the Cross Regional Action Plan, which would define common principles regarding cross-border issues on pan-European level and thus facilitate achieving of EU Target Market Model in 2014

• The 8th Region included in ACER ERI Quarterly Report as Annex
EU Regional Highlights for 2012

- **NWE intraday project** to introduce an implicit intraday solution by the end of 2012 which facilitates hub-to-hub trading [Q4 2012]

- **SWE border** implementation of implicit intraday solution as part of NWE project [Q4 2012]

- **CE region** decides on preferred approach to implement target model [Q3 2012]

- **CS region** implement explicit allocation [Q2 2012] and agree roadmap toward target model [Q4 2012]

- **SEM-GB border** to implement explicit allocation [Q2 2012]
Four Target Models for Electricity Market Integration

- Common vision for completion of IEM in Electricity by 2014
- Electricity markets across Europe must share a set of common features and be linked by efficient management of interconnection capacities
- In order to achieve this: CACM and Balancing have been identified as priority areas → 3rd Legislative Package
In order to implement CACM Target Models for Electricity across Europe, four priority projects have been identified:

1. **Single European Price Coupling** aims at optimising the use of existing day-ahead cross-border capacities at European level, reducing the day-ahead price volatility and improving confidence in organised price references.

2. **Single European Continuous Implicit Mechanism for cross-border Intraday trade** aims at enabling market participants to adjust their position before the closure of the market and, possibly, short-term arbitrage. This Intraday timeframe is becoming increasingly important in the context of growing intermittent generation.

3. **European Platform for the allocation of Long-Term Transmission Rights** aims at delivering one single point of contact for the allocation of harmonised long-term transmission rights across Europe.

4. **Flow-Based Capacity Calculation Method for short-term capacity allocation** in highly meshed networks aims at improving the network security and the level of capacity made available to the market, by taking into account the influence of cross-border flows on the congested lines in a more transparent and effective way.
Towards European ID Power Market

- Over the summer period Europex and ENTSO-E agreed on a joint approach to provide a solution for the Interim Model and a clear path for smooth transition towards the Target Model.

- **Interim Solution:** Aim to cover at least NWE by end 2012, if feasible, but open to other Regions (borders or group of borders), if ready.
  - Target Model: Launch by end of 2014

- **Memorandum of Understanding** shall be signed by ENTSO-E and Europex in order to create the framework and to establish technical and governance principles.

- TSOs are still committed to deliver the interim and the enduring solution based on Elbas timely as stated in the EC meetings and in the Florence Forum.
WMO Study in SEE Region

SEE Regional Action Plan
WB WMO Study for SEE Region

• SEE Regulators’ cooperated very closely with the Consultants POYRY/NordPool on the Interim Reports + discussions with TSOs, Regulators, Ministries, Traders and Industry

• **Final version** of the WMO Study was submitted to SEE Regulators (EWG) in **late April 2010**

• Consultants accepted most of regulatory concerns for SEE region

• Consultant’s proposal based on **gradual transition** of big industrial consumers from tariff to eligibility exercising consumers

• Consultants ready to assist on implementation steps: WB provided Consultants’ further support to EWG within Implementation phase:
  o Regulators’/EWG role, ECRB role, MC role- in implementation
  o Feasibility of the Consultants’ proposal
  o Realistic deadlines for implementation
SEE Regulators’ feedback on WMO process in SEE Region

- It is necessary to take an efficient **Step-by-step approach** when introducing WMO in the 8th Region
- WMO is mainly driven by **political influence** and **national strategies**!
- Regulators could just **support** WMO and **propose** solutions, but cannot decide or make strong influence to decisions
- **Regulators** are supposed to **implement the recommendations** into their **market models**
- Regulators addressed the fact that the **willingness of regulators** to adapt their systems was **not the key problem**, but **limitations** related to **their powers** and **acceptance by governments** would exist
- Regulators should more actively **raise the restriction of powers** they are facing
- **Ministries** representatives and **Governments** to be **much more involved** in the **implementation phase**, as they are **key elements** and most responsible entities for **accelerating** wholesale market **opening** in the eight region
- **SEE regulators support WMO process, advice** and work on creating an appropriate regulatory framework for the proposed solutions
WB WMO Study: Implementation phase

- SEE Regulators - Need for **WMO project** in the 8th region to be **fully in compliance** with **new developments in EU** - Target Market Model, Framework Guidelines, Network Codes:
  
  ➢ Main concept is **in line with EU developments**
  ➢ Need to **adjust some details** from WB WMO Study
  ➢ Ensure **compatibility** between **ECRB EWG and ENTSO-E RG SEE WPs**

- Necessary to **introduce SEE TSOs** in the **WMO project** ASAP

- ENTSO-E RG SEE Working Program 2011 presented to ECRB, which was approved by ENTSO-E and fully harmonized with EU Target Market Model

- **Need for a realistic WMO Regional Action Plan** which is fully harmonized between SEE **NRA**s (ECRB) and SEE **TSOs** (ENTSO-E RG SEE), **supported by PHLG** and in compliance with EU **TMM**
WB WMO Study: Implementation phase

- ECRB EWG Chairman and ENTSO-E RG SEE Convenor redrafted WMO Regional Action Plan Draft in order to harmonize it with ENTSO-E RG SEE WP 2011 and EU Streamlining activities:

  - **SEE TSOs approved** it via their WP 2011, but also by SEE TSOs representatives
  - **ECRB approved** it from regulatory side
  - **Need for SEE RAP update**, but **keeping** the final goal deadline: **2015**
WB WMO Study: Implementation phase

- CPs should be responsible for elaborating **National (Local) Action Plans** (by Ministries, TSOs, NRAs and Power Exchanges, if applicable), based on SEE Regional Action Plan

- Any guidance received from PHLG and Consultants’ proposal for National Action Plans is welcome

- **2nd Joint PHLG-ECRB Meeting** dedicated to WMO issue was held on 24 March 2011: SEE RAP Draft was discussed and presented by ECRB and ENTSO-E RG SEE
WB WMO Study:
Moldova and Ukraine position in RAP

- All ECRB EWG members supported SEE RAP Draft with minor changes which were introduced in the final SEE RAP Draft.

- ECRB EWG members of Moldova and Ukraine fully supported RAP Draft, but informed that they will not be able to implement it due to technical problems as their power systems are not synchronized with ENTSO-E interconnection, and their TSOs are not involved in the ENTSO-E and related processes: Relevant note included in SEE RAP.

- Decision: Moldova and Ukraine were involved in the gap analysis, produced additionally by the Consultants - to include Moldova and Ukraine gap analysis in the WMO Study, using remaining funds.

- Consultant’s proposal: Moldova and Ukraine should start implementing all steps not requiring synchronization with the ENTSO-E interconnection, start opening the wholesale market between themselves and to form in the meantime a sub-region consisting of UA and MD → After synchronization this sub-region could easily join the regional wholesale market in SEE.
SEE RAP: Finalization

• **Focus Team** provided Regional Action Plan (RAP) Draft after the 20\textsuperscript{th} ECRB EWG meeting (April 2011)

• **RAP Draft** was **fully harmonized** between ECRB EWG and ENTSO-E RG SEE (June 2011)

• Final SEE RAP includes both logo: ECRB and ENTSO-E

• **ECRB and ENTSO-E RG SEE APPROVED** SEE RAP; it was forwarded to the PHLG, which gave a full support

• **Joint task** of SEE NRAs, TSOs and Ministries: Accomplishment of SEE RAP according to defined deadlines

• **PHLG, ECRB** and **ENTSO-E** have appointed relevant **Coordinators** who will review and inform the Energy Community institutions on regular (quarterly) basis on **progress** achieved as regards the deliverables defined in Annex I; Any obstacles identified should be reported to the Energy Community institutions with a proposal for remedial action
SEE RAP: Cooperation with ACER ERI

• **ACER Coordination Group for ERI**: ECRB represented unofficially at these meetings

• **Positive signal**: The 8\textsuperscript{th} Region included in the ERI Draft Agenda meetings under topic \textit{Revision of consistency among Regional Action Plans}

• **Required presentation** of the Revised Regional Action Plan for SEE

• ECRB-S has submitted SEE RAP Draft to ACER for their evaluation (17 June 2011) before the 17\textsuperscript{th} ECRB meeting
  - Presentation of required revised SEE RAP (coherence between 8 E RIs)
SEE RAP Document Structure

- SEE RAP structure comparable to FG structure:
  - CAPACITY CALCULATION
  - FORWARD CAPACITY MARKETS
  - DAY-AHEAD MARKET
  - CROSS-BORDER INTRADAY MARKET AND BALANCING MECHANISM
Capacity Calculation

- Development of common grid model and coordinated capacity calculation method in the SEE region in line with the EU Target Model
Forward Capacity Market

- Step by step (“glide-path”) approach

- Implementation of coordinated bilateral explicit auctions in the SEE Region

- Establishment of multilateral coordinated (NTC based) explicit auctions on several borders (based on technical and organizational feasibility)

- Establishment of centralized multilateral coordinated (NTC-based in a first step, flow based method is still under consideration) auctions on most of SEE borders

- Multilateral coordinated auctions on all borders within the SEE region (regional one-stop-shop or EU-wide solution)
MONTHLY ALLOCATION in SEE (September’10)
MONTHLY ALLOCATION in SEE (PLAN MID 2012)
Day-Ahead Market

- Price Based Market Coupling as Target Model for SEE DAM
- Staged Implementation of the Regional DAM
- Parallel Development of Regional and Local Electricity Markets (each CP obligation and duty to make National Action Plan)
- Bilateral/ trilateral market coupling in the SEE region (nucleus approach or different regional initiatives)
- Integration with neighbouring regions/markets
- Pan-European market coupling including the SEE region operational
Day-Ahead Market - Explicit
Day-Ahead Market - Explicit

DAILY (D-1) ALLOCATION in SEE (September’11)

Legend:
- IA Joint
- EA Joint
- Under negotiation
- EA Split
- EA Split - one TSO

4th Annual Energy Trading Week - Central and Eastern Europe - Vienna, 16-17 April 2012
Day-Ahead Market - Implicit

Ongoing initiatives

- OTC + Power Exchange
- OTC only
- Ongoing PX projects

4th Annual Energy Trading Week - Central and Eastern Europe - Vienna, 16-17 April 2012
**XB Intraday Market**

- **Common regional solution for XB Intraday Market**
  - First step as simple as possible (FCFS or pro-rata)
  - Interim step of sub-regional integration before implementing an entirely regional solution (market integration would start with a nucleus consisting of two to three jurisdictions)
  - Final solution in line with EU Target Model (continuous trading)

- **XB Balancing Market**
  - Investigation of the options for integration of national balancing mechanisms (taking into consideration timeframe and results achieved on ENTSO-E level)
  - TSO-TSO mechanism without common merit-order list as an interim solution
  - Final solution – XB Balancing mechanism with common MO list
Governance SEE RAP

• **Top-Down Guidance:**
  - European regulation, Framework Guidelines on CACM, Network Codes

• **Governance within the SEE Region**
  - **MC** (supported with PHLG): General policy guidance to the process and harmonization of the national legal and regulatory frameworks
  - **ECRB**: Harmonization of Market Rules and Network Codes, Regional Market Monitoring Process
  - **ENTSO-E RG SEE**: Development of the regionally coordinated CACM mechanism and harmonization with the corresponding EU-wide mechanism
  - **EnC Secretariat**: Support to the Energy Community institutions in the Treaty implementation process

• **Governance at Local Level**
  - Development and implementation of the Local Action Plans
<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>INDICATIVE TARGET DATE</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Capacity calculation</td>
<td>Q4 2011</td>
<td>ENTSO-E RG SEE</td>
</tr>
<tr>
<td>Revise and enhance a common grid model (CGM) for the SEE region</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harmonize methodologies/procedures for capacity calculation for yearly/monthly/day ahead time horizons</td>
<td>Q4 2011</td>
<td>ENTSO-E RG SEE</td>
</tr>
<tr>
<td>2 Forward markets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coordinated bilateral explicit auctions implemented on all borders within the SEE region</td>
<td>Q1 2012</td>
<td>TSOs^{20}, NRA, Ministries</td>
</tr>
<tr>
<td>Multilateral (NTC-based) coordinated auctions on several borders in SEE</td>
<td>Q3 2012</td>
<td>TSOs^{18}, NRAs, Ministries</td>
</tr>
<tr>
<td>Centralized multilateral coordinated (NTC-based in a first step, flow based remaining the final concept) auctions on relevant SEE borders (auctions performed by CAO as the service provider, i.e. single point of contact within SEE region)</td>
<td>Q4 2012</td>
<td>TSOs^{19}, NRAs, Ministries</td>
</tr>
<tr>
<td>Multilateral coordinated auctions on all borders within the SEE region (regional one-stop-shop and, finally, EU-wide solution)</td>
<td>Q4 2014/15</td>
<td>ENTSO-E RG SEE^{21}, PHLG, ECRB</td>
</tr>
<tr>
<td>3 Day-Ahead market</td>
<td>In line with National Action Plans but not later than 31 December 2012</td>
<td>TSOs, Market participants, NRA, Ministries^{14}</td>
</tr>
<tr>
<td>Establishment of power exchanges in several SEE countries or contracting services from the existing PX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bilateral/ trilateral market coupling in the SEE region (nucleus approach or different regional initiatives) – tight volume coupling as a possible interim step</td>
<td>Q2 2013</td>
<td>TSOs^{19}, NRA, Ministries</td>
</tr>
<tr>
<td>Implementation of price based market coupling (EU target model) in the entire SEE region</td>
<td>Q4 2014</td>
<td>ENTSO-E RG SEE^{14}, PHLG, ECRB</td>
</tr>
<tr>
<td>Pan-European market coupling including the SEE region operational</td>
<td>Q2 2015</td>
<td>ENTSO-E^{14}, ACER, EC, PHLG, ECRB</td>
</tr>
<tr>
<td>4 Intraday market</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Survey on existing intraday capacity markets in the SEE region</td>
<td>Q2 2011</td>
<td>ECRB^{14}, ENTSO-E RG SEE</td>
</tr>
<tr>
<td>Establishment of cross-border intraday</td>
<td>Q2 2014</td>
<td>TSOs^{19}, NRA, Ministries</td>
</tr>
</tbody>
</table>
Questions and answers
Questions and answers

What are the big challenges in creating a CEE-wide and Europe-wide trading market?

- **Harmonization** of Regulatory competences in SEE Region
- **Starting Harmonization** of Market Rules
- **Common** EU-wide Licensing approach including SEE Region (CPs as non EU members)
- **Starting Market Monitoring activity**: SEEAMMS as MM Project in SEE Region, and ACER EU Monitoring Project and start up activity and REMIT introduction
- **Define** clear Balancing Guidelines and Rules
- **Waiting** for ACER Framework Guidelines and Network Codes, including modus for their full implementation in SEE Region

4th Annual Energy Trading Week - Central and Eastern Europe - Vienna, 16-17 April 2012
Regional Energy Strategy
Energy Community: PROPOSAL!

- Actions and deadlines to establish Regional Energy Strategy in Energy Community and achieve the objectives:
  
  - Energy Community Treaty aims at regulating relations between CPs, in a manner to create a common legal and regulatory framework for energy markets and allow trading energy across their borders.
  
  - Its objective is the creation of a competitive integrated regional energy market between CPs and ultimately, its integration with the single EU energy market.
  
  - Strategy to be adopted by PHLG in June 2012.
  
  - Besides adoption of EU acquis on energy, CPs shall take also other actions in order to achieve such objective that shall comprise but not be limited to the following issues:
Objective 1: Creating a Competitive Integrated Regional Energy Market

- **Actions:**
  - Introduce common capacity allocation mechanism (coordinated auctions): Setting up of the **Coordinated Auction Office Project Company** and establishing a working coordinated auction office **during 2013**
  - Establish **Power Exchanges** in several SEE countries
  - Develop a plan for the implementation of price based market coupling, in line with the milestones defined in the “Regional Action Plan for Market Integration in South East Europe”, with the aim of joining the single European Price Coupling mechanism no later than beginning **2015**
Objective 1: Creating a Competitive Integrated Regional Energy Market

- Adopt regulatory Balancing Rules and Balancing Responsibilities for Market Participants by the dates agreed in the Action Plan for Market Integration in South East Europe

- Actions:
  - Responsible bodies (as determined by NRAs or legislation in each CP) should develop Balancing Rules and should specify Balancing Responsibilities for Market Participants
  - In the same timeframe, NRAs should fix or approve non-discriminatory and cost-reflective methodologies for calculating prices for imbalances
Objective 1: Creating a Competitive Integrated Regional Energy Market

- All remaining Legal / Regulatory/ Institutional Barriers to Trade of Energy shall be removed by January 2015

- Actions:
  - **Harmonisation of VAT treatment** for energy by CPs with EU Member States
  - Harmonising requirements for establishing a local office for energy traders, and phase out licensing regime for all energy traders by the end of 2014
  - NRAs should ensure that there is **consistent publication of sufficient data on cross border capacity** published by TSOs and **statistical information** made available by NRAs
  - Ensure transparent and fair management of the **grid connection** of independent power producers (IPPs)
**Objective 2: Attracting investments in energy**

- **Related to Price Regulation and Network Tariffs:**

  - **Actions:**
    - Phase out price regulation for large customers by December 2012
      - National Regulators should ensure that the electricity prices for large / industrial consumers are not subject to price regulation
    - Adopt cost reflective energy network tariffs by the end of 2012
      - Regulators should ensure that network tariffs are non-discriminatory and cost-reflective
    - Adopt prices that reflect fully the cost of supply for all tariff customers, by the end of 2012
      - NRAs (and Gen) should ensure that they are able to calculate real costs of generation: costs of full generation portfolio, necessary investments/depreciation/market based rate of return, costs of imports, costs of supply services and appropriate treatment of bad debts
      - All CPs shall ensure that electricity prices for all small and medium customers are subject to price regulation are covering full costs of supply
Objective 2: Attracting investments in energy

Related to Energy Infrastructure:

- **Focus** should be placed on ensuring that there is no ‘supply gap’ between energy demand and supply based on forecasts of demand and supply for 2020 and 2030.

- **Interconnection capacity shall be increased**, based on recommendation stated in ENTSO-E TYNDP and ENTSO-E Regional Investment Plan, and ENTSOG TYNDP.

Actions:

- **A set of policy tools** will be proposed to implement strategic infrastructure priorities.

- **Projects of Regional interest** will be defined with the aim to stimulate investments connected with improvement of security, reliability and quality of energy supply, energy efficiency and environment as well as improvement use of RES.
Objective 2: Attracting investments in energy

- Related to Regulatory Barriers:

- Actions:
  - Introduce harmonized licensing regimes in line with the EU licensing / registration regime by January 2015
  - A harmonized Pan-European Licensing / Registration regime (in line with that envisaged by REMIT) should be established
Objective 3: Providing secure and sustainable energy supplies to customers

- **Related to Security of Supply:**

- **Actions:**

  - Establish the internal framework for security of supply (nomination of Competent Authority, definition of protected customers, interruptible consumers)

  - Enhance preparedness to secure gas supply (establishing Risk Assessments, Preventive Action Plans, Emergency Plans)

  - Diversify sources of gas imports where appropriate
Objective 3: Providing secure and sustainable energy supplies to customers

- **Related to Energy Efficiency:**

  - **Actions:**
    - Increase efficient use of energy by reducing final energy consumption by minimum 10% in 2020, compared to projections

- **Related to Renewable Energy:**

  - **Actions:**
    - Increase RES share of Gross Final Energy Consumption (“GFEC”) of the Energy Community to the levels decided by the Ministerial Council
Objective 3: Providing secure and sustainable energy supplies to customers

- **Related to Protection of Customers:**

- **Actions:**
  - Ensuring that **vulnerable customers are protected**
  - All CPs should **define clearly and by law or regulation** (as appropriate) the **definition of vulnerable customers** subject to special protection or support **by 31 December 2012**
Questions and answers

- Predictions about the realistic timeframe – is unity up to 15 years away?
  - ACER ERI Initiative activity as Monitoring vehicle for respecting and fulfilling EU Target Market Model
  - 7 ERI Regional Action Plans → Cross-Regional Action Plan elaboration
  - NWE Model as the TMM for EU
  - SEE RAP fully harmonized with EU TMM
  - Process is advancing, detecting obstacles, but still possible to fulfill the imposed IEM deadline 2014/15, including SEE Region
Questions and answers

- Breakdown of the concerns traders have about the impact connectivity will have on competition

  - Creation of pan-European Internal Electricity Market, including SEE Region, till 2014/15 has the final goal to define Common and Harmonized Rules for all Electricity Market Participants, and Clear Responsibilities of all Electricity Entities

  - The final goal of this process is to obtain the equal position of all electricity market players, and thus…

  - Enable health competition between all electricity market players
Contact:
Nenad Stefanović
ECRB EWG Chairman
Senior Expert for Electricity

Energy Agency of Republic of Serbia (AERS)
Terazije 5/V
11000 Belgrade - Serbia

Tel: +381 11 3037 253
Fax: +381 11 3225 780
E-mail: nenad.stefanovic@aers.rs
URL: www.aers.rs