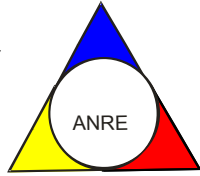




**ROMANIAN ENERGY REGULATORY AUTHORITY**  
**ELECTRICITY MARKET DEPARTMENT**



**REPORT ON MONITORING RESULTS OF THE**  
**ELECTRICITY MARKET**  
**APRIL 2008**

*- This document represents an unauthorised translation of the Romanian document -*

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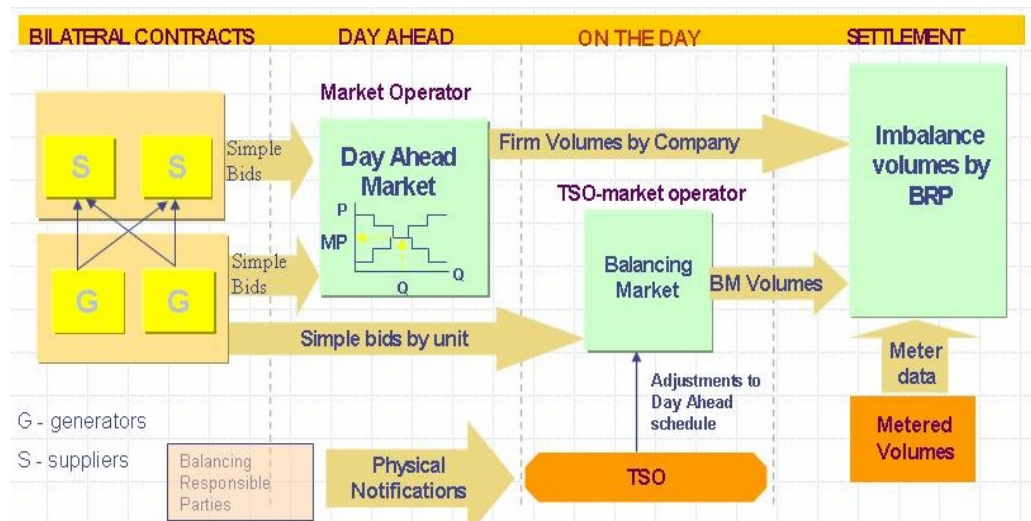
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## I. MAIN EVENTS IN THE DEVELOPMENT OF THE ROMANIAN ELECTRICITY MARKET

- **GD 365/1998** – vertically integrated monopol – RENEL – was split in. Separated distribution and supply companies (SC Electrica SA) and generation companies (SC Termoelectrica SA and SC Hidroelectrica SA) were established within a new company - CONEL SA. Two other electricity generators (SN Nuclearelectrica SA and RAAN) were separately established;
- transmission, system services and market administration were separately organised, within CONEL SA;
- the relationships between parties within the electricity sector were settled based on contracts;
- **GD 122/2000** – electricity market opens at 10%;
- **GD 627/2000** – CONEL holding is dissolved;
- **September 2000** – launch of the compulsory electricity spot market in Romania, administrated by OPCOM and organized based on pool model;
- **GD 1342/2001** – SC Electrica SA splits in 8 subsidiaries for electricity distribution and supply;
- **GD 1524/2002** – SC Termoelectrica SA reorganizes in several separate legal entities for generation;
- **July 2005** – launch of the new market model, based on:
  - voluntary spot market, with both sides offers and bilateral settlement;
  - compulsory balancing market, with TSO as single counterparty;
  - financial responsibilities of the balancing are allocated to the BRP;
- **GD 644/2005** – electricity market opens at 83.5%;
- **November 2005** – launch of the green certificates market;
- **December 2005** – launch of the centralized market for bilateral contracts;
- **March 2007** – launch of the centralized market for partially standardized bilateral contracts with continuous negotiation;
- **GD 638/2007** – fully opening of electricity and gas markets;
- **July 2007** – rules for capacity market have been established.

## II. WHOLESALE ELECTRICITY MARKET

### 1. Structure of the wholesale electricity market



## 2. Participants on the wholesale electricity market

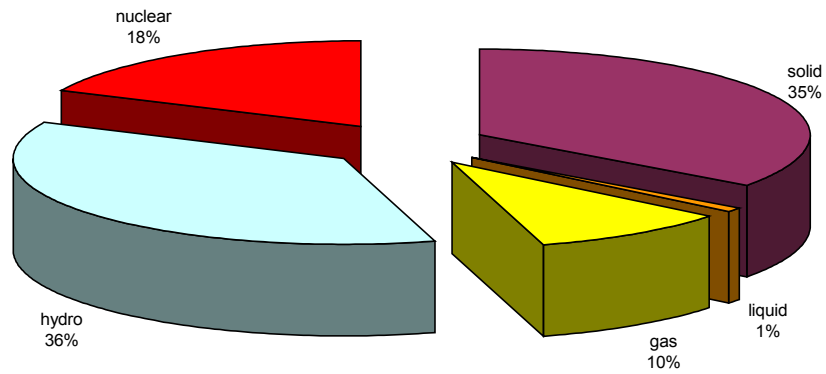
The market participants\* in April 2008 are presented below split into categories:

| No.   | Name   | Comments   | No.   | Name                                |
|---|--|--|---|-------------------------------------|
| <b>A Electricity generators operating dispatching units</b> |  |  | <b>F Electricity Suppliers acting exclusively on the wholesale market</b> |                                     |
| 1   | SC CET Bacău SA                                    |  | 1   | SC Atel Energy Romania SRL          |
| 2   | SC CET Braşov SA                                   |  | 2   | SC CEZ Trade Romania SRL            |
| 3   | SC CET Govora SA                                   |  | 3   | SC EFT Romania SRL                  |
| 4   | SC CET Iaşi SA                                     |  | 4   | SC Elizor Prest SRL                 |
| 5   | SC CET Oradea SA                                   |  | 5   | SC Encaz SRL                        |
| 6   | SC Electrocentrale Bucureşti SA                    |  | 6   | SC Energy Market Consulting SRL     |
| 7   | SC Electrocentrale Galaţi SA                       |  | 7   | SC E.ON Energy Trading AG           |
| 8   | SC Dalkia Termo Prahova SRL                        |  | 8   | SC Ezpada SRL                       |
| 9   | SNP Petrom Sucursala Petrobrazii                   |  | 9   | SC Grivco SA                        |
| 10  | SC Termica SA Suceava                              |  | 10  | SC Korlea Invest SRL                |
| 11  | SC Termoelectrica SA                               |  | 11  | SC Re Energie SRL                   |
| 12  | SC Termoficare 2000 SA Piteşti                     |  | 12  | SC Romelectro SA                    |
| 13  | SC Termon Oneşti SA                                |  | 13  | SC Sempra Energy Europe Ltd         |
| 14  | SC Uzina Termică Giurgiu SA                        |  | 14  | SC Statkraft Romania SRL            |
| 15  | SN Nuclearelectrica SA                             |  | 15  | SC Ten Transilvania SRL             |
| 16  | SC CE Rovinari SA                                  |  | <b>G Electricity Suppliers</b>  |                                     |
| 17  | SC CE Turceni SA                                   |  | 1   | SC Alro SA                          |
| 18  | SC CE Craiova SA                                   |  | 2   | SC Also Energ SA                    |
| 19  | SC CET Arad SA                                     | Generators acting also as suppliers on the competitive market                                      | 3   | SC Arelco Distribuție SRL           |
| 20  | SC Electrocentrale Deva SA                         |  | 4   | SC Beny Alex SRL                    |
| 21  | SC Hidroelectrica SA                               |  | 5   | SC Biol Energy SRL                  |
| 22  | RAAN   |  | 6   | SC Buzmann Industries SRL           |
| <b>B Transmission System Operator</b>                       |  |  | 7   | SC EFE Energy SRL                   |
| 1   | CN TRANSELECTRICA SA                               | Balancing Market Operator  | 8   | SC EGL Gas & Power Romania SA       |
| <b>C DAM Operator</b>                                       |  |  | 9   | SC Elcomex EN SRL                   |
| 1   | SC OPCOM SA  | Operator of the Green Certificates Market, Bilateral Contracts Market and Settlement Administrator | 10  | SC Electrica SA                     |
| <b>D Distribution network operators</b>                     |  |  | 11  | SC Electricom SA                    |
| 1   | SC CEZ Distribuție SA                              | Operators of the distribution network  | 12  | SC Electromagnetica SA              |
| 2   | SC ENEL Distribuție Banat SA                       |  | 13  | SC Energy Holding SRL               |
| 3   | SC ENEL Distribuție Dobrogea SA                    |  | 14  | SC Energy Network SRL               |
| 4   | SC E.ON Moldova Distribuție SA                     |  | 15  | SC Enex SRL                         |
| 5   | SC FDFEE Muntenia Sud SA                           |  | 16  | SC Ennet Grup SRL                   |
| 6   | SC FDEE Electrica Distribuție Muntenia Nord SA     |  | 17  | SC Enol Grup SA                     |
| 7   | SC FDEE Electrica Distribuție Transilvania Sud SA  |  | 18  | SC EURO-PEC SA                      |
| 8   | SC FDEE Electrica Distribuție Transilvania Nord SA |  | 19  | SC Fidelis Energy SRL               |
| <b>E Incumbent suppliers</b>                                |  |  | 20  | SC General Com Invest SRL           |
| 1   | SC CEZ Vanzare SA                                  | Incumbent suppliers acting also as suppliers on the competitive market                             | 21  | SC Gevco SRL                        |
| 2   | SC ENEL Energie SA                                 |  | 22  | SC Green Energy SRL                 |
| 3   | SC E.ON Moldova Furnizare SA                       |  | 23  | SC Hidroconstructia SA              |
| 4   | SC FDFEE Muntenia Sud SA                           |  | 24  | SC ICCO Electric SRL                |
| 5   | SC FFEE Electrica Furnizare Muntenia Nord SA       |  | 25  | SC ICPE Electrocond Technologies SA |
| 6   | SC FFEE Electrica Furnizare Transilvania Sud SA    |  | 26  | SC Interagro SA                     |
| 7   | SC FFEE Electrica Furnizare Transilvania Nord SA   |  | 27  | SC Luxten LC SA                     |
|   |  |  | 28  | SC Petprod SRL                      |
|   |  |  | 29  | SC Tinmar Ind SA                    |
|   |  |  | 30  | SC Total Electric Oltenia SA        |
|   |  |  | 31  | SC Transenergo Com SA               |
|   |  |  | 32  | SC UCM Energy SRL                   |

\*) The electricity market participants report to ANRE technical/commercial data according to the *Methodology of wholesale electricity market monitoring for assessing the competition level on market and preventing the abuse of dominant position*, approved by ANRE Order no. 35/2006. The table does not include the Balancing Responsible Parties (BRP). The BRP updated list is published on the Balancing Market Operator website - [www.ope.ro](http://www.ope.ro).

### 3. Generation structure of National Energy System on resources types

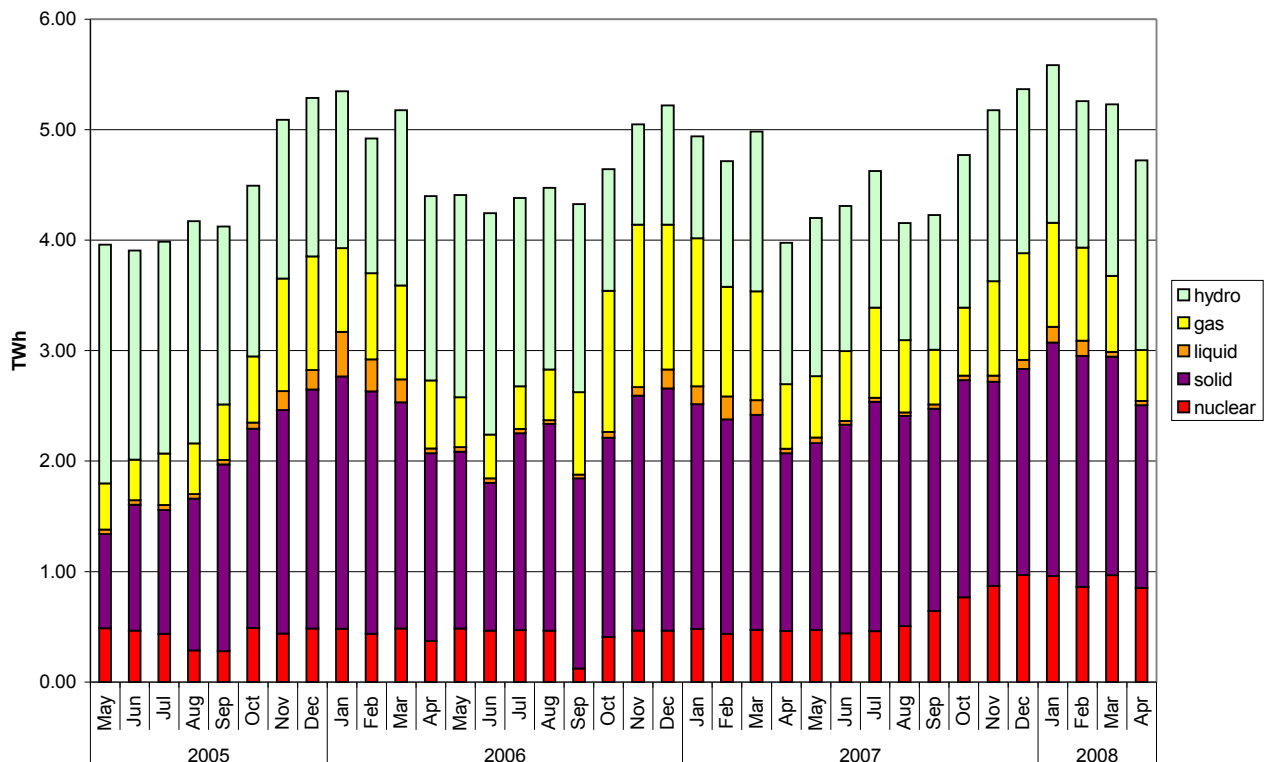
Electricity structure by primary sources (delivered by generators with dispatchable units)  
- April 2008 -



Source: Monthly reports of generators – processed by MG

The evolution of delivered electricity structure, starting with May 2005, is the following:

Evolution of electricity delivered by generators with dispatchable units by primary sources



Source: Monthly reports of generators – processed by MG

The following table presents the main data regarding the physical balance of electricity for April 2008 and January-April 2008, compared with data for similar period of time of 2007:

| No. | Indicator                                      | UM   | April 2007 | April 2008 | %           | Jan-Apr 2007 | Jan-Apr 2008 | %           |
|-----|--|------|------------|------------|-------------|--------------|--------------|-------------|
| 0   | 1  | 2    | 3          | 4          | $5=4/3*100$ | 6            | 7            | $8=7/6*100$ |
| 1   | Generated electricity                          | TWh  | 4.34       | 5.11       | 117.80      | 20.44        | 22.67        | 110.94      |
| 2   | Delivered electricity                          | TWh  | 3.98       | 4.72       | 118.81      | 18.62        | 20.80        | 111.72      |
| 3   | Import   | TWh  | 0.19       | 0.05       | 23.96       | 0.25         | 0.26         | 104.77      |
| 4   | Export   | TWh  | 0.16       | 0.43       | 266.74      | 1.25         | 2.22         | 177.34      |
| 5   | Internal consumption                           | TWh  | 4.01       | 4.34       | 108.38      | 17.61        | 18.84        | 106.96      |
| 6   | Electricity supplied on the regulated market   | TWh  | 1.72       | 1.86       | 108.1       | 7.57         | 8.12         | 107.3       |
| 6.1 | Of which electricity supplied to households    | TWh  | 0.75       | 0.83       | 110.7       | 3.26         | 3.57         | 109.5       |
| 7   | Electricity supplied on the competitive market | TWh  | 1.71       | 1.86       | 108.8       | 7.10         | 7.56         | 106.5       |
| 8   | Transmission – Injection component             | TWh  | 4.02       | 4.61       | 114.6       | 18.25        | 20.50        | 112.29      |
| 9   | Transmission – Extraction component            | TWh  | 4.03       | 4.69       | 116.31      | 18.34        | 20.76        | 113.18      |
| 10  | System services                                | TWh  | 4.11       | 4.69       | 114.14      | 18.60        | 20.76        | 111.58      |
| 11  | Actual transmission grid losses                | TWh  | 0.06       | 0.08       | 145.31      | 0.26         | 0.34         | 133.83      |
| 12  | Heat generated for delivery                    | Tcal | 1283.06    | 1279.84    | 99.75       | 8769.66      | 9280.91      | 105.83      |
| 13  | Heat in co-generation                          | Tcal | 1029.90    | 1089.25    | 105.76      | 7389.05      | 7514.46      | 101.70      |

Note: 1. Data shown in the table neither includes the energy produced by the generators who do not own dispatchable units nor the energy delivered to the consumers directly connected to the power plants.

2. The imported/exported quantities do not comprise the unscheduled crossborder exchange with neighbor countries for ensuring the balance of the national energy system.

3. The electricity considered for transmission tariff – injection component include neither the electricity sold by generators for covering the transmission losses nor the electricity imported by competitive suppliers and used for the same purpose by Transelectrica, due to the exceptions applied for G payment obligations.

#### 4. Transactions structure on the wholesale electricity market

The size of wholesale market depends on the sum of all transactions performed by the market players, exceeding the quantities physically transmitted from generation to consumption; the total transactions include also resale transactions made in order to match the contractual obligations and to obtain financial benefit.

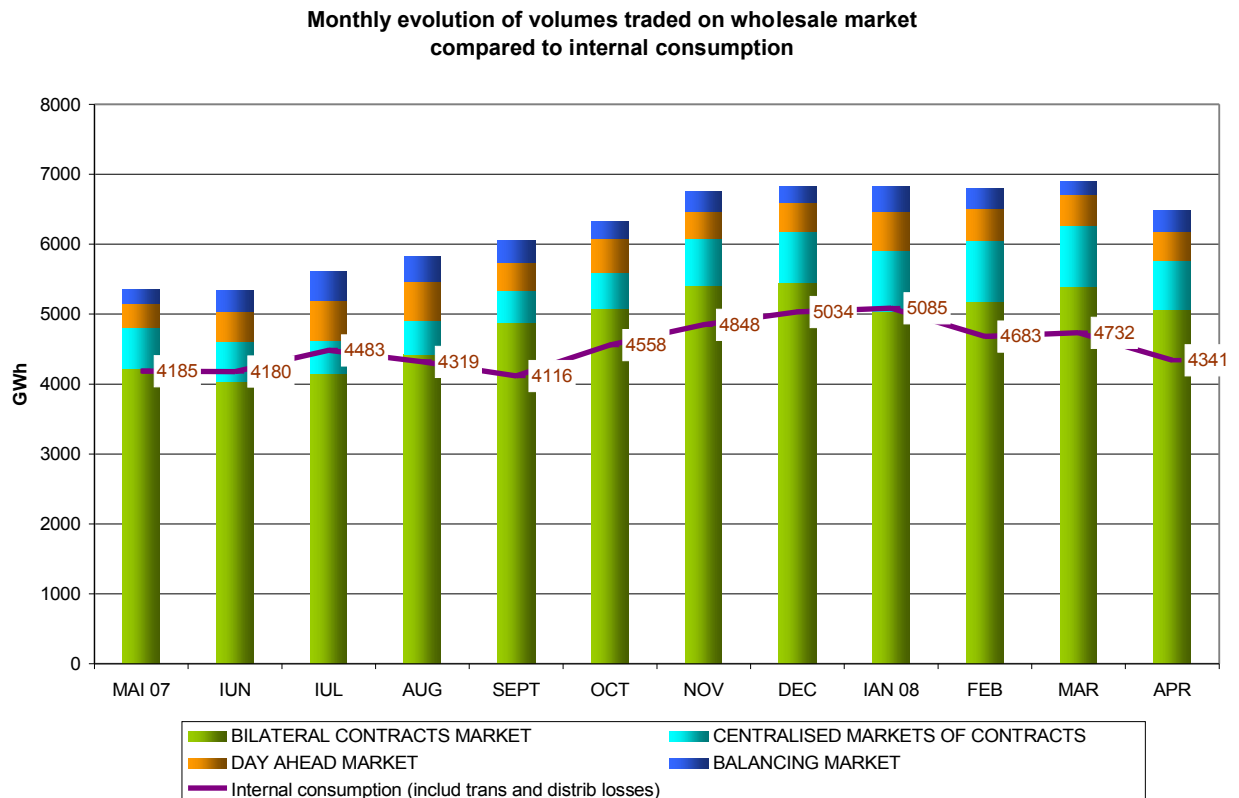
Therefore, the wholesale electricity market includes: regulated contracts and bilateral negotiated contracts between generators and suppliers, regulated contracts for covering the network losses, bilateral negotiated contracts generator-generator and supplier-supplier, as well as contracts concluded on centralized markets: CMBC (centralized market of bilateral contracts), CMBC-CN (centralized market of partially standardised bilateral contracts, with continuous negotiation) and on the Power floor of RCE (Romanian Commodities Exchange), transactions on DAM (day-ahead market) and on BM (Balancing Market).

The volumes traded on each type of contracts and on the main components of the wholesale market are presented in the table below for April 2008 compared to the volumes of April 2007:

| TRANSACTIONS ON THE WHOLESALE MARKET  | UM  | April 2007  | April 2008  |
|---|-----|-------------|-------------|
| 0   | 1   | 2           | 3           |
| <b>1. BILATERAL CONTRACTS' MARKET</b>                                       | GWh | <b>4134</b> | <b>5068</b> |
| 1.1. Sales on regulated contracts   | GWh | 2213        | 2220        |
| 1.2. Sales on negotiated contracts *  | GWh | 1921        | 2848        |
| 1.3. Export   | GWh | 161         | 429         |
| <b>2. CONTRACTS ON CENTRALISED MARKETS</b>                                  | GWh | <b>588</b>  | <b>697</b>  |
| <b>3. DAY AHEAD MARKET</b>  | GWh | <b>374</b>  | <b>414</b>  |
| <b>4. BALANCING MARKET (all the transactions)</b>                           | GWh | <b>235</b>  | <b>303</b>  |
| 4.1. Upward   | GWh | 68          | 125         |
| 4.2. Downward   | GWh | 167         | 178         |
| <b>INTERNAL CONSUMPTION (includes distribution and transmission losses)</b> | GWh | <b>4005</b> | <b>4341</b> |

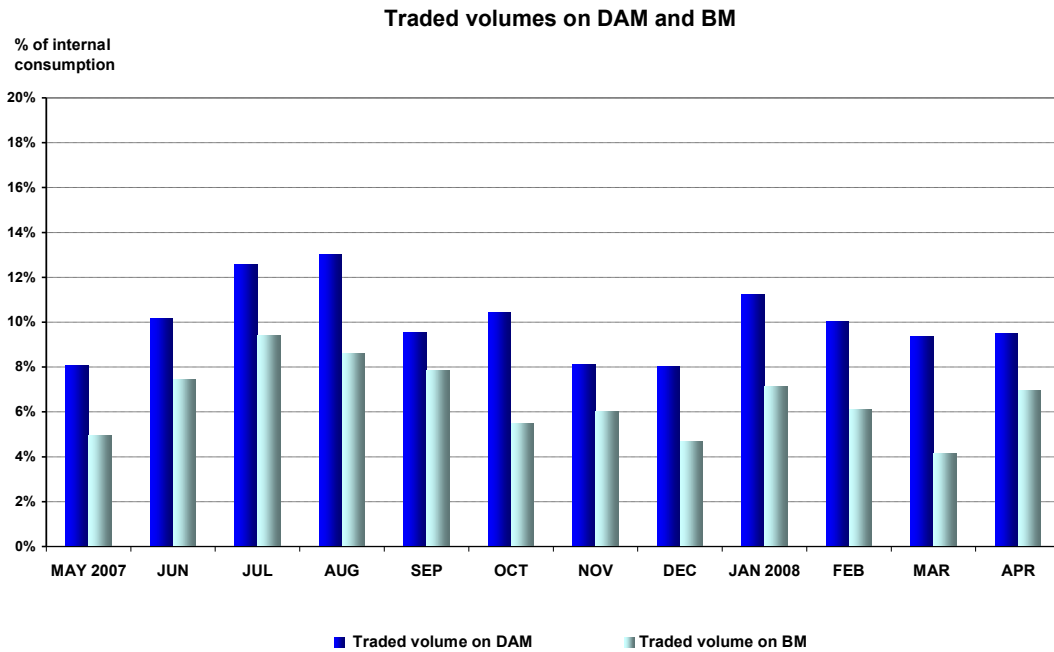
\* the sales to final consumers are not included

The evolution of the relation between the volumes sold on each market and the estimated internal consumption, for May 2007 – April 2008, is presented below:



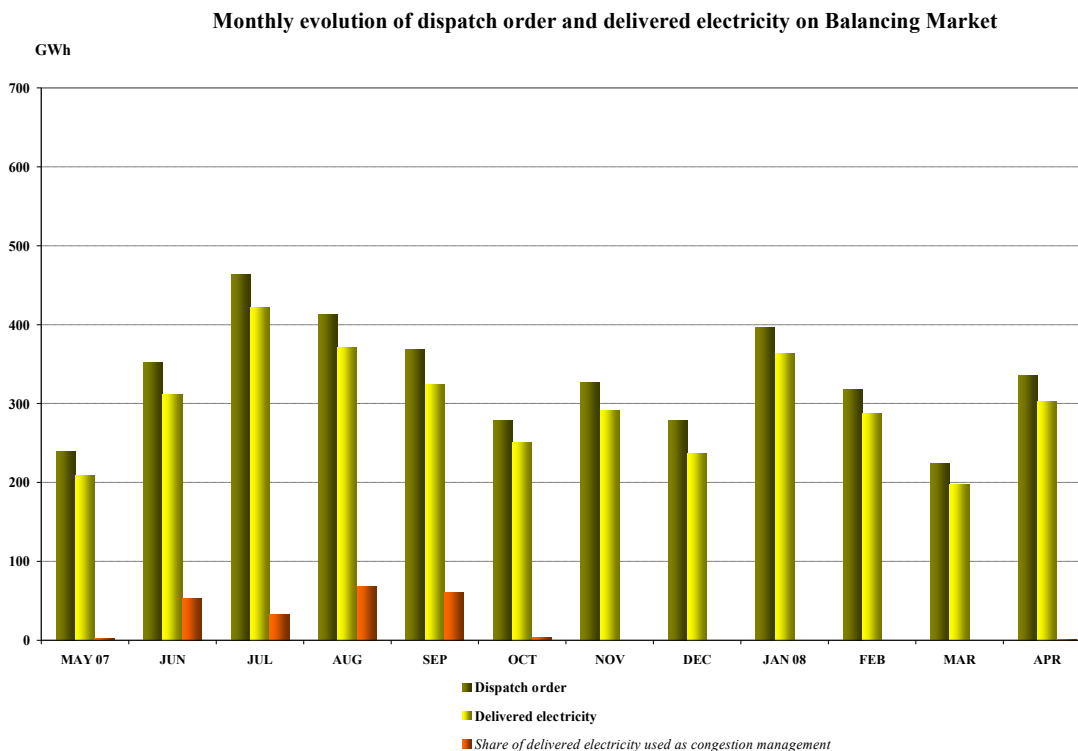
Source: Monthly reports of wholesale market participants, SC Opcom SA and CN Transelectrica SA – processed by MG

The following graph presents the evolution on 12 month-period of volumes traded on DAM, compared to volumes traded on BM (expressed as percentages from the internal consumption) in order to evaluate the relationship between those two types of traded volumes.



Source: Monthly reports of SC Opcom SA and CN Transelectrica SA – processed by MG

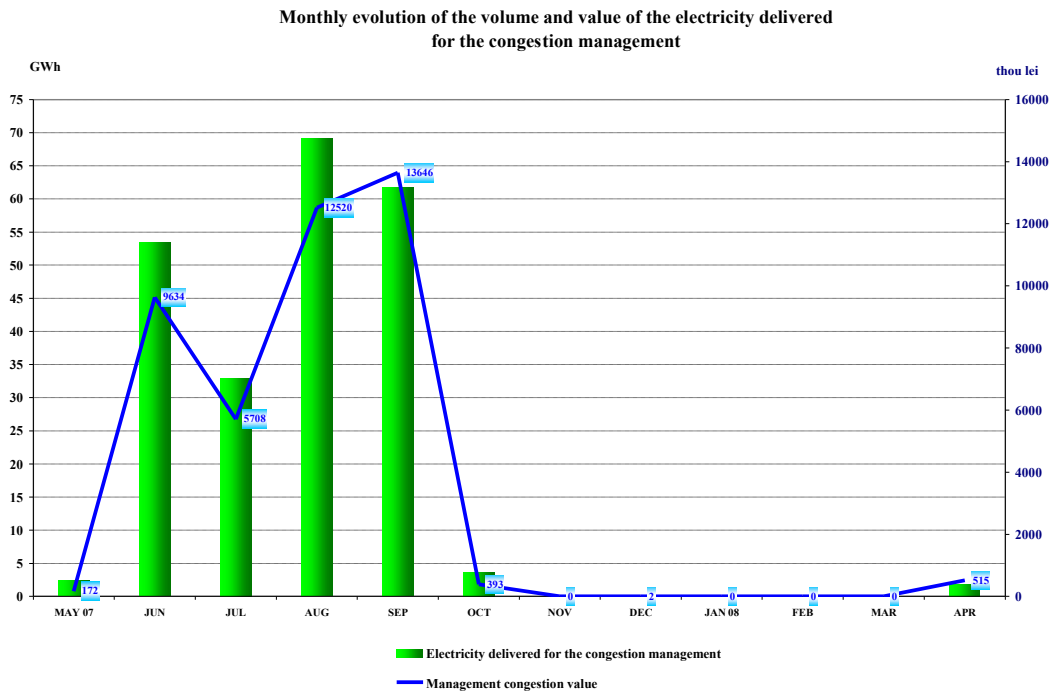
Balancing electricity is determined by the dispatch orders (accepted offers) received by generators. After settlement, the actual electricity delivered by generators on the balancing market is determined based on the measured (approved) values; the relation between the accepted and delivered electricity during May 2007 – April 2008 is presented in the following graph:



Source: Monthly reports of CN Transelectrica SA – processed by MG

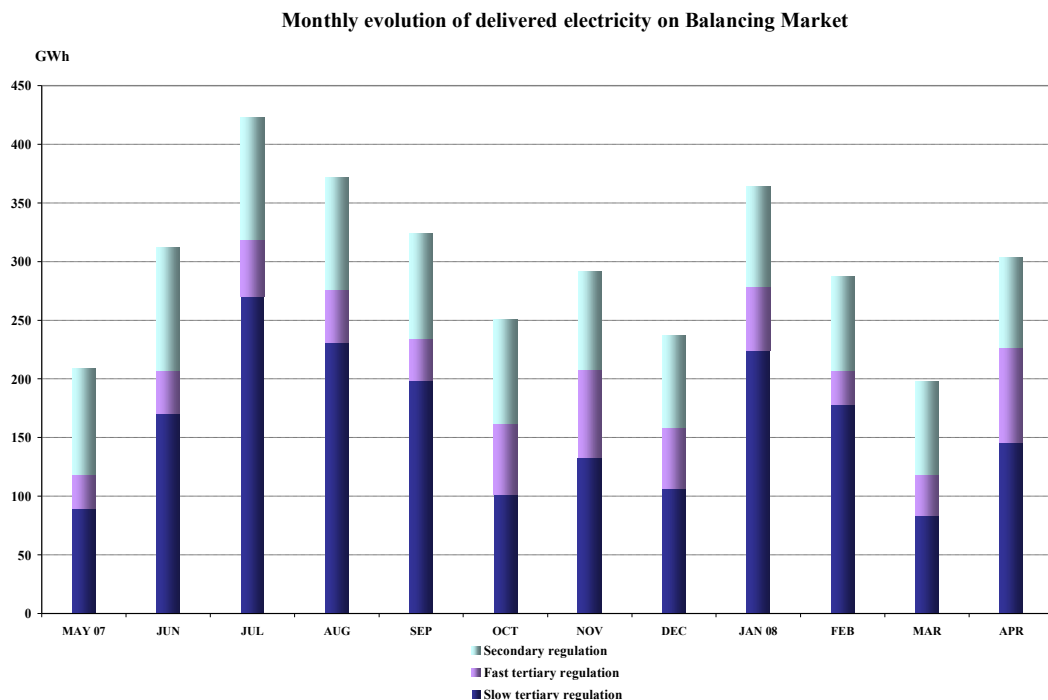
The above graph also presents the energy used for congestion management compared to the volumes traded on BM; this energy represents the quantity purchased by the transmission operator on the balancing market in order to solve the congestions appeared in the transmission network.

The following graph presents the monthly evolution and the values of transactions made by CN Transelectrica SA for the electricity used for congestion management, starting with May 2007.



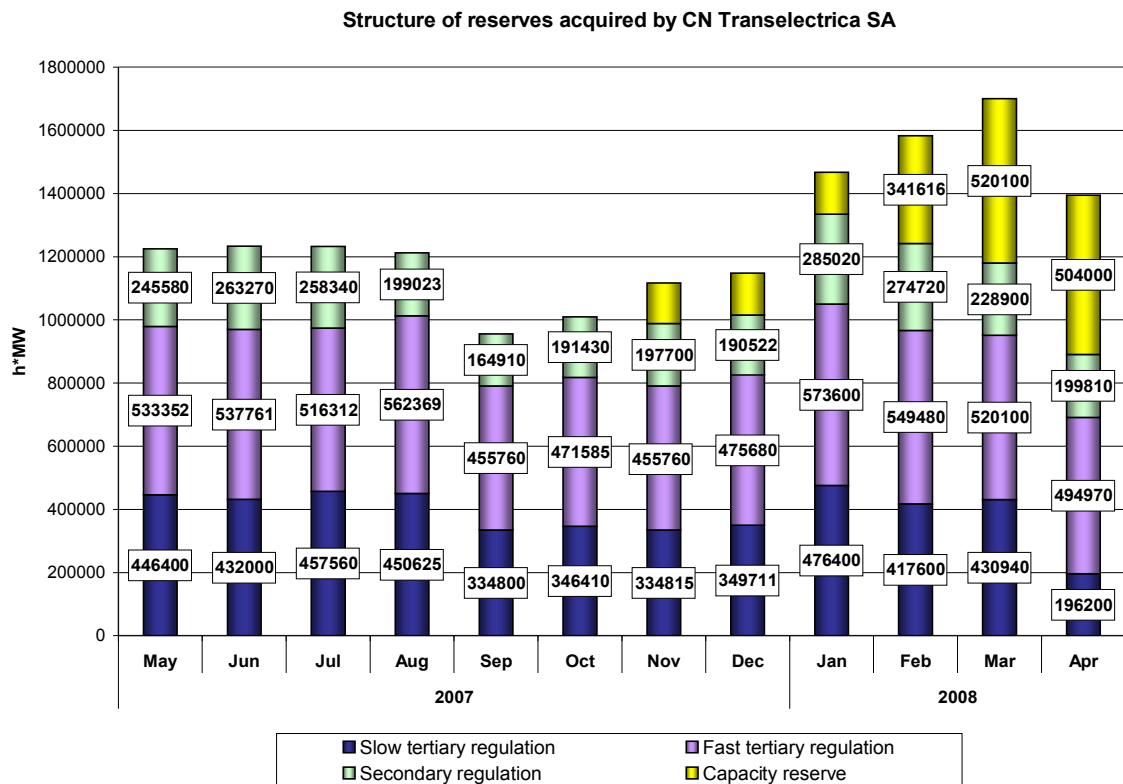
Source: Monthly reports of CN Transelectrica SA – processed by MG

The structure of balancing electricity delivered in the system on each type of regulation for the period May 2007 – April 2008 is presented in the graph below:



Source: Monthly reports of CN Transelectrica SA – processed by MG

For comparison, the following graph presents the evolution of reserves (ancillary services, i.e. obligations of generators to maintain their contracted capacities available for dispatching/offering on BM) acquired/paid by CN Traselectrica SA during May 2007- April 2008:



Source: Monthly reports of CN Traselectrica SA – processed by MG

### 5. Trading structure on the wholesale electricity market of different participant categories

#### Generators

In April 2008, the structure of electricity sales obligations contracted before delivery day by the electricity generators with dispatchable units was the following:

| Transaction type  | MU  | April 2007 | April 2008 |
|---|-----|------------|------------|
| 0   | 1   | 2          | 3          |
| Regulated to incumbents, thermal generators                                   | GWh | 1232.26    | 876.87     |
| Regulated to incumbents, hydro generator                                      | GWh | 227.81     | 311.50     |
| Regulated to incumbents, nuclear generator                                    | GWh | 204.74     | 491.05     |
| Regulated for distribution losses, thermal generators                         | GWh | 271.78     | 212.93     |
| Regulated for distribution losses, hydro generator                            | GWh | 65.66      | 87.11      |
| Regulated for distribution losses, nuclear generator                          | GWh | 56.12      | 143.74     |
| Regulated for transmission losses, thermal generator                          | GWh | 69.18      | 63.72      |
| Regulated, to other generators (with the obligation of return, within a year) | GWh | 61.76      | 32.95      |
| Regulated to other generators, activated on request, with option premium      | GWh | 0          | 0.00       |

|   |            |                |                |
|---|------------|----------------|----------------|
| Negotiated, to incumbents   | GWh        | 30.60          | 0.00           |
| Negotiated, to distributors                                       | GWh        | 0              | 0.00           |
| Negotiated, to other generators                                   | GWh        | 0              | 106.13         |
| Negotiated, to competitive suppliers                              | GWh        | 1010.86        | 1231.57        |
| Contracts concluded on centralized markets (CMBC, CMBC-NC, RCE)   | GWh        | 462.60         | 695.77         |
| Supply to consumers (negotiated + auction on centralized markets) | GWh        | 231.39         | 219.40         |
| Export  | GWh        | 140.37         | 128.12         |
| DAM   | GWh        | 116.38         | 307.88         |
| <b>Total</b>  | <b>GWh</b> | <b>4181.50</b> | <b>4908.74</b> |

Source: Monthly reports of generators – processed by MG

### Suppliers

In April 2008, 54 companies having as main activity the supply of electricity concluded transactions on the electricity market; 15 suppliers out of 54 traded electricity exclusively on the wholesale market (WEM) and 39 suppliers traded electricity on the retail market as well (REM), including the 7 incumbent suppliers trading electricity both on competitive and regulated markets.

#### Suppliers acting exclusively on WEM

The following table shows the activity for April 2008 compared to April 2007 of the suppliers acting exclusively on WEM, acquisitions and sales being split by categories of markets/participants:

- GWh -

| <b>Transactions' structure of suppliers acting exclusively on WEM</b> | <b>April 2007</b> | <b>April 2008</b> |
|---|-------------------|-------------------|
| <b>Acquisitions</b>   |                   |                   |
| Import  | 106.55            | 0.31              |
| Negotiated contracts with suppliers                                   | 102.56            | 552.29            |
| Negotiated contracts with generators                                  | 108.00            | 221.85            |
| Contracts concluded on centralized markets                            | 18.00             | -                 |
| DAM   | 31.89             | 59.19             |
| <b>Sales</b>  |                   |                   |
| Export  | 0.23              | 283.02            |
| Negotiated contracts with suppliers                                   | 290.98            | 637.85            |
| Negotiated contracts with generators                                  | 3.36              | 48.51             |
| Contracts concluded on centralized markets                            | 55.8              | -                 |
| DAM   | 17.31             | 6.34              |

#### Active suppliers on REM (the incumbent suppliers are not included)

The following table presents aggregated information on acquisitions volume and structure for suppliers providing electricity to final consumers, on the competitive market, for April 2008 and April 2007.

- GWh -

| Acquisition structure of suppliers providing electricity to final consumers (the incumbent suppliers are not included) | April 2007 | April 2008 |
|--|------------|------------|
| Import   | 82.93      | 45.08      |
| Negotiated contracts with suppliers  | 497.5      | 625.23     |
| Negotiated contracts with generators   | 902.86     | 1009.87    |
| Contracts concluded on centralized markets   | 461.16     | 603.40     |
| DAM  | 48.15      | 106.41     |

### Incumbent suppliers

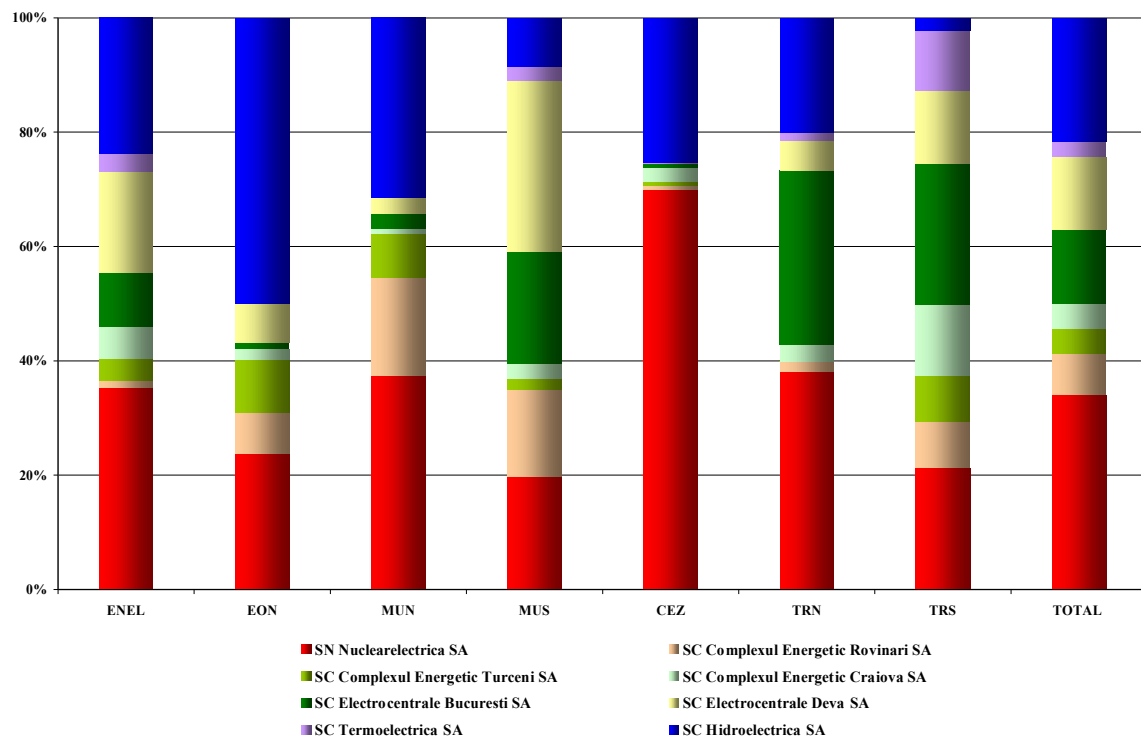
Electricity acquisition structure of incumbent suppliers (before the delivery day), for supplying the regulated market consumers, is presented in the table below, for April 2008 compared to the situation of April 2007:

- GWh -

| Acquisition structure of incumbent suppliers for regulated REM component | April 2007 | April 2008 |
|--|------------|------------|
| Regulated contracts  | 1734.79    | 1723.76    |
| Negotiated contracts   | 75.27      | 49.68      |
| Contracts concluded on centralized markets                               |            | 6.53       |
| DAM  | 41.37      | 99.10      |

The structure of the electricity purchased by the incumbent suppliers from the main generators on regulated contracts is presented in the following graph for April 2008:

Electricity acquisition from main generators, on regulated contracts, of incumbent suppliers for delivering electricity to final consumers on regulated market  
April 2008



Source: Monthly reports of the incumbent suppliers – processed by MG

Likewise to the situation presented for the regulated REM, the table below presents the acquisition structure of incumbent suppliers (before the delivery day), corresponding to the

competitive REM (energy supplied at negotiated prices to the consumers who renounced to regulated tariffs) for April 2008 compared to April 2007:

- GWh -

| Acquisition structure of incumbent suppliers for competitive REM component | April 2007 | April 2008 |
|--|------------|------------|
| Import   | -          | -          |
| Negotiated contracts with suppliers  | 115.74     | 210.94     |
| Negotiated contracts with generators                                       | 33.86      | -          |
| Contracts concluded on centralized markets                                 | 90.92      | 85.24      |
| DAM  | 79.10      | 85.20      |

### Main distribution operators

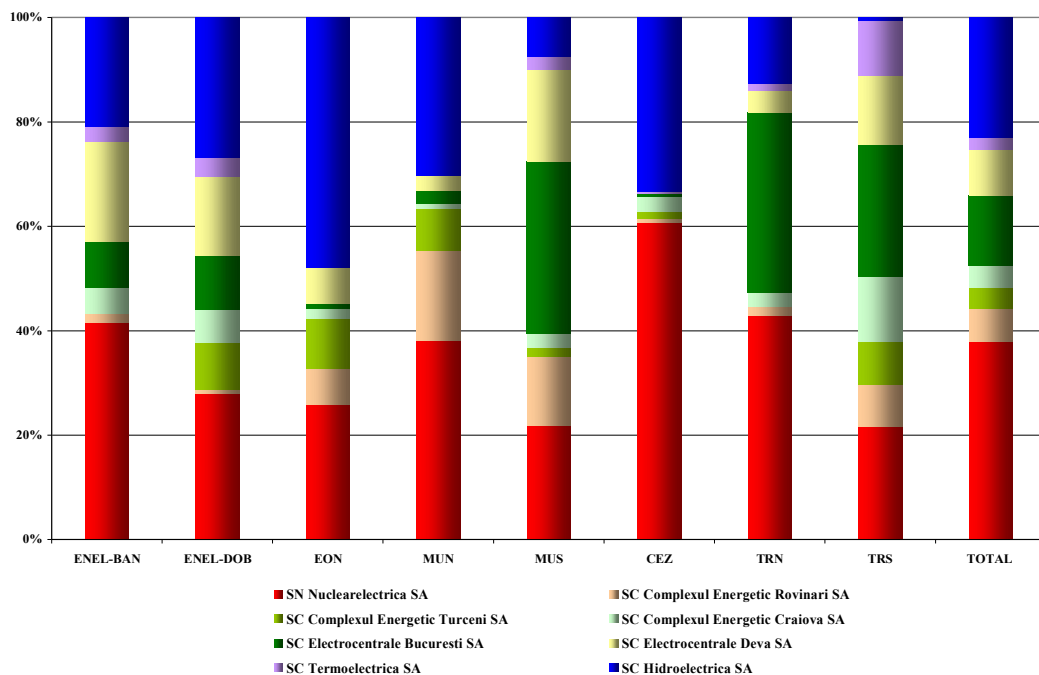
The following table shows the electricity acquisition structure of main distribution operators (before the delivery day), for covering the distribution network losses, for April 2008 compared to April 2007:

- GWh -

| Acquisition structure                      | April 2007 | April 2008 |
|--|------------|------------|
| Regulated contracts                        | 405.53     | 444.40     |
| Negotiated contracts                       | 18.89      | 0.67       |
| Contracts concluded on centralized markets |            | -          |
| DAM  | 13.48      | 22.53      |

The electricity purchased by the 8 distribution operators from the main generators on regulated contracts, for covering their network losses is presented in detail in the following graph, for April 2008:

Achizitia de energie electrica pe contracte reglementate a operatorilor de distributie de la principalii producatori pentru acoperirea consumului propriu tehnologic  
April 2008



Source: Monthly reports of the distribution operators – processed by MG

**6. Concentration indicators on the wholesale electricity market and its components**

According to the economic theory and the EU documents, the following market concentration indicators may be defined:

- HHI, Herfindahl-Hirschman Index = sum of square market shares of participants (%):  
The indicator values signify:
  - HHI < 1000                      unconcentrated market;
  - 1000 < HHI < 1800        moderately concentrated market;
  - HHI > 1800                      highly concentrated market.
  
- C3 = sum of market shares of the main three participants in the market:  
The indicator values signify:
  - 40% < C3 < 70%            moderately concentrated market;
  - C3 > 70%                        highly concentrated market.

Regarding the offer, the concentration indicators may be defined for the whole market (electricity or ancillary services) or for each of its components where direct competition takes place.

Concentration indicators and market shares of the electricity generators

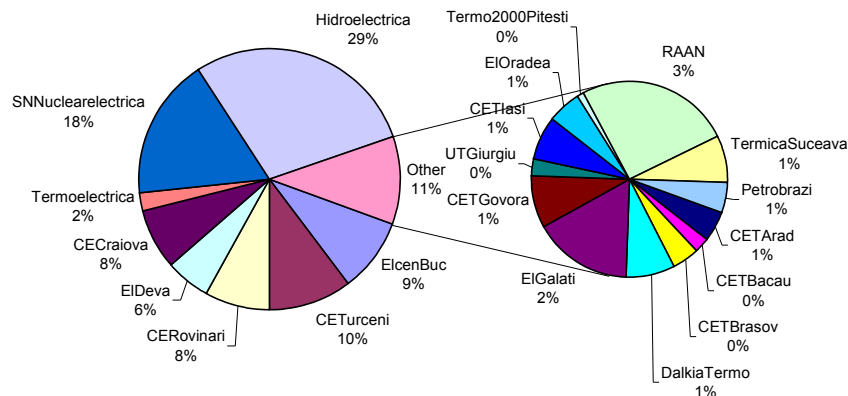
The market structure regarding the electricity generation offers an initial basis for analyzing the possible competitiveness level of the electricity market.

The following table presents the concentration indicators of electricity generation for April 2008, calculated based on electricity delivered into the networks by the generators with dispatchable units.

| Indicator | C1  | C3  | HHI  |
|-----------|-----|-----|------|
| Value     | 36% | 64% | 1923 |

The market shares of the electricity generators, taking into account all components of the wholesale electricity market, are presented in the following graph, for the first 4 months of 2008. These market shares are calculated based on the electricity delivered into networks.

**Market shares of dispatchable generators by delivered electricity  
January - April 2008**



Source: Monthly reports of generators – processed by MG

A component of the WEM where direct competition between generators exists is the BM. The values of concentration indicators on this market for April 2008 are determined based on effectively delivered electricity, for each type of regulation defined within the Commercial Code, and they are presented in the following table:

| Structure/<br>concentration<br>indicators of BM | Regulation |          |               |          |               |          |
|---|------------|----------|---------------|----------|---------------|----------|
|   | Secondary  |          | Fast tertiary |          | Slow tertiary |          |
|   | upward     | downward | upward        | downward | upward        | downward |
| <b>C1 (%)</b>                                   | 73         | 71       | 68            | 49       | 22            | 31       |
| <b>C3 (%)</b>                                   | 99         | 99       | 87            | 78       | 56            | 82       |
| <b>HHI</b>                                      | 5703       | 5517     | 4830          | 3049     | 1590          | 2408     |

The competition between generators is also present when speaking about the ensuring the reserves necessary for security of supply in the NES. Due to the fact that the generators have different levels of capabilities for ensuring this type of service, this market has a regulated component.

The relationship between regulated and competitive components on the ancillary services market as well as the main concentration indicators on each type of reserve (secondary, fast tertiary, slow tertiary and capacity reserve) are presented in the following table for April 2008:

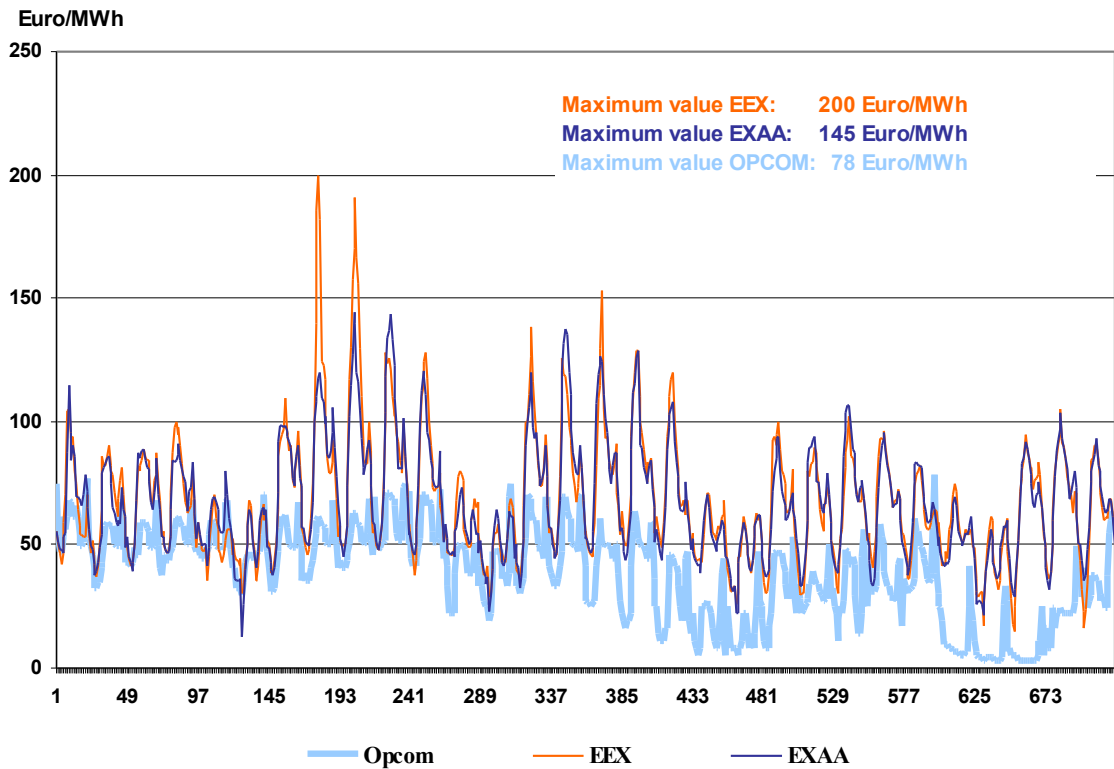
| Concentration indicators on ancillary services market |                            | Secondary reserve | Fast tertiary reserve | Slow tertiary reserve | Capacity reserve |
|---|----------------------------|-------------------|-----------------------|-----------------------|------------------|
| regulated component                                   | contracted quantity (h*MW) | 199810            | 494970                | 196200                | 0                |
|   | C1 (%)                     | 84.4              | 82.1                  | 78.0                  | 0                |
|   | C3 (%)                     | 100               | 92.0                  | 100                   | 0                |
| competitive component                                 | contracted quantity (h*MW) | 0                 | 0                     | 0                     | 504000           |
|   | C1 (%)                     | 0                 | 0                     | 0                     | 77.1             |
|   | C3 (%)                     | 0                 | 0                     | 0                     | 100              |
|   | HHI                        | 0                 | 0                     | 0                     | 6473             |

## 7. Price evolution on wholesale electricity market

SC Opcom SA is the administrator of DAM. The MCP on DAM represents a reference value for the prices on the bilateral contracts. The evolution of hourly and daily average prices on DAM in April 2008 is presented in the followings graphs, along with the prices on EEX and EXXA.

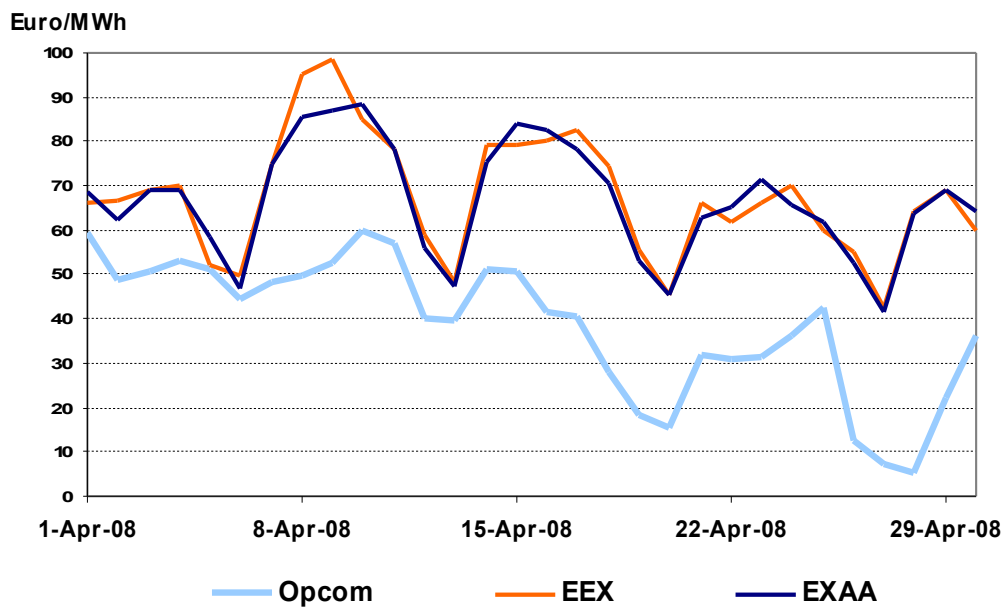
For comparison with prices on the European power exchanges, the spot price on SC Opcom SA is denominated in EUR, taking into consideration the daily exchange rates Euro/leu communicated by the National Bank of Romania.

**HOURLY SPOT PRICES**  
April 2008



Source: Daily reports of SC Opcom SA and published data of EXAA and EEX  
– processed by MG

**DAILY AVERAGE SPOT PRICES**  
April 2008

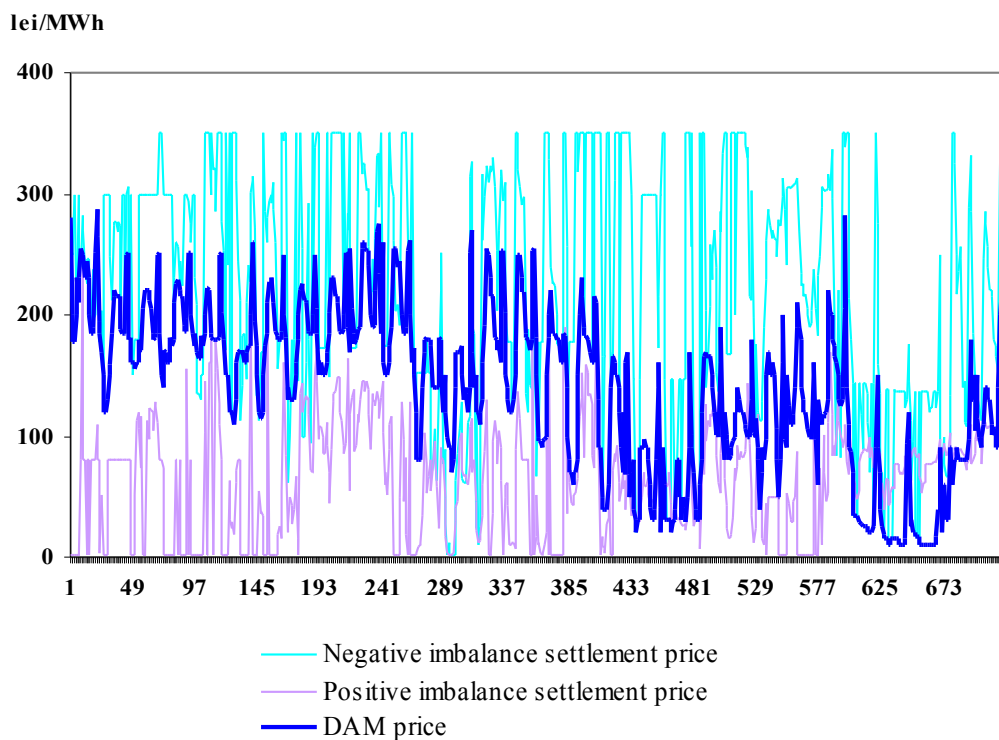


Source: Daily reports of SC Opcom SA and published data of EXAA and EEX  
– processed by MG

In order to cover the differences between planned/contracted amounts of consumption/generation and the real time consumption, the system operator (CN Transelectrica SA) operates the BM by buying or "selling" electricity at prices determined by the merit order of dispatchable generators' offers. The participants who generate the imbalances, grouped in BRPs, have to bear the imbalances costs. For the negative imbalances, they have to pay the settlement price resulting from the upward bids accepted on the BM, while for the positive imbalances they receive the settlement price resulting from the downward bids accepted on the BM.

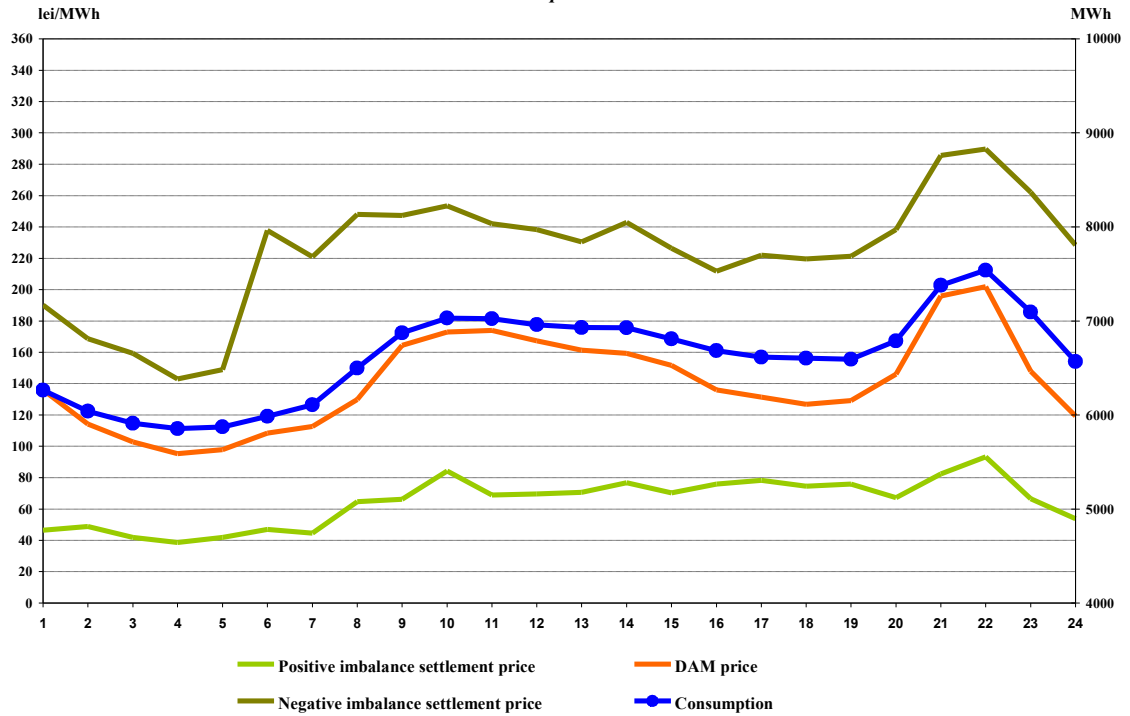
The settlement prices (MCP on DAM, negative imbalance settlement price and positive imbalance settlement price) are represented on the same graph, showing the two markets correlation degree. In the first graph the prices are expressed in hourly values, in the second graph in hourly average values compared to internal consumption, and in the last graph in average monthly values.

### Hourly settlement prices April 2008



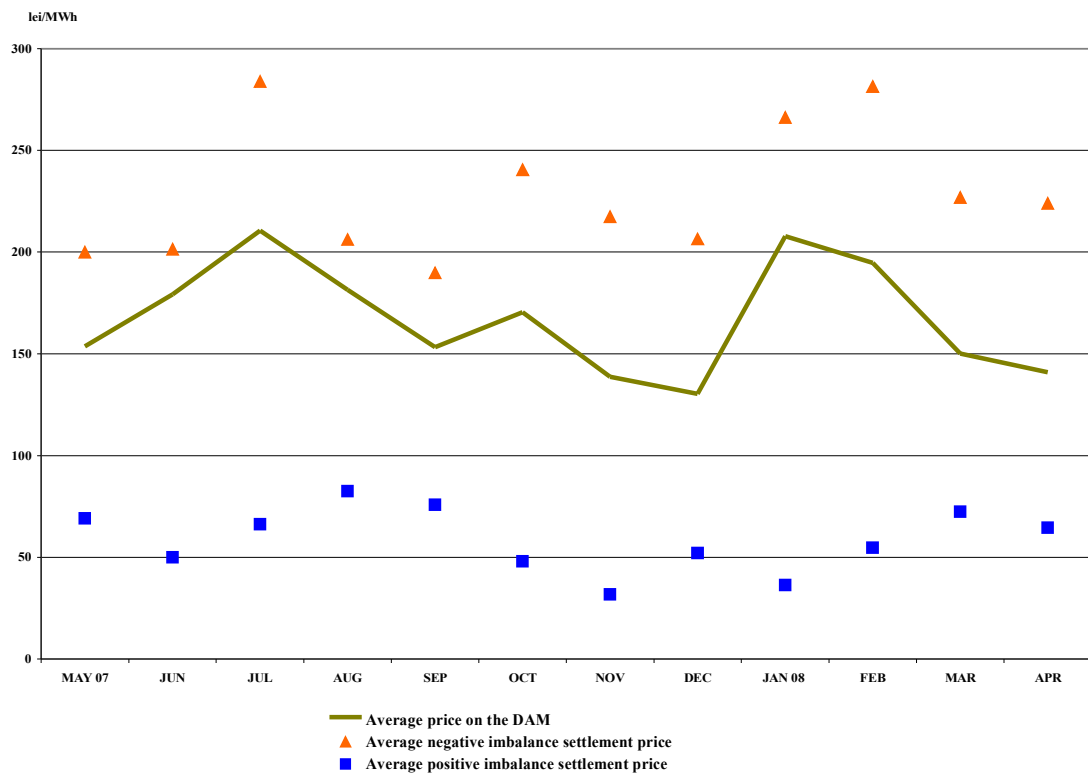
Source: Daily/monthly reports of SC Opcom SA – processed by MG

Hourly average settlement prices and internal consumption  
April 2008



Source: Monthly reports of SC Opcom SA and CN Tranelectrica SA – processed by MG

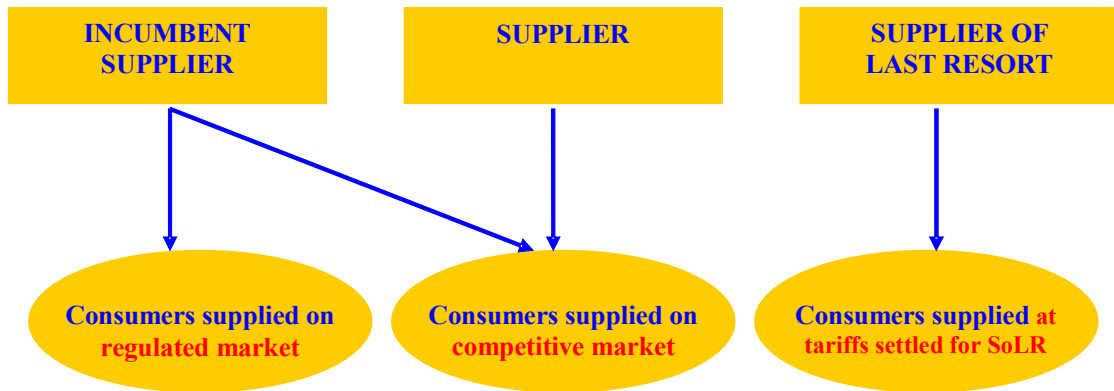
Monthly average prices on DAM and BM  
- May 2007 - April 2008 -



Source: Monthly/daily reports of SC Opcom SA – processed by MG

### III. RETAIL ELECTRICITY MARKET

#### 1. Structure of the retail electricity market



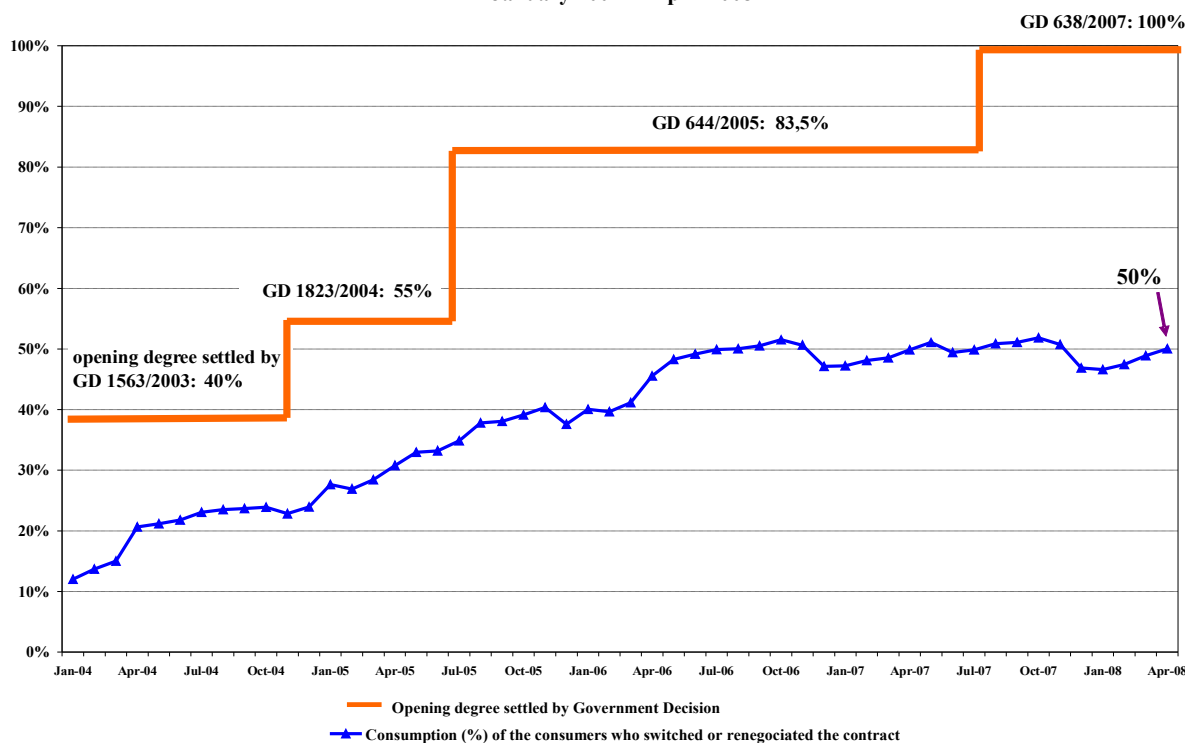
#### 2. Steps in the opening process of the electricity market

| Government Decision                              | Opening degree % | Annual consumption threshold GWh/year |
|--|------------------|---------------------------------------|
| No. 122/2000, published in O.G. 77/21.02.2000    | 10               | 100                                   |
| No. 982/2000, published in O.G. 529/27.10.2000   | 15               | 100                                   |
| No. 1272/2001, published in O.G. 832/21.12.2001  | 25               | 40                                    |
| No. 48/2002, published in O.G. 71/31.01.2002     | 33               | 40                                    |
| No. 1563/2003, published in O.G. 22/12.01.2004   | 40               | 20                                    |
| No. 1823/2004, published in O.G. 1062/16.11.2004 | 55               | 1                                     |
| No. 644/2005, published in O.G. 684/29.07.2005   | 83.5             | -                                     |
| No. 638/2007, published in O.G. 427/27.06.2007   | 100              | -                                     |

#### 3. Electricity market opening degree

The following graph contains the quota of the consumption from total consumption, of the consumers who switched their supplier or renegotiated their contracts with the suppliers operating on the regulated market, during January 2004 – April 2008. The values presented are cumulated from the beginning of the opening process and are presented monthly.

Opening degree evolution for electricity market  
January 2004 - April 2008



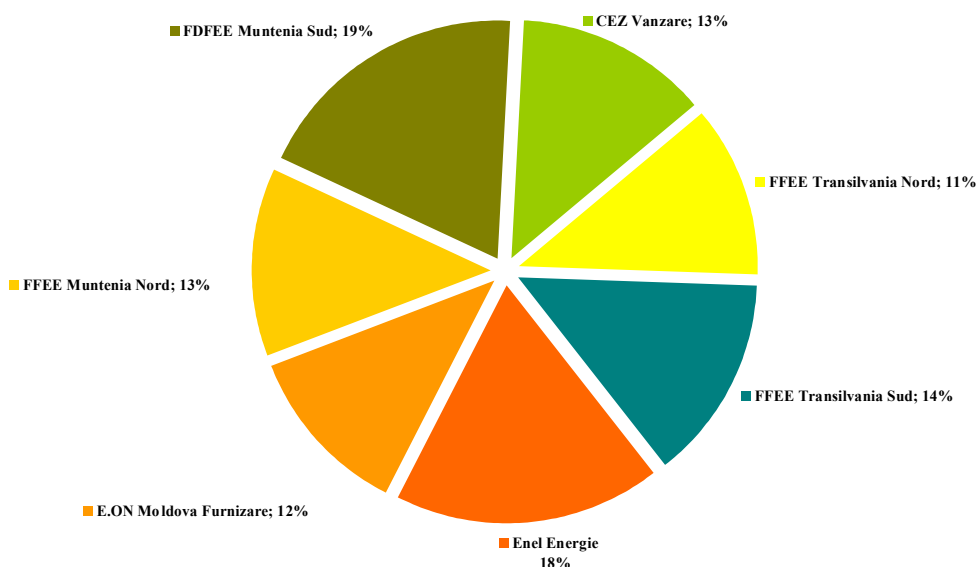
Source: Monthly reports of the final consumers' suppliers – processed by MG

#### 4. Market shares of the electricity suppliers

In the following two graphs there are presented the market shares of electricity suppliers on the retail market, calculated:

- a) for incumbent suppliers - based on the electricity supplied for the consumers at regulated tariffs,

Market shares of incumbent suppliers on regulated market  
- January - April 2008 -



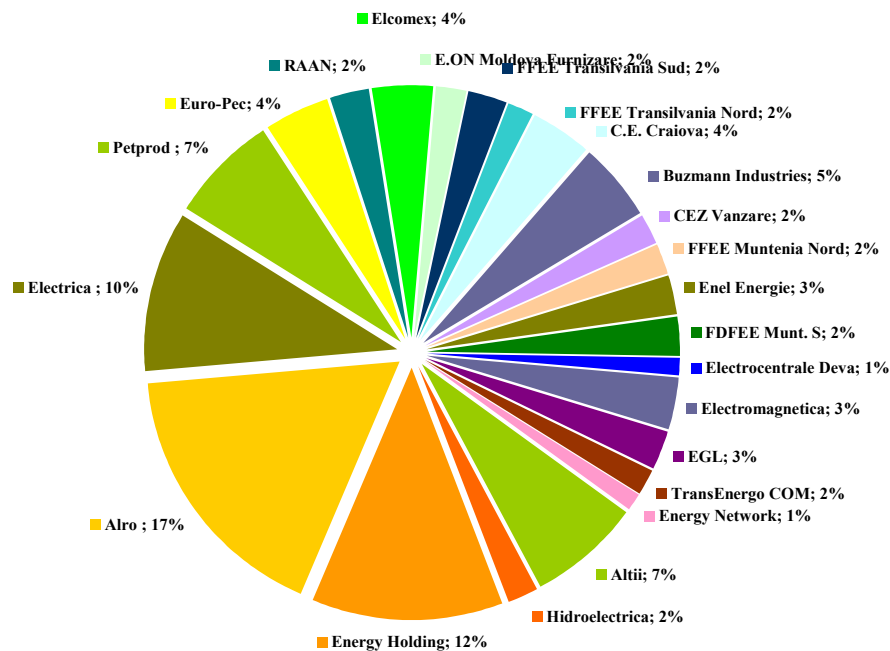
Consumption of consumers supplied at regulated tariffs: 8121 GWh

Source: Monthly reports of the incumbent suppliers – processed by MG

And

b) for all suppliers (including the incumbents) based on the electricity supplied for the consumers at negotiated prices on competitive component of REM:

**Market shares of suppliers delivering electricity on the competitive market**  
- January - April 2008 -



Consumption on competitive market: 7558 GWh

Structure indicators:

HHI - 743

C3 - 40%; C1 - 17%

Category "Others" includes 25 suppliers with individual market share less than 1%

Source: Monthly reports of the competitive suppliers – processed by MG

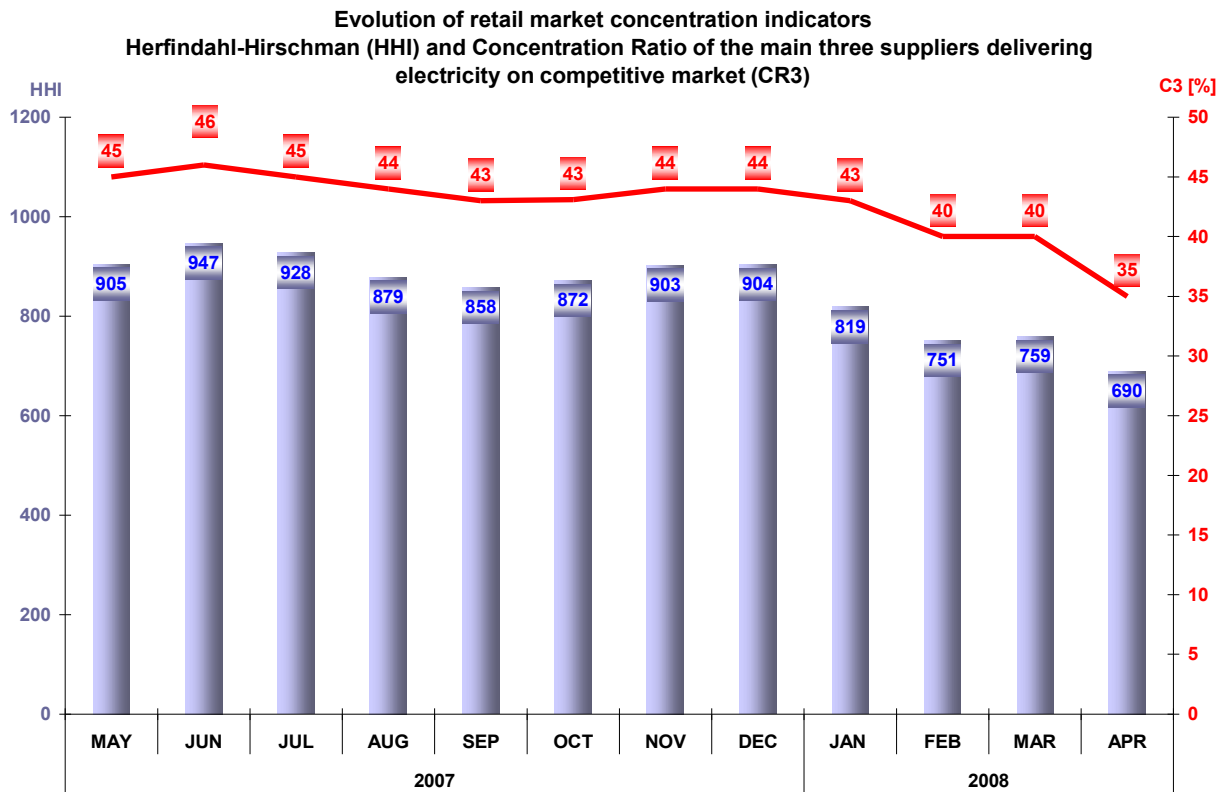
The electricity supplied to the final consumers, used for calculating the market share of every supplier, includes also the self-consumption of that particular supplier (e.g. consumers with supply license who buy electricity for themselves from WEM as competitive suppliers).

The analysis of the competitive suppliers' activity on the competitive REM component compared to their activity on the WEM is developed based on the weight of the electricity sold to final consumers in total electricity sales. The table below presents the number of suppliers acting on the REM, grouped into categories of sales weight during April 2008.

| Number of suppliers<br>- April 2008 - | Share of sales to final consumers from total sales transactions |            |           |      |
|---------------------------------------|---|------------|-----------|------|
|                                       | 100%  | 75% - 100% | 50% - 75% | <50% |
| Competitive                           | 4   | 10         | 7         | 11   |
| Incumbent                             | 5   | 1          | 0         | 1    |

### 5. Concentration indicators of the competitive retail electricity market

The monthly evolution of concentration indicators (C3, HHI) determined on the competitive component of the REM is presented in the following graph:



*Source: Monthly reports of the suppliers – processed by MG*

The table below shows the values of structure indicators of competitive component of REM for April 2008, calculated for each consumer category as defined by Directive 377/90:

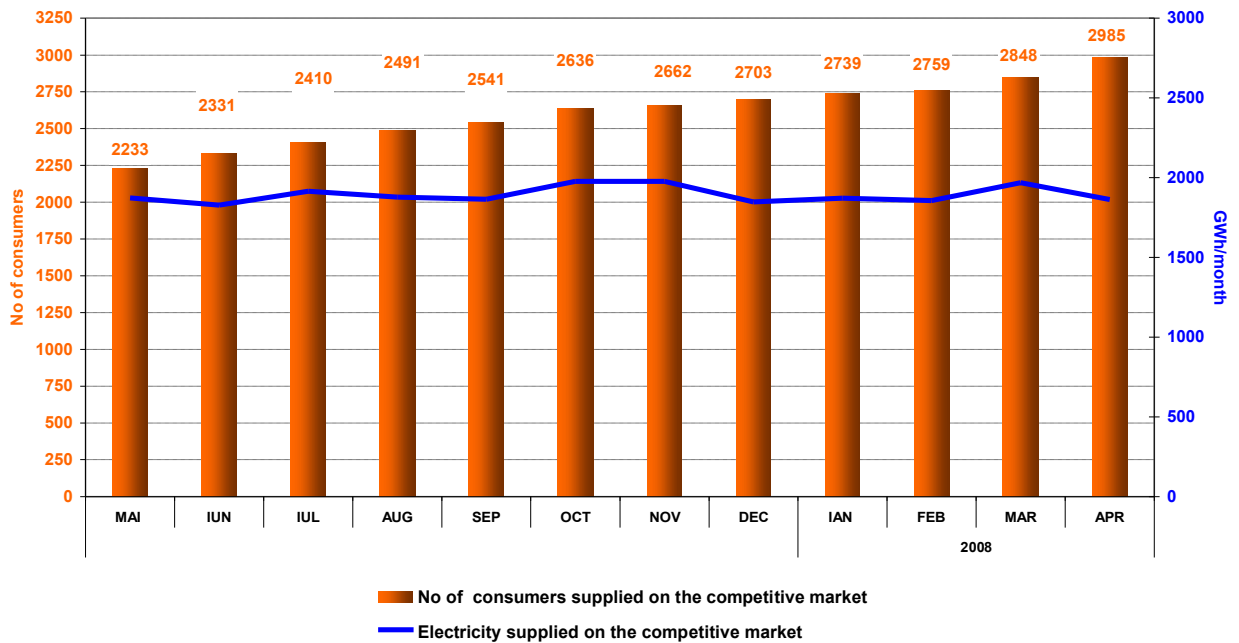
| Indicators<br>- April 2008 -          | Consumer category |      |      |     |     |      |        | Total |
|---------------------------------------|-------------------|------|------|-----|-----|------|--------|-------|
|                                       | IA                | IB   | IC   | ID  | IE  | IF   | Others |       |
| C1 -% -                               | 78                | 26   | 21   | 15  | 17  | 32   | 30     | 17    |
| C3 - % -                              | 93                | 55   | 48   | 32  | 43  | 59   | 57     | 35    |
| HHI                                   | 6277              | 1380 | 1045 | 672 | 866 | 1646 | 1516   | 690   |
| No. of incumbent suppliers            | 7                 | 7    | 7    | 7   | 6   | 1    | 2      | 7     |
| No. of competitive suppliers          | 3                 | 21   | 26   | 31  | 17  | 9    | 12     | 32    |
| No. of generators acting as suppliers | 0                 | 1    | 3    | 4   | 1   | 0    | 4      | 5     |

## 6. Evolution of consumers' number and of the electricity delivered

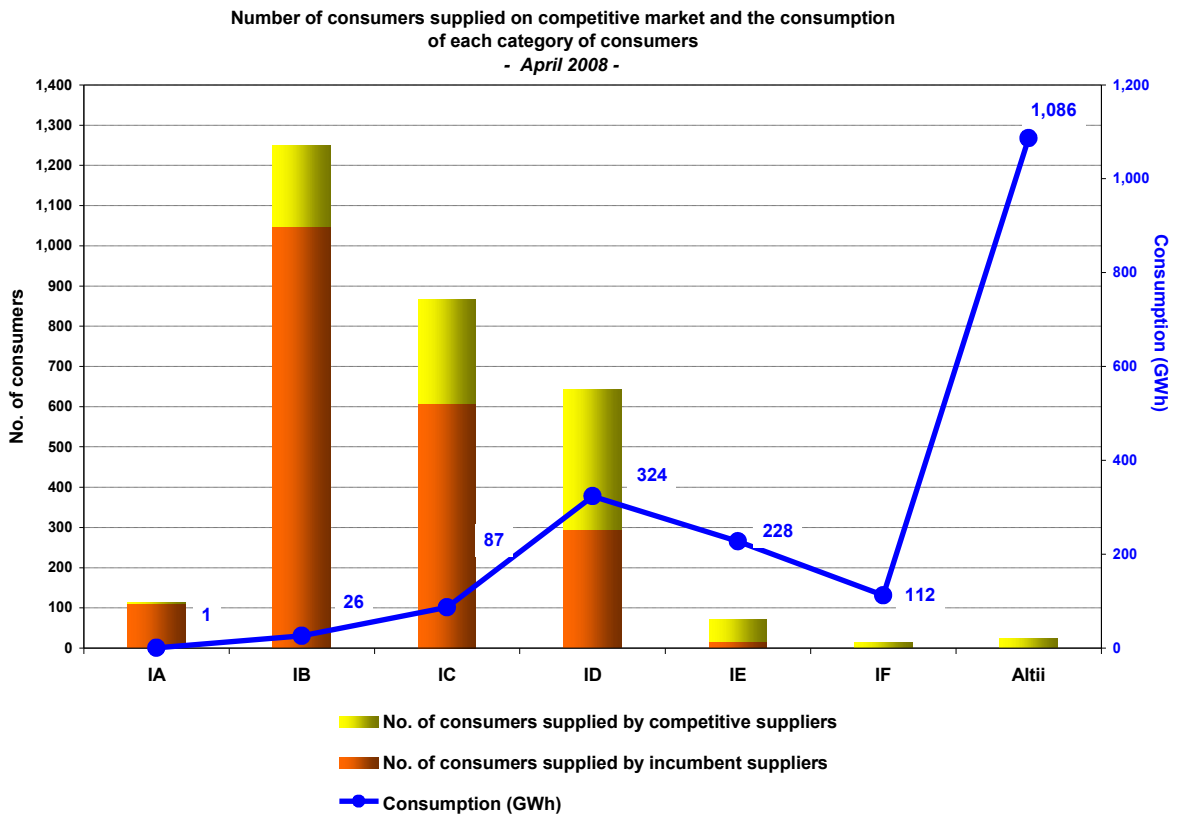
Number of consumers supplied on the competitive market is presented as total value from the beginning of the market opening process; for April 2008 this number is split into categories, according to the provisions of the European Directive 377/90. The table below presents the bands of consumption of each category of consumers:

| Industrial end-user | Annual electricity consumption (MWh) |          |
|---------------------|--------------------------------------|----------|
|                     | Lowest                               | Highest  |
| IA                  |                                      | <20      |
| IB                  | 20                                   | <500     |
| IC                  | 500                                  | <2000    |
| ID                  | 2000                                 | <20000   |
| IE                  | 20000                                | <70000   |
| IF                  | 70000                                | <=150000 |
| Others              | >150000                              |          |

Evolution of the number of supplied consumers and delivered electricity on the competitive market



Source: Monthly reports of the competitive suppliers – processed by MG



*Source: Monthly reports of the suppliers – processed by MG*

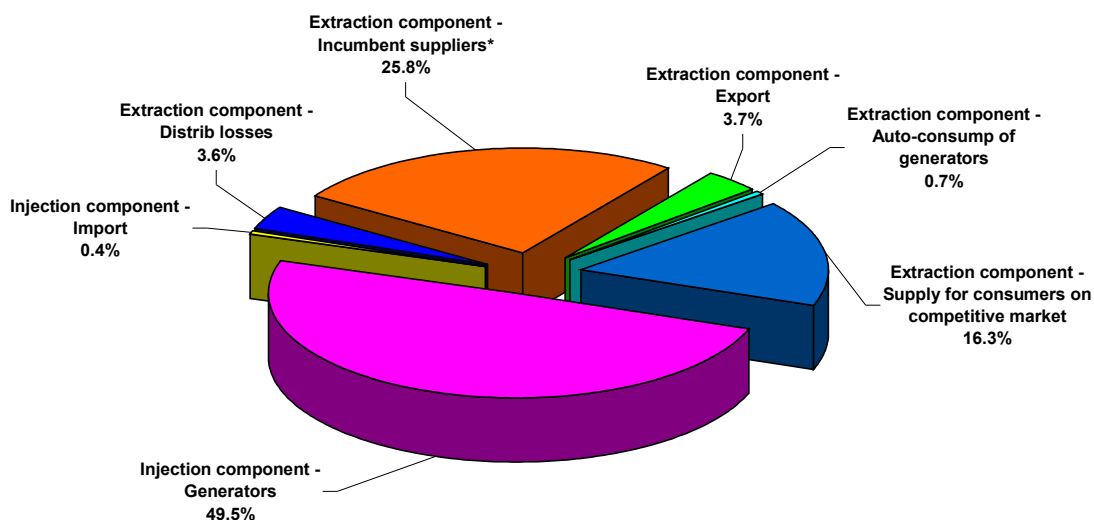
#### IV. TRANSMISSION AND SYSTEM OPERATOR C.N. TRANSELECTRICA S.A.

CN Transelectrica SA performs the electricity transmission service at regulated tariffs, which have two components:

- injection component (TG), aimed to determine an optimum geographic positioning of the new power units;
- extraction component (TL), as an incentive for an equilibrate positioning into the territory of the consumers.

The following graph presents the structure of CN Transelectrica SA revenues from performing the transmission services and reflects the structure of its clients benefiting from this type of service in April 2008.

**CN Traselectrica SA structure of revenues from transmission services  
- April 2008 -**



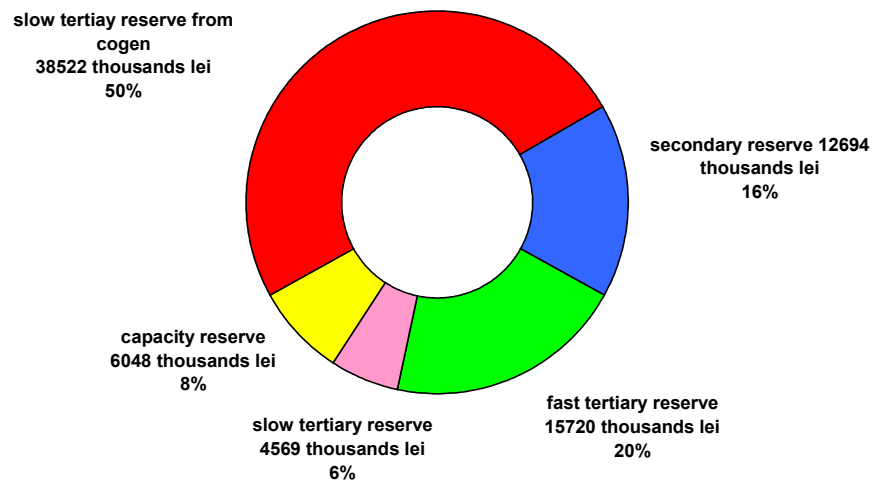
\* referring to all their activity as well as the distribution losses for two distribution operators

Source: Monthly reports of CN Traselectrica SA – processed by MG

In order to perform the system operator tasks, CN Traselectrica SA assesses and contracts reserves (ancillary services) from qualified generators, which are integrated on BM. The ancillary services used are: reserves for secondary, fast tertiary, slow tertiary regulation and slow tertiary reserve from cogeneration. Starting with July 2007, the rules for capacity reserve entered into force, by determination of the reserve dimensions, the way in which the suppliers of this service are selected and the conditions in which this new type of reserve may be used by CN Traselectrica SA.

The following graph presents the costs of ancillary services CN Traselectrica SA had to pay in April 2008. In order to cover these costs and its own operating costs, TSO applies a regulated tariff for system services.

Structure of CN Transelectrica SA costs with ancillary services acquired from qualified generators  
- April 2008 -



Source: Monthly reports of CN Transelectrica SA – processed by MG

## V. EVOLUTION OF MARKET RULES IN APRIL 2008

- In April 2008 no regulations concerning the functioning of the electricity market were issued.

## VI. EXPLANATIONS AND ABBREVIATION

### 1. Explanations

- **Auto-consumption of generators** – in the graph regarding the revenues of CN Transelectrica SA, the auto-consumption exclusively represents the generators consumption at consumption places other than the generation sites.
- **Internal consumption** represents the electricity covered by the wholesale market participants and calculated as *Delivered electricity + Import – Export*.
- **Consumption of consumers on regulated market** represents the consumption of consumers supplied at regulated tariffs by the incumbent suppliers.
- **Consumption of consumers on competitive market** represents the consumption of consumers supplied at negotiated prices.
- **Fuel consumption** represents the fuel consumed for generating electricity and heat.
- **Electricity delivered into the grid** includes also the own consumption of auto-generators such as RAAN and SNP Petrom together with the electricity sold by the generators through direct lines or consumed by themselves at other consumption sites.
- **Competitive supplier** represents, within the present document, the supplier which is active on the competitive retail market.

2. Abbreviation

- MG – Monitoring Group
- EEX – European Energy Exchange – Leipzig, Germany, [www.eex.de](http://www.eex.de)
- EXAA – Energy Exchange Austria, [www.exaa.at](http://www.exaa.at)
- DAM – Day Ahead Market
- BM – Balancing Market
- MCP – Market Clearing Price
- BRP – Balancing Responsible Party
- TG/TL – injection / extraction component of the transmission tariff
- CMBC – centralised market of bilateral contracts
- CMBC-CN – centralised market for partially standardised bilateral contracts with continuous negotiation
- NES – National Energy System
- WEM – wholesale electricity market
- REM – retail electricity market
- RCE – Romanian Commodities Exchange