



## **The Regional Electricity Market: Current Position and Development Prospects**

- Regulatory activities in SEE Region and in Serbia**
- SEE Regional Action Plan**

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**IENE Workshop: Opening Up The West Balkans Energy Market**

**Belgrade, 7 March 2012**

- Energy Agency of the Republic of Serbia regulatory competences
- Electricity Market development in Serbia: New Energy Law
- Regulatory activities on the regional level (ECRB):
  - Licensing issue
  - ITC Mechanism – ITC Guidelines
  - Cross-Border allocation requirements – EU Regulation
  - SEE Coordinated Auction Office (CAO)
  - Market Monitoring
  - Regional Balancing
  - SEE Regional Action Plan (RAP)

# Energy Agency of the Republic of Serbia regulatory competences

## Electricity Market development in Serbia: New Energy Law

## **New regulators' competences after the new Energy Law:**

- Adopts rules on supplier switch
- Determine System Services prices
- Approves cross-border capacity allocation rules
- Approves Power Exchange rules

## **Regulators' Competences kept from the former Energy Law:**

- Approves Electricity Market Rules
- Approves Grid Code
- Approves Distribution Code

## **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 the Agency
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## 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

- **Electricity Generator**
- **Supplier**
- **Public Supplier**
- **Final Customer (End User)**
- **TSO**: system services procurement, system balancing, safe power system operation and electricity purchase for losses compensation
- **DSO**: electricity purchase for losses compensation
- **Market Operator**

# Electricity Market Organization in Serbia

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**Bilateral Market:** Purchase Agreement includes:

- Certain quantities for each calculation period during the supply period in advance
- Full supply

**Balancing responsibility:** Each participant is obliged to regulate balancing responsibility by contract or by contract on transfer of responsibility

**TSO** is responsible for:

- Establishing and executing balancing responsibility;
- Keeping register of balancing responsibility for delivery points at the transmission system

**DSO** is responsible for:

- Keeping Register of balancing responsibility for delivery points at the distribution system;
- Data submission from TSO Register in line with Grid Code and Supplier Switch Rules

Each Final Customer has right to SOLAR (max. 60 days duration)

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# Switching Supplier Rules

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## Regulate:

- Supplier Switching procedure
- Conditions that supplier must fulfill related to balancing responsibility
- Supplier obligations whose agreement is under the termination
- TSO obligations
- New supplier rights regarding the access to transmission or distribution system for new customer supply needs

## Deadlines for the rules finalization according to new Energy Law:

- TSO shall submit Market Rules to Regulator for approval till May 2012
- Market Rules shall be adopted till August 2012



# Regulatory activities on the regional level (ECRB)



- ECRB recommendation paper concluded that the **preferred option** which should be pursued in the 8<sup>th</sup> 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

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- Establish one single ITC mechanism within EU
- Single EU-SEE ITC fund was created in June 2007
- Monitor ITC process
- Cooperation with 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

## ENTSO/ENTSO-E ITC Agreements

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- 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**
- It has been signed by ENTSO-E and **39** 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 **multiyear agreement**, and replaces the previous voluntary agreement
- URL: [www.entsoe.net](http://www.entsoe.net)

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

- Directive 2003/54/EC of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in electricity
- Regulation (EC) No 1228/2003 of the European Parliament and of the Council of 26 June 2003 on conditions for access to the network for cross-border exchanges in electricity (up until March 2011)
- REGULATION (EC) No 714/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No 1228/2003
- 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 8<sup>th</sup> Congestion Management Region (SEE)

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- 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 8<sup>th</sup> 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 8<sup>th</sup> Congestion Management Region was established according to the approach used within the EU (ERGEG Electricity Regional Initiatives) by the agreement/decision reached at the Ministerial Council in June 2008



# A Project Overview : The 8<sup>th</sup> Region

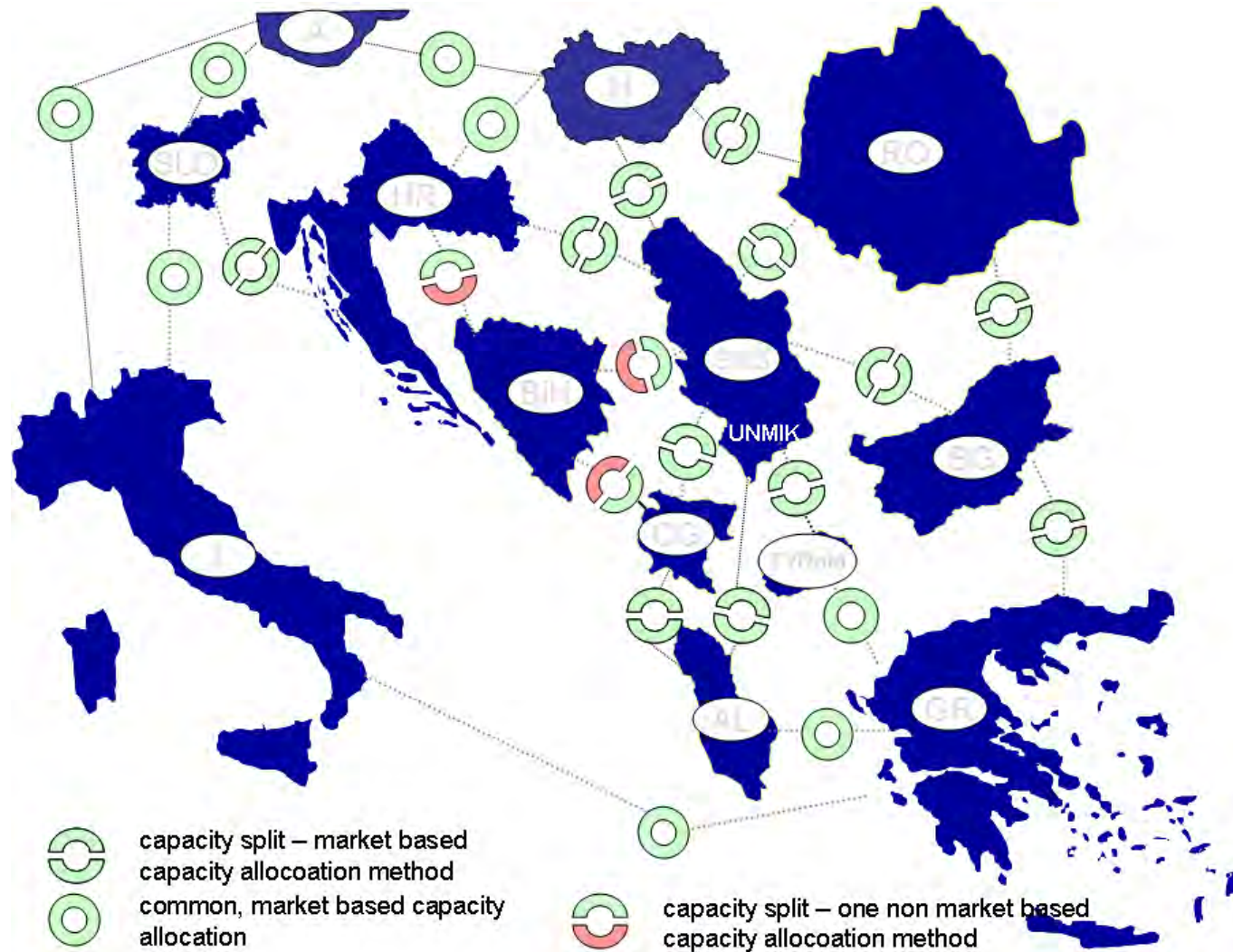
- As a result a common Coordinated Congestion Management method, including capacity allocation, is to apply for the following territories:
  - the nine Energy Community Treaty Contracting Parties
  - the neighboring countries Bulgaria, Greece, Hungary, Romania and Slovenia
  - Italy with regard to the 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



<b>SEE</b>
<b>13 contracting parties</b>
<b>24 borders</b>
<b>Population: 137,12 million</b>



# Congestion Management in SEE Region





## **Congestion Management in SEE: Compliance with Regulation 1228/03 and CMG**

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- 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

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- 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](http://www.drcat.at)
  - SEE CAO structure will be **owned by SEE TSOs**
  - **Future prospects:** SEE CAO establishment in 2012
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## SEE Coordinated Auction Office

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- **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 CAO are **in compliance** with Regulation 1228/03 (714/2009) and CMG provisions
- Majority of EnC contracting parties 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

## The 8th Region Progress

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- 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: General

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- 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 give 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

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- SEE region (8<sup>th</sup> 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

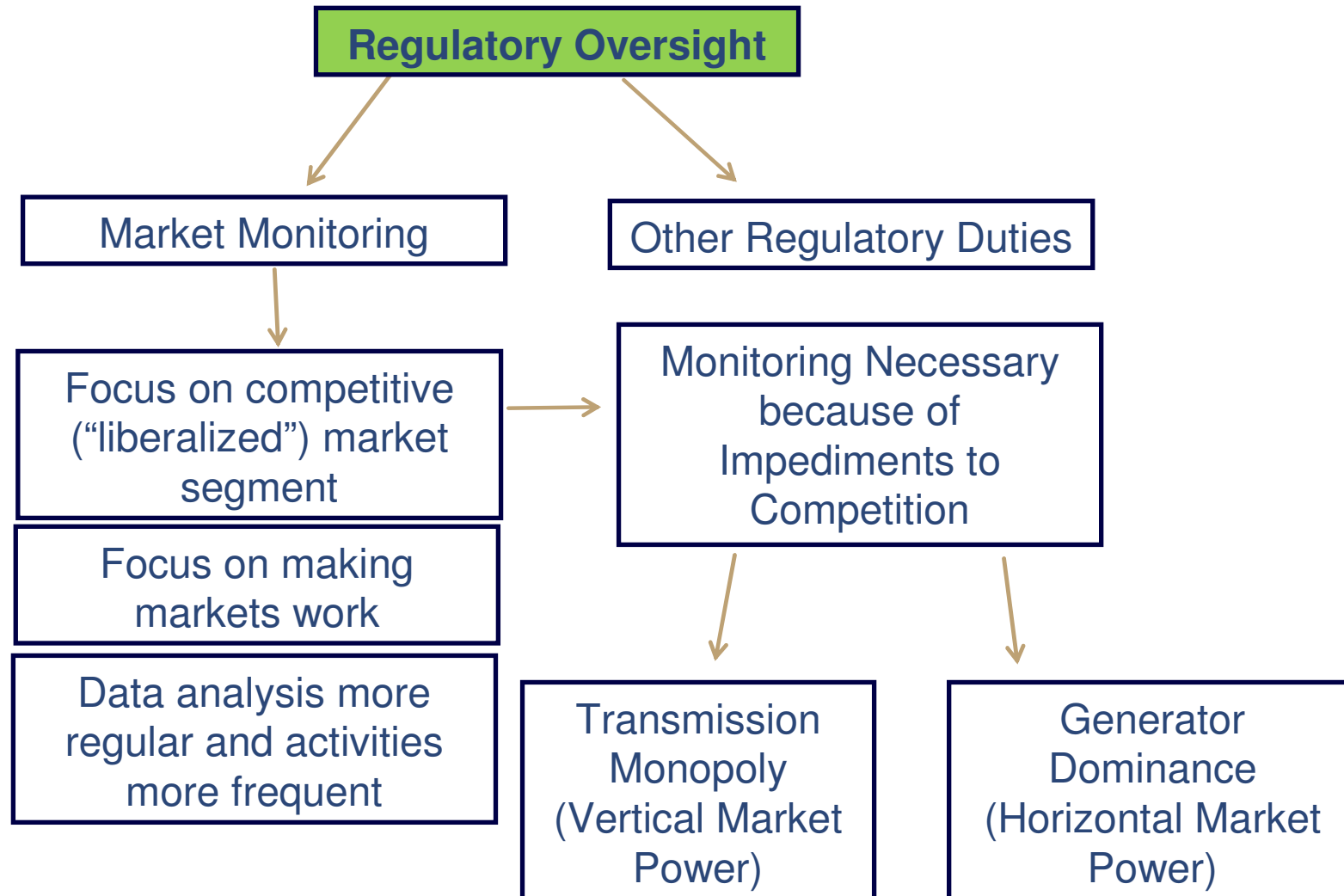
# Market Monitoring responsibilities in SEE

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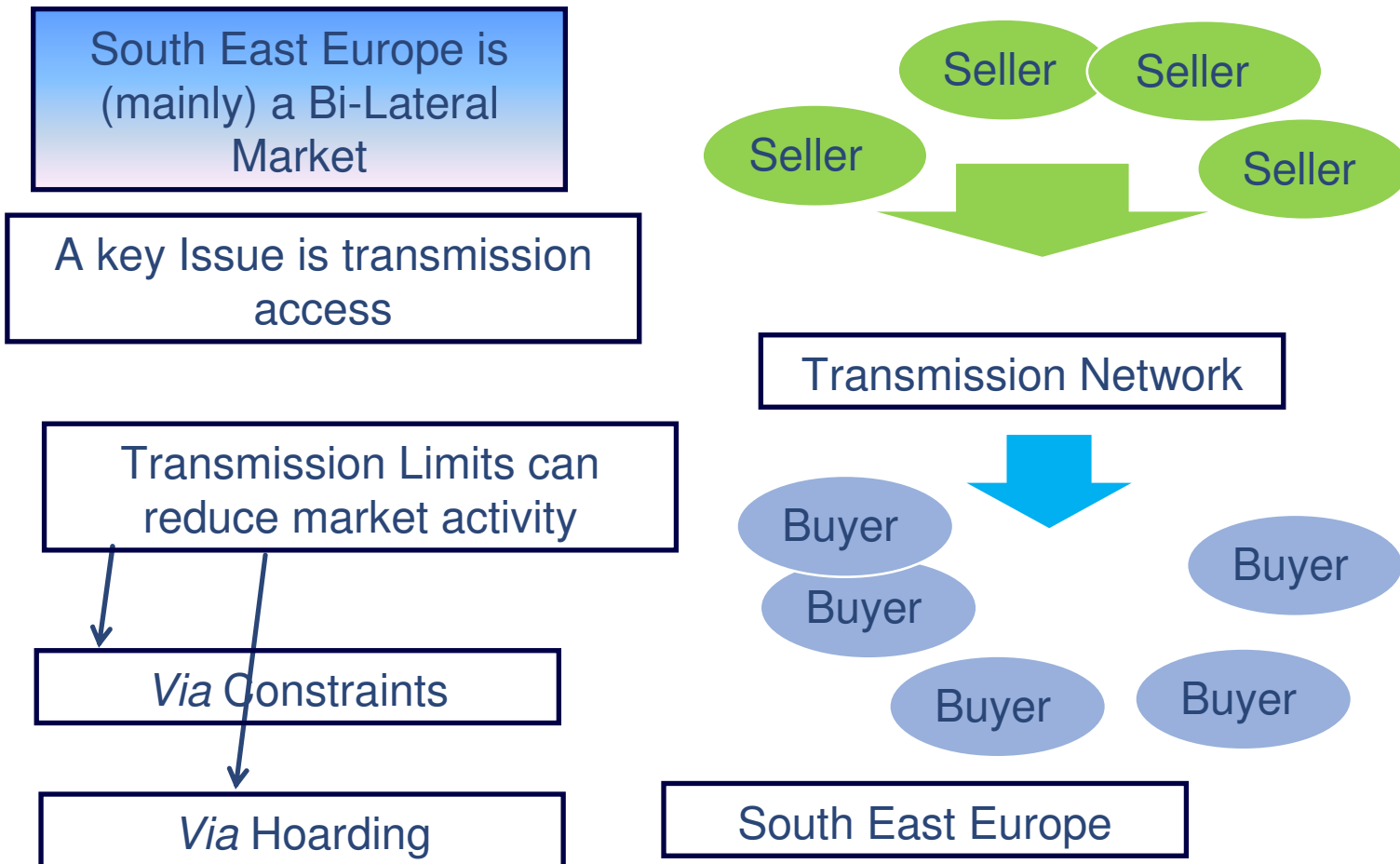
- NRAs in SEE are usually given **authority** to **track** licensed subjects' **behavior** in the electricity market and **produce reporting**, as the expert bodies for Electricity Market, **but ...**
  - NRAs are usually **not given** any **authority** to **penalize** those participants which did not 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
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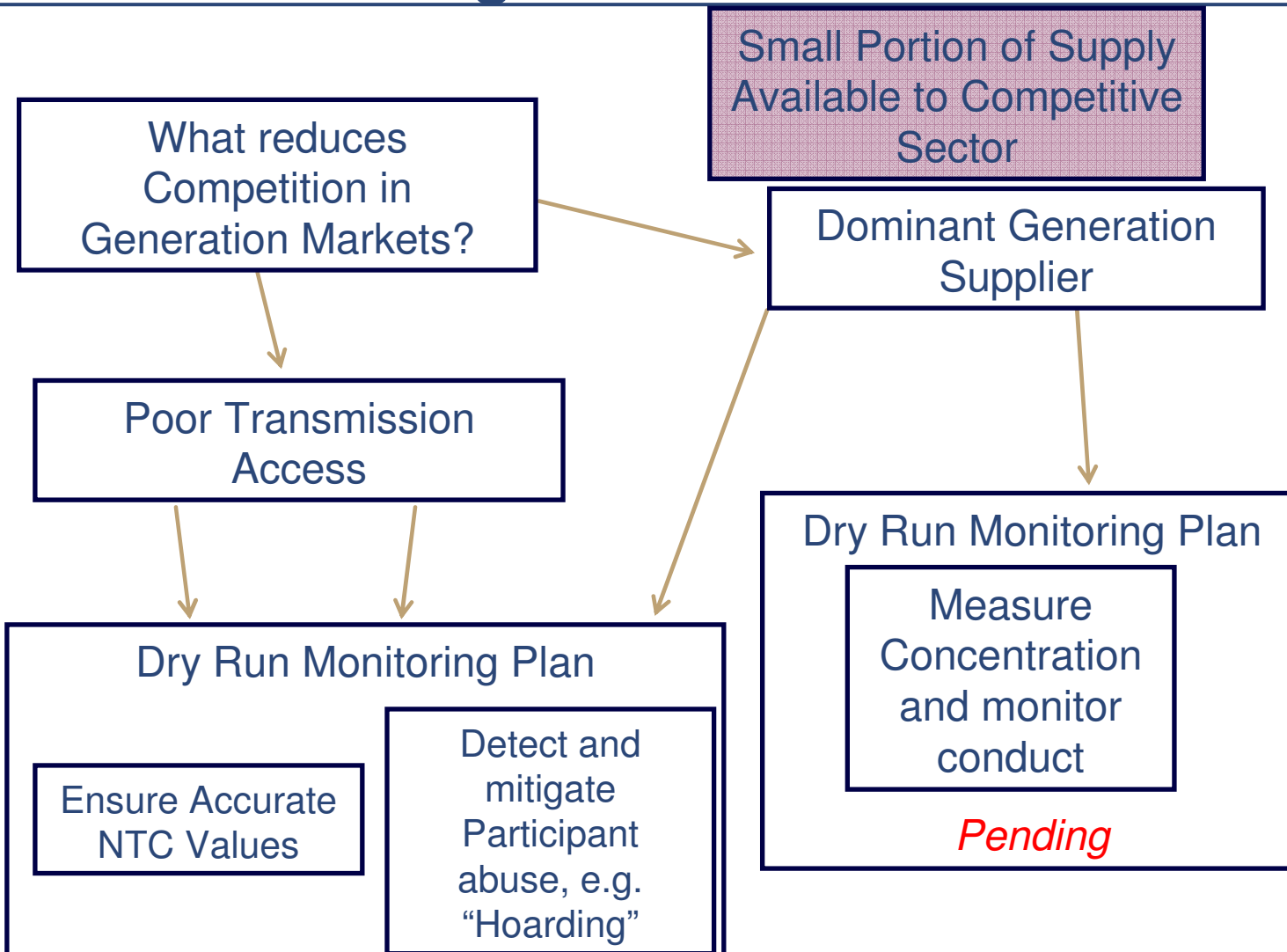
# Electricity Market Monitoring



# Market Monitoring in SEE Region



# Dry-Run Market Monitoring Project in SEE Region



# USAID Market Monitoring Project in SEE Region: History

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- **MM Project** was initiated after invitation from the 8<sup>th</sup> Athens Forum in **June 2006** to establish a **Market Monitoring Pilot Plan**, which became effective in December 2006
- 12<sup>th</sup> 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

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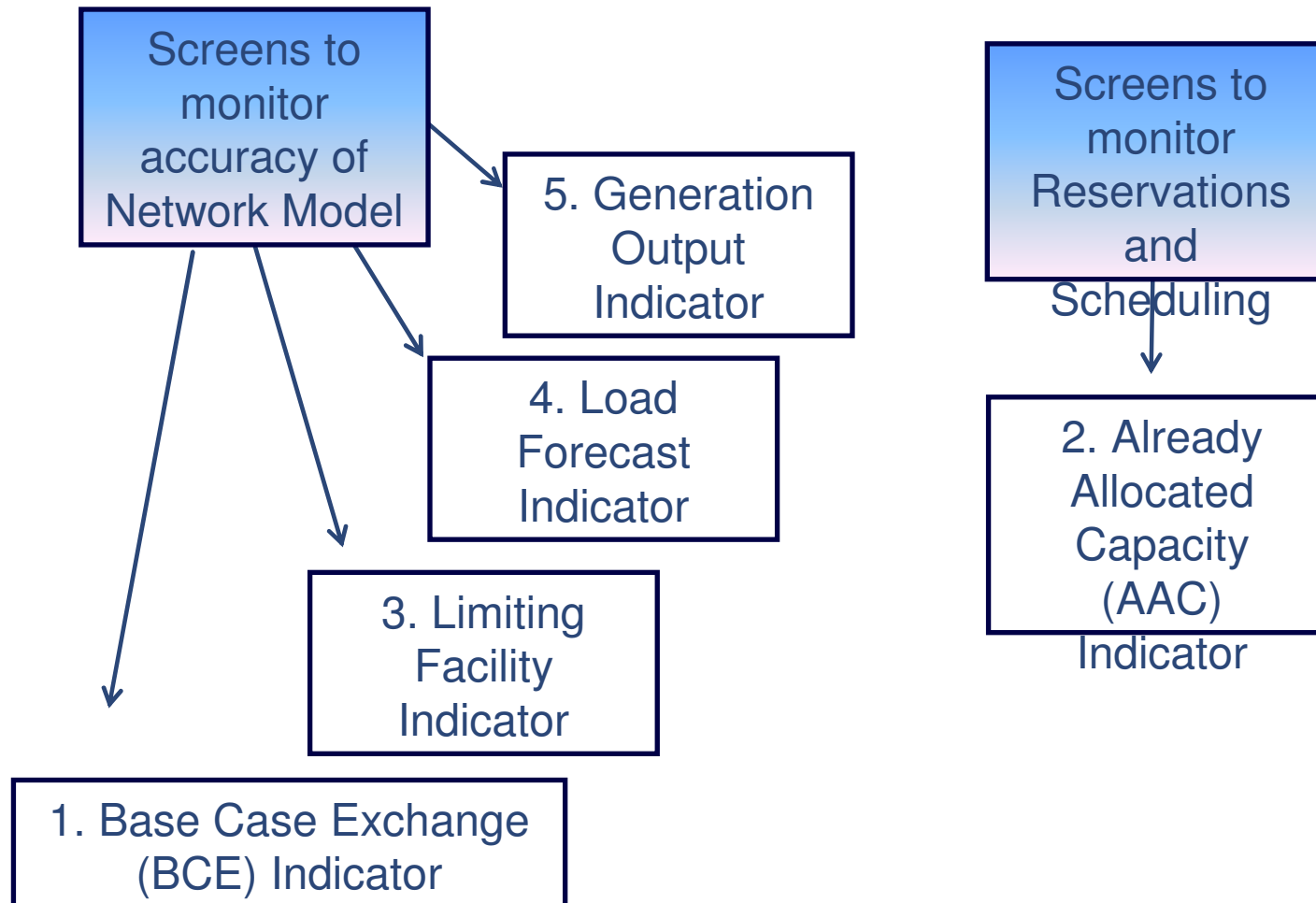
- **Very first phase:** Cross-Border Monitoring – **USAID/PE produced Quarterly Reports** and various templates due to the importance of maximum and non-discriminatory access to interconnectors
- ECRB EWG **recommended changing** Quarterly Report format and **starting more operational phase: learning phase** for regulators and **direct cooperation** between **TSOs** and **regulators** on **data collection** and **analysis**
- **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 agreed and **supported** by **ECRB EWG**, based on PE Screens proposal
  - **MM Dry-Run** has **started** successfully with Indicator 1 in **November 2009** as part of Transitional phase

# USAID Market Monitoring Project in SEE region: History

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- The **MM Project** includes the entire **8<sup>th</sup> Congestion Management Region**
- Project introduces a **single Indicator (1-7) each month** and asks **NRAs** to **request** from **TSOs** very **specific data** to **calculate very specific indicators** in order to be able to **make conclusions** regarding Indicator analysis outcomes
- **USAID MM Workshop** was organized on 18 May 2010 in ECS premises in Vienna with support of ECS
- **SEE regulators** (EWG) were **invited** to participate this Workshop in order to **discuss** MM Indicators, make **analysis**, **pose questions** and **comments** and **try to define an appropriate MM procedure** in the 8<sup>th</sup> 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 four 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 8<sup>th</sup> region
- It was also concluded that EWG will propose to and seek ECRB approval in June 2010 to draft MM Guidelines for the 8<sup>th</sup> Region based on Screens accepted at the Workshop (This task would be undertaken by USAID/Potomac Economics)





# 8<sup>th</sup> Region Market Monitoring Guidelines

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- It was concluded that, upon ECRB approval, Market Monitoring Guidelines would define the minimum set of commonly introduced MM Indicators (for cross-border issues) for all NRAs of the 8<sup>th</sup> Congestion Management Region
- At the May 2010 SEE Market Monitoring Workshop, NRAs and TSOs recommended adopting Dry-Run market Monitoring Indicator 1-4 as the basis for the 8<sup>th</sup> Region Market Monitoring Guidelines
- ECRB approved drafting of the 8<sup>th</sup> Region Guidelines and PE submitted this Draft to EWG in 2010

# 8<sup>th</sup> 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 Allowed by EWG to ECRB for 8<sup>th</sup> Region MM Guidelines. Monitors the usages of cross-border reserves to detect any hoarding (Hoarding);

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

**Screen 4:** Load Forecast Accuracy. Awaiting EWG action; Most NRAs currently able to provide data. Monitors the accuracy of load forecasts in Network Model;

**Screen 5:** Generation Forecast Accuracy. Monitors the accuracy of generation forecasts in Network Model;

**Screen 6:** TRM Screen. Monitors TRM imbalances;

**Screen 7:** Control Area Exchanges. Propose to combine into a single Indicator 6 to address imbalances for TRM accuracy.

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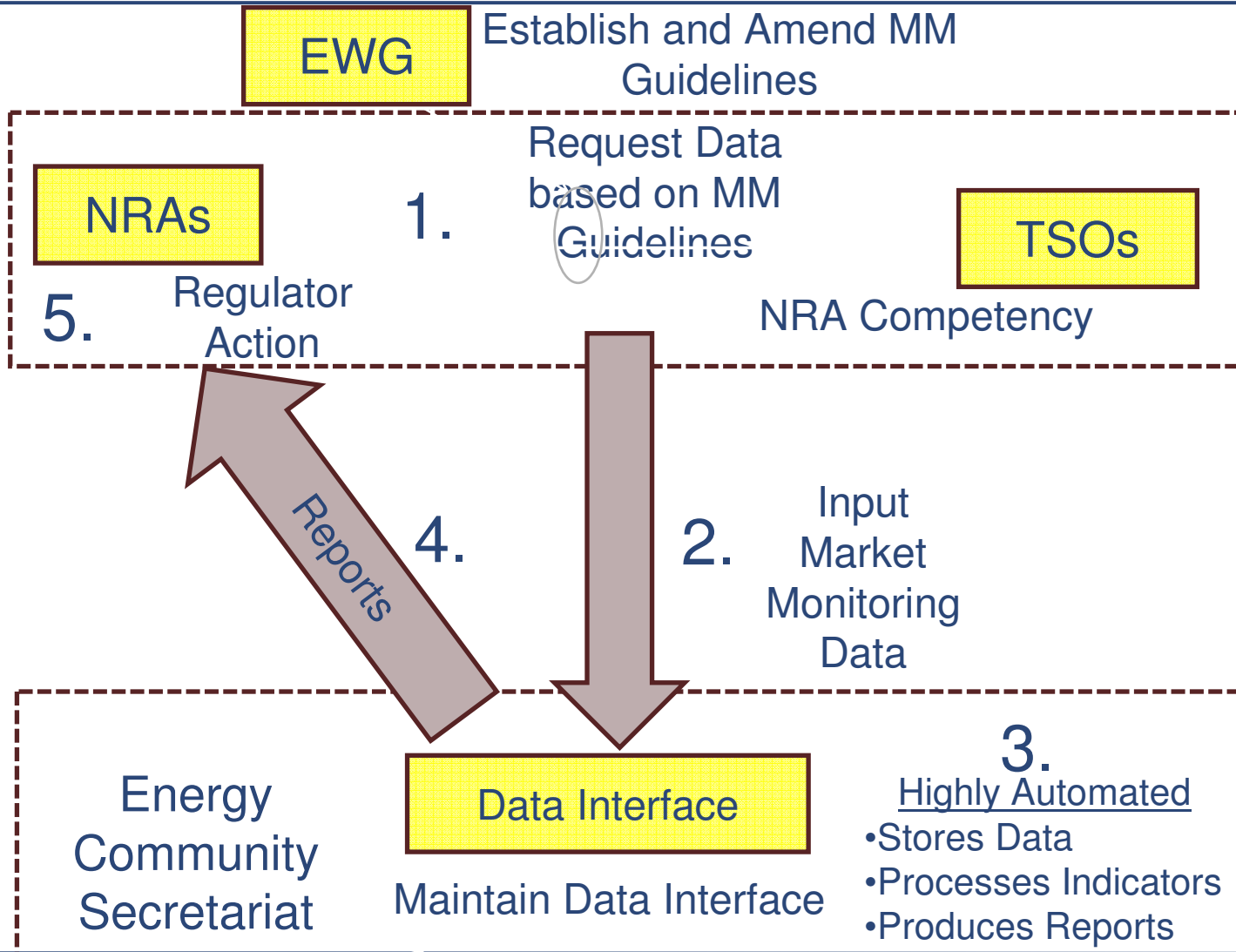
**ANNEX 4 – EXAMPLES OF REGIONAL COORDINATION**

# Web-Based Data and Reporting Interface

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- A key element of the implementation of the 8<sup>th</sup> 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 screen and threshold calculations;
  - Report screen results;
  - Report screen 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



# Regional Balancing Mechanism: Main goals

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- 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

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- **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

# ACER Electricity Regional Initiatives

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- 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 regulators
- 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 (3<sup>rd</sup> 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 8<sup>th</sup> Region included in ACER ERI Quarterly Report as Annex

IENE – Opening Up The West Balkans Energy Market, 7 March 2011



- 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

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- It is necessary to take an efficient **Step-by-step approach** when introducing WMO in the 8<sup>th</sup> 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

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- SEE Regulators - Need for WMO project in the 8<sup>th</sup> region to be fully in compliance with new developments in EU - Target Market Model, Framework Guidelines, Network Codes:
    - Main concept in line with EU developments
    - Need to adjust some details from the WB WMO Study
    - Ensure compatibility between the Consultant's/ECRB EWG and ENTSO-E RG SEE Action Plans
  - Necessary to introduce SEE TSOs in the WMO project ASAP
  - ENTSO-E RG SEE Working Program 2011 presented to ECRB, which is approved by ENTSO-E and fully harmonized with EU TMM
  - Need for a realistic WMO Regional Action Plan which is fully harmonized between the Regulators (ECRB) and SEE TSOs (ENTSO-E RG SEE) and in compliance with EU TMM
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## WB WMO Study: Implementation phase

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- ECRB EWG tasked ECRB EWG Chairman and ENTSO-E RG SEE Convenor to redraft WMO Regional Action Plan Draft in order to harmonize it with ENTSO-E RG SEE WP 2011 and EU Streamlining activities:
  - SEE TSOs already approved it through their WP 2011; RG SEE Convenor circulated it to TSOs representatives to approve it officially as well
  - ECRB should approve it from regulatory side

## WB WMO Study: Implementation phase

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- CPs should be responsible for elaborating **National Action Plans** (by Ministries, TSOs, NRAs and Power Exchanges, if applicable), based on Regional Action Plan
- Any guidance received from PHLG and Consultants' proposal for National Action Plans is welcome
- **2<sup>nd</sup> 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: Implementation phase

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- **All EWG members supported SEE RAP Draft** at the 20<sup>th</sup> EWG meeting (April 2011) with minor changes which were introduced in the final RAP Draft
- 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: Note included in SEE RAP
- Decision: **Moldova** and **Ukraine** to be **involved in the gap analysis** to be produced additionally by the Consultants - to **include Moldova** and **Ukraine gap analysis** in the **WMO Study**, using remaining funds

## SEE RAP: Finalization

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- **Focus Team** provided Regional Action Plan (RAP) Draft after the 20<sup>th</sup> 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 and forwarded it to the PHLG for further consideration
- **Joint task** of SEE Regulators and TSOs: 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

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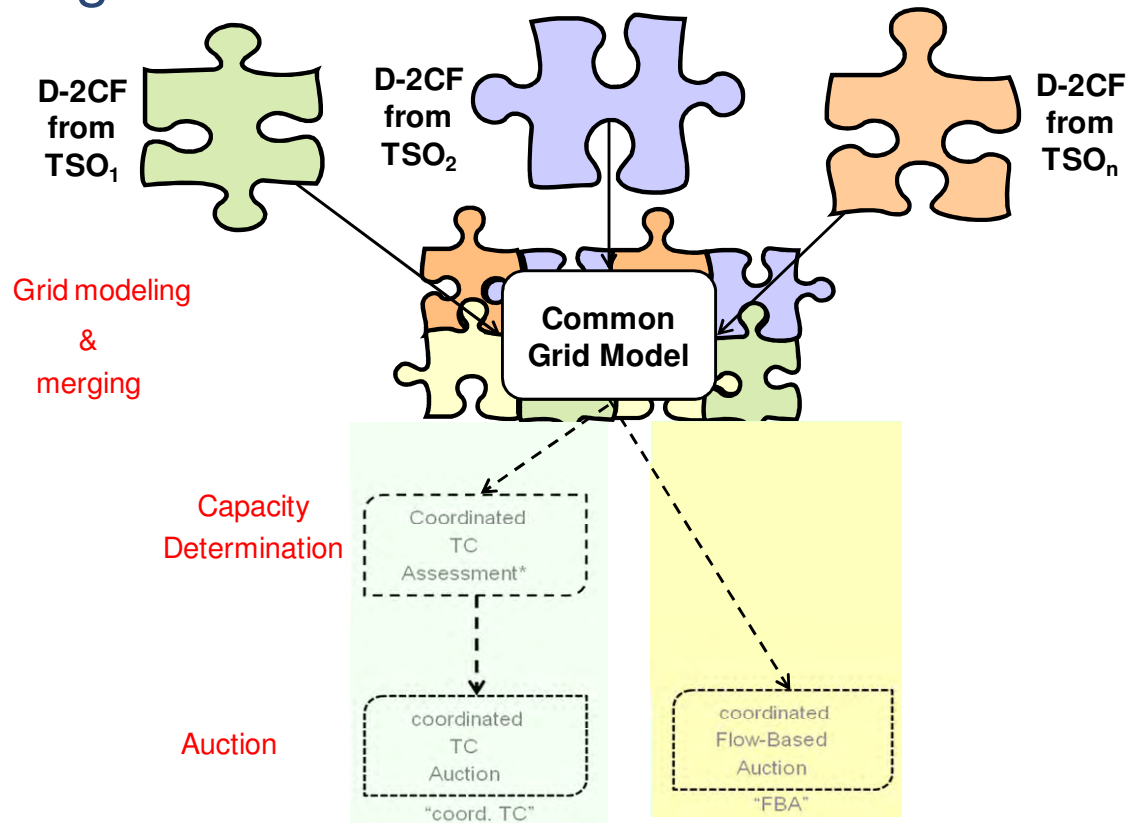
- **ACER Coordination Group for ERI:** ECRB represented unofficially at these meetings
- **Positive signal:** The **8<sup>th</sup> Region included** in the ERI Draft Agenda meetings under topic **Revision of consistency among Regional Action Plans**
- **Required presentation** of the **Revised Regional Action Plan for SEE**
- ECRB-S has submitted SEE RAP Draft to ACER for their evaluation (17 June 2011) before the 17<sup>th</sup> ECRB meeting
  - o Presentation of required revised SEE RAP (coherence between 8 E RIs)



- **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



- **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)

# Forward Capacity Market

MONTHLY ALLOCATION in SEE (September'10)



# Forward Capacity Market

MONTHLY ALLOCATION in SEE (September'11)



# Forward Capacity Market

MONTHLY ALLOCATION in SEE (PLAN MID 2012)



- **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

DAILY (D-1) ALLOCATION in SEE (September'10)



Legend:

-  EA Joint
-  EA Split
-  EA Split - one TSO



# Day-Ahead Market - Explicit

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

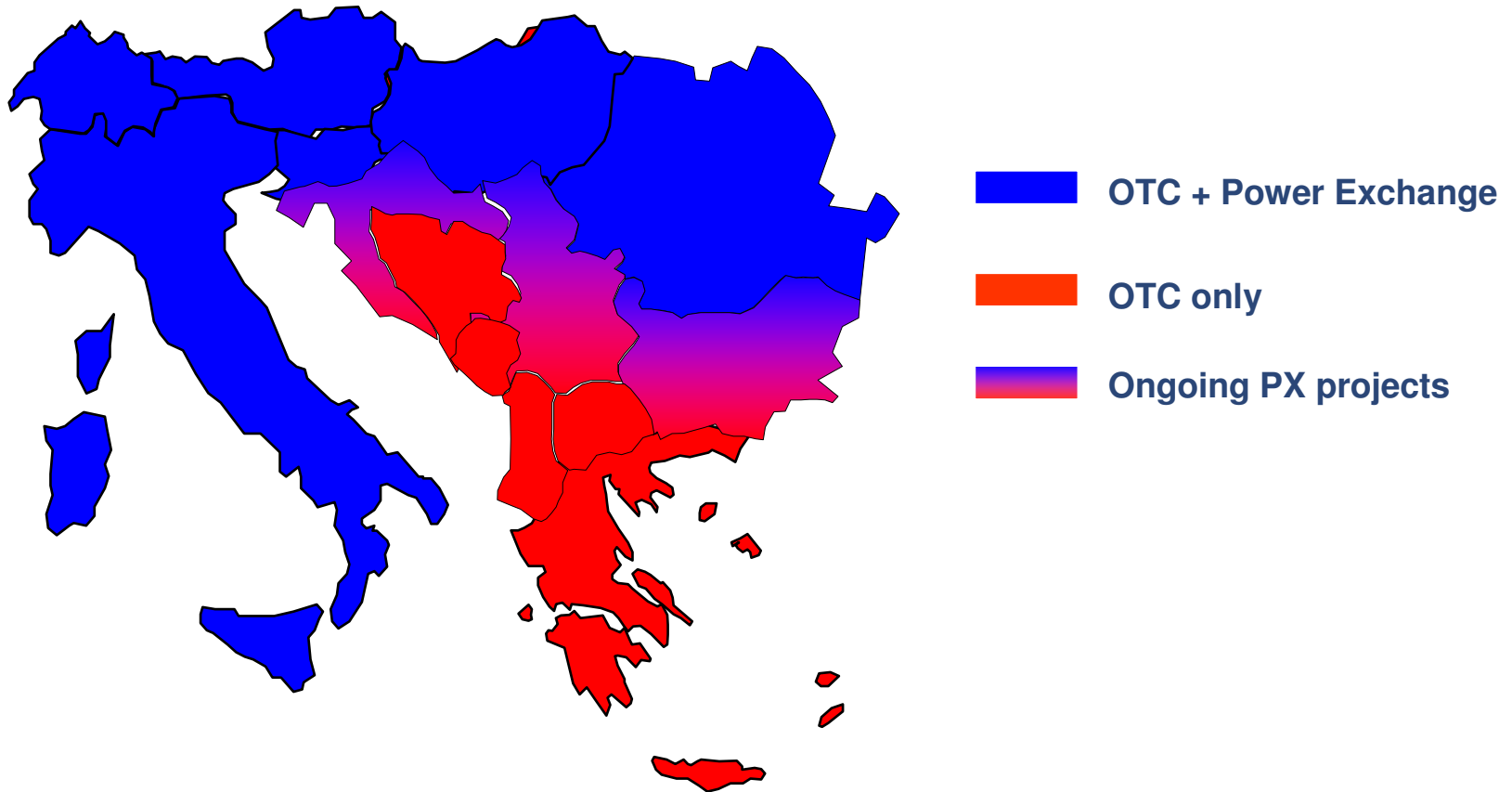


# Day-Ahead Market - Explicit

DAILY (D-1) ALLOCATION in SEE (PLAN MID 2012)



## ➤ Ongoing initiatives



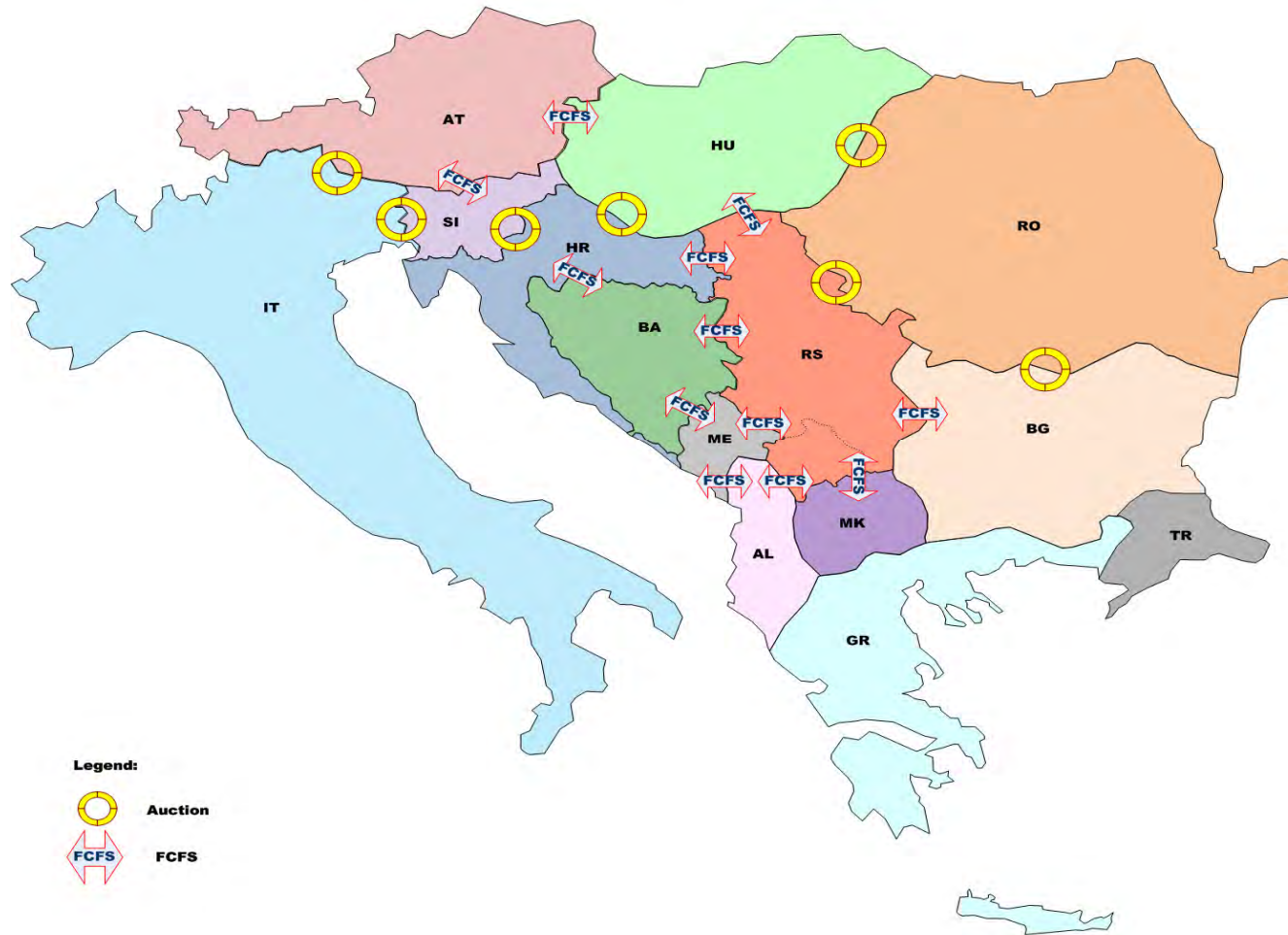
- **Common regional solution for XB Intraday Market**
  - First step as simple as possible (FCFS or pro-rata)
  - Interim step of sub-regional integration before implementing an entirely regional solution (market integration would start with a nucleus consisting of two to three jurisdictions)
  - Final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

INTRADAY in SEE (2011)





## INTRADAY in SEE (PLAN MID 2012)



- **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
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