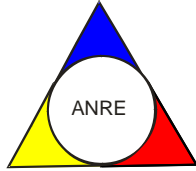




**ROMANIAN ENERGY REGULATORY AUTHORITY**  
**GENERAL DIRECTION OF ELECTRICITY MARKET**



**REPORT ON RESULTS OF MONITORING THE  
ROMANIAN ELECTRICITY MARKET  
SEPTEMBER 2012**

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

---

ANRE makes all the necessary efforts to present within the here above mentioned document, as accurately and concisely as possible, the data based on the legal entities reports. This document published by ANRE is for information purpose only. ANRE is not and will not be under any circumstances legal responsible for any inadvertences regarding the information presented within the document or for the improper way the information is used

## TABLE OF CONTENTS

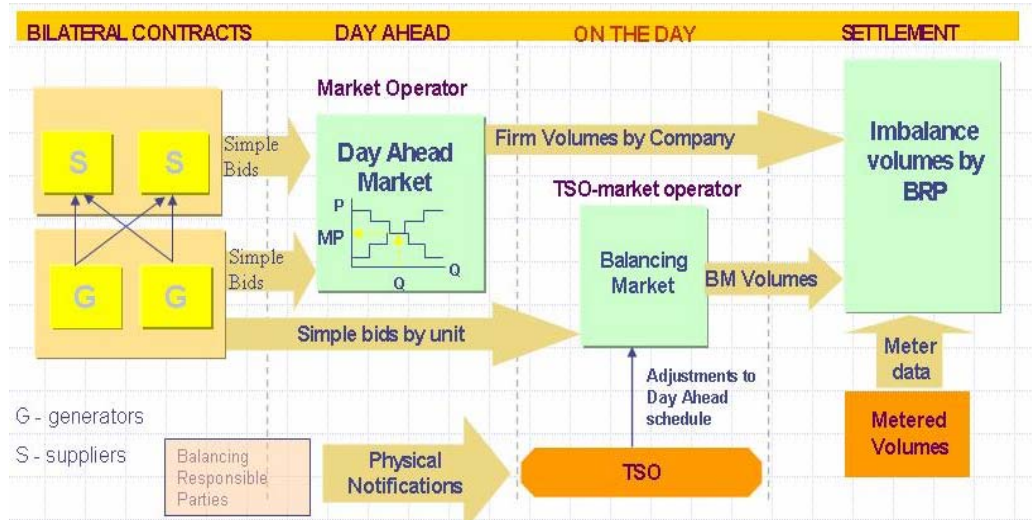
I.	MAIN EVENTS IN THE DEVELOPMENT OF THE ROMANIAN ELECTRICITY MARKET.....	3
II.	WHOLESALE ELECTRICITY MARKET .....	4
1.	Structure of the wholesale electricity market.....	4
2.	Participants on the wholesale electricity market.....	4
3.	Generation structure of National Energy System on resources types.....	5
4.	Transactions' structure on the wholesale electricity market.....	7
5.	Trading structure on the wholesale electricity market of different participant categories .	13
6.	Concentration indicators on the wholesale electricity market and its components .....	19
7.	Price evolution on wholesale electricity market .....	21
III.	RETAIL ELECTRICITY MARKET.....	26
1.	Structure of the retail electricity market .....	26
2.	Steps in the opening process of the electricity market.....	26
3.	Electricity market opening degree .....	26
4.	Market shares of the electricity suppliers .....	27
5.	Concentration indicators of the competitive retail electricity market.....	30
6.	Evolution of consumers' number and of electricity delivered.....	31
7.	Average selling prices of consumers supplied on the competitive market.....	32
IV.	TRANSMISSION AND SYSTEM OPERATOR C.N. TRANSELECTRICA S.A.....	33
V.	EVOLUTION OF MARKET RULES IN SEPTEMBER 2012 .....	34
VI.	EXPLANATIONS AND ABBREVIATION .....	34

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

- GD 365/1998 – vertically integrated monopol – RENEL – was split into 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.
- July 2008 – launch of the mechanism of direct debit and guarantee for electricity transactions on the day-ahead market (OPCOM as central counterparty).
- August 2008 – process of legal unbundling of distribution and supply companies has been concluded;
- August/October 2010 – launch of bilateral coordinated auctions for capacity allocation on interconnections with Hungary and Bulgaria;
- July 2011 - launch of the intraday market;
  - GD 930/2010 – SC Electrica Furnizare SA had been established through merger of the former incumbent suppliers Electrica Furnizare Muntenia Nord, Electrica Furnizare Transilvania Nord and Electrica Furnizare Transilvania Sud;
- June 2012 - GD 1024/2011, Complexul Energetic Oltenia SA had been established in a dual system through merger of the former SNLO Tg. Jiu SA , SC Complexul Energetic Turceni SA, SC Complexul Energetic Rovinari SA and SC Complexul Energetic Craiova SA;
- July 2012 – the Law of electricity and natural gas no. 123 has come into force.

## II. WHOLESALE ELECTRICITY MARKET

### 1. Structure of the wholesale electricity market



### 2. Participants on the wholesale electricity market

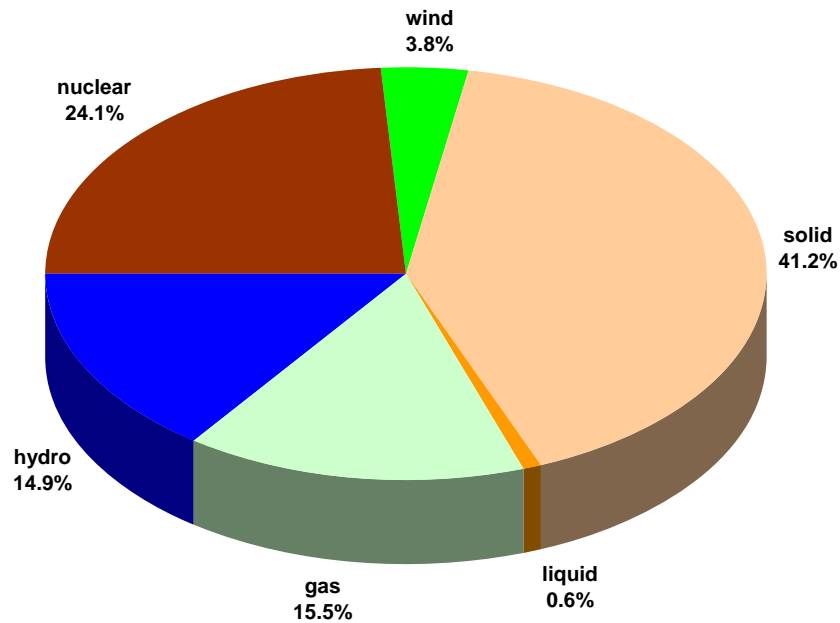
The market participants\* acting on the electricity market in September 2012 are presented below split into categories:

No.	Name	No.	Name	No.	Name
<b>A Electricity generators operating dispatching units</b>					
1	SC CET Bacău SA				
2	SC CET Govora SA				
3	SC CET Oradea SA				
4	SC Cernavoda Power SRL				
5	SC Dalkia Termo Prahova SRL				
6	SC EDP Renewables România SRL				
7	SC Electrocentrale Bucuresti SA				
8	SC Electrocentrale Galați SA				
9	SC Electrocentrale Paroseni SA				
10	SC Enel Green SRL				
11	SC Romconstruct Top SRL				
12	SC Termica SA Suceava				
13	SC Termoelectrica SA				
14	SC Tomis Team SRL				
<b>A1 Electricity generators operating dispatching units and acting also as suppliers on the competitive</b>					
15	RAAN				
16	SN Nuclearelectrica SA				
17	SC OMV Petrom SA				
18	SC CE Oltenia SA				
19	SC CET Arad SA				
20	SC Electrocentrale Deva SA				
21	SC Hidroelectrica SA				
22	SC Lukoil Energy & Gaz Romania SRL				
23	SC OMV Petrom Power Park SRL				
<b>B Transmission System Operator</b>					
1	CN TRANELECTRICA SA				
<b>C DAM, Bilateral Contracts Market, Green Certificates Market Operator</b>					
1	SC OPCOM SA				
<b>D Distribution network operators</b>					
1	SC CEZ Distributie SA				
2	SC ENEL Distributie Banat SA				
3	SC ENEL Distributie Dobrogea SA				
4	SC E.ON Moldova Distributie SA				
5	SC ENEL Distributie Muntenia SA				
6	SC FDDE Electrica Distributie Muntenia Nord SA				
7	SC FDDE Electrica Distributie Transilvania Sud SA				
8	SC FDDE Electrica Distributie Transilvania Nord SA				
<b>E Incumbent suppliers</b>					
1	SC CEZ Vanzare SA				
2	SC ENEL Energie SA				
3	SC E.ON Energie Romania SA				
4	SC ENEL Energie Muntenia SA				
5	SC FFEF Electrica Furnizare SA				
<b>F Electricity Suppliers acting exclusively on the wholesale market</b>					
1	SC Adedero G.P. Energy SRL				
2	Alpiq Energy SE				
3	CEZ as				
4	SC CEZ Trade Romania SRL				
5	SC Dalkia Romania SRL				
6	Danske Commodities/s Aarhus				
7	E&T ENERGIE Handelsgesellschaft				
8	SC Edison Trading SpA				
9	SC Electrica SA				
10	SC Enel Trade Romania SRL				
11	Energy Financing Team Switzerland				
12	SC Energy Market Consulting SRL				
13	SC Energon Power&Gaz SRL				
14	SC Entrex Services SRL				
15	E.ON Energy Trading SE				
16	SC Ezpada SRL				
17	Ezpada SRO				
18	Freepoint Commodities Europe Ltd				
19	Gazprom Marketing & Trading				
20	GEN-I trgovanje in prodaja elektricne energije				
21	GEN-I Bukarest Electricity Trading and Sales				
22	SC Getica 98 COM SRL				
23	SC Grivco SA				
24	SC Iberdola Romania SRL				
25	SC KBS Threeenergyes SRL				
26	SC Lord Energy SRL				
27	SC Midest Energy SRL				
28	SC MVM Partner Bucharest SRL				
29	OMV Trading GmbH				
30	RWE Supply Trading GmbH				
31	Repower Trading Ceska Republica				
32	SC Romelectro SA				
33	SC Rudnap SRL				
34	Statkraft Markets GmbH				
35	SC Statkraft Romania SRL				
36	SC Verbund Trading România SRL				
<b>G Electricity Suppliers</b>					
1	SC Alpiq RomEnergie SRL				
2	SC Alpiq RomIndustries SRL				
3	SC Alro SA				
4	SC Arcelormittal Galati SA				
5	SC Areleo Power SRL				
6	SC Biol Energy SRL				
7	SC EFE Energy SRL				
8	SC EGL Gas & Power Romania SA				
9	SC Electricom SA				
10	SC Electromagnetica SA				
11	SC Energotrans SRL				
12	SC Energy Distribution Services SRL				
13	SC Energy Financing Team Romania SRL				
14	SC Energy Holding SRL				
15	SC Energy Network SRL				
16	SC Enex SRL				
17	SC Ennet Grup SRL				
18	SC Enol Grup SA				
19	SC Fidelis Energy SRL				
20	SC Gaz Sud Furnizare SRL				
21	SC GDF SUEZ Energy Romania SA				
22	SC General Com Invest SRL				
23	SC ICCO Energ SRL				
24	ILIOTOMI Impex GRPA				
25	SC ICPE Electrocond Technologies SA				
26	SC Luxten LC SA				
27	Magyar Aramszolgaltato KFT				
28	SC Monsson Energy Trading SRL				
29	OET Obedineni Energini Targovtsi				
30	SC Renovation Trading SRL				
31	SC Repower Furnizare Romania SRL				
32	SC Romenergy Industry SRL				
33	SC Romenergo SA				
34	SC TEN Transilvania Energie SRL				
35	SC Tinmar Ind SA				
36	SC Transformer Supply SRL				
37	SC Transenergo Com SA				

\*) 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

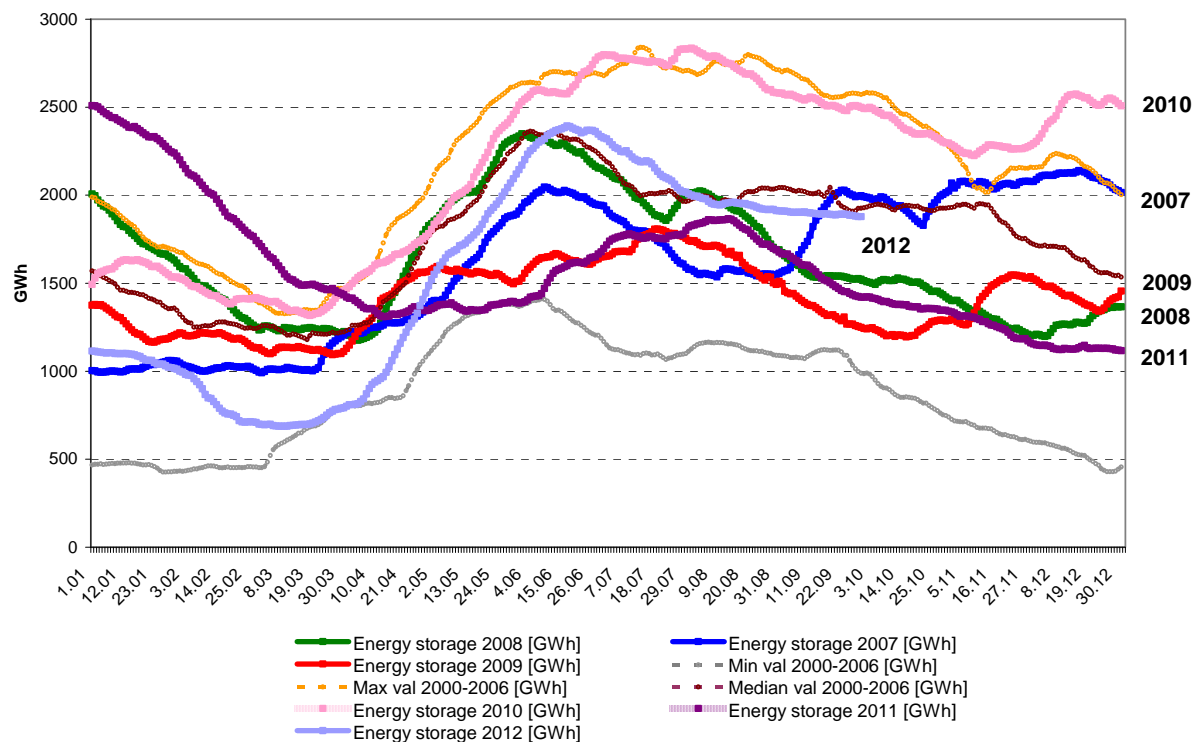
Electricity structure by primary sources  
(delivered by generators with dispatchable units)  
- September 2012 -



Source: Monthly reports of generators – processed by MG

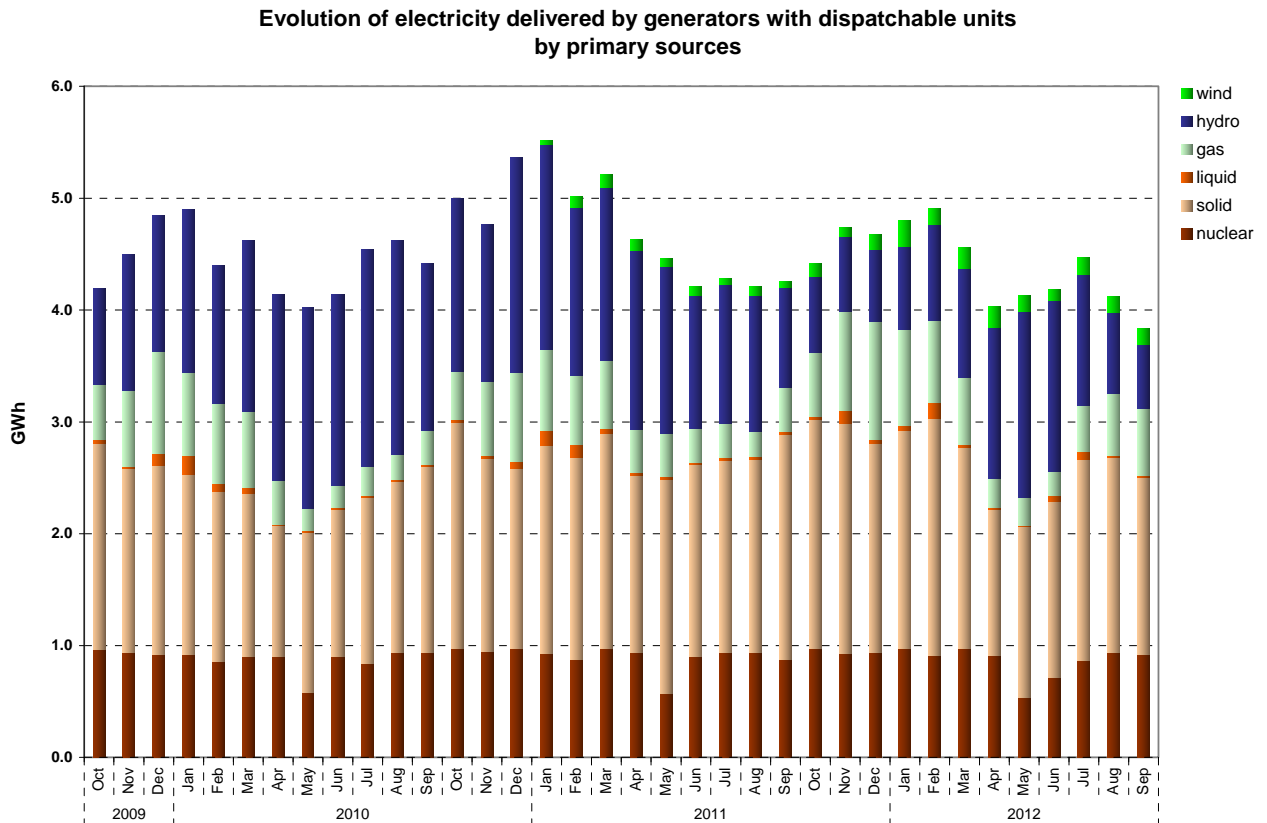
The electricity generated from hydro resources and the energy stored in the main water reservoirs are directly correlated. The following graph presents the evolution of daily amounts of energy storage during the last 4 years and compared to minimum, maximum and median values from 2000-2006.

Yearly evolution of daily values of energy stored in the main water reservoirs



Source: Monthly reports of S.C. Hidroelectrica S.A. – processed by MG

The evolution of delivered electricity structure, during the last 3 years, is the following:



Source: Monthly reports of generators – processed by MG

The following table presents the main data regarding the physical balance of electricity for September 2012 compared to data for similar period of 2011:

No.	INDICATOR	MU	September 2011	September 2012	%	Jan-Sept 2011	Jan-Sept 2011	%
0	1	2	3	4	5=4/3*100	3	4	5=4/3*100
1	Generated electricity	TWh	4.64	4.17	89.87	45.19	42.40	93.83
2	Delivered electricity	TWh	4.26	3.84	90.14	41.80	39.05	93.43
3	Import	TWh	0.09	0.12	133.33	0.60	1.08	180.00
4	Export	TWh	0.17	0.04	23.53	2.61	0.93	35.63
5	Internal consumption	TWh	4.18	3.91	93.54	39.79	39.20	98.52
6	Consumption of household consumers on the regulated market	TWh	0.89	0.94	105.62	8.61	8.88	103.13
7	Consumption of non-households consumption	TWh	2.91	2.73	93.81	25.65	25.56	99.65
7.1	on the regulated market	TWh	0.67	0.67	100.00	6.42	6.61	102.96
7.2	on the competitive market	TWh	2.24	2.06	91.96	19.23	18.89	98.23
8	Transmission–Injection component	TWh	4.21	3.94	93.59	41.04	39.72	96.78
9	Transmission–Extraction component	TWh	4.28	3.96	92.52	41.91	40.16	95.82
10	Actual transmission grid losses	TWh	0.077	0.072	93.51	0.771	0.748	97.02
11	Heat generated for delivery	Tcal	654.41	556.28	85.00	12078.07	10893.07	90.19
12	Heat in co-generation	Tcal	560.44	450.79	80.44	10201.22	9351.82	91.67

Note: 1. Data shown in the table neither include the energy produced by the generators who do not own dispatchable units (positions 1 & 2) nor the energy delivered to the consumers directly connected to the power plants (positions 6 & 7).

2. *The imported/exported quantities do not comprise transits and cross border exchange of CN Transelectrica SA with neighbor countries in order to ensuring the balance of the national energy system.*
3. *The electricity considered for transmission tariff – injection component do not comprise the electricity sold by generators for covering the transmission losses.*
4. *The transmission tariff – extraction component and the system service tariff are applied for the same quantity of electricity*

#### **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), on BM (Balancing Market) and Intraday Market (recently introduced).

When entering into force, the new Law 123/2012 on Electricity and Natural Gas has set as a general principle that energy competitive market and electricity transactions should take place in a transparent, public, centralized and non-discriminatory way. Therefore, all the new transactions have to be the result of the participation on the centralized markets administrated by Opcom, the only owner of a license issued for the electricity market operation in Romania. In this respect, efforts have been made by all the responsible factors for covering the diversity of trade products requested by the market participants. Currently, two new centralized markets are to be implemented at Opcom level as soon as possible – the organize framework for contracting energy for large end consumers and the centralized market trading with continuous double negotiation of bilateral contracts for electricity (developed based on a OTC platform model).

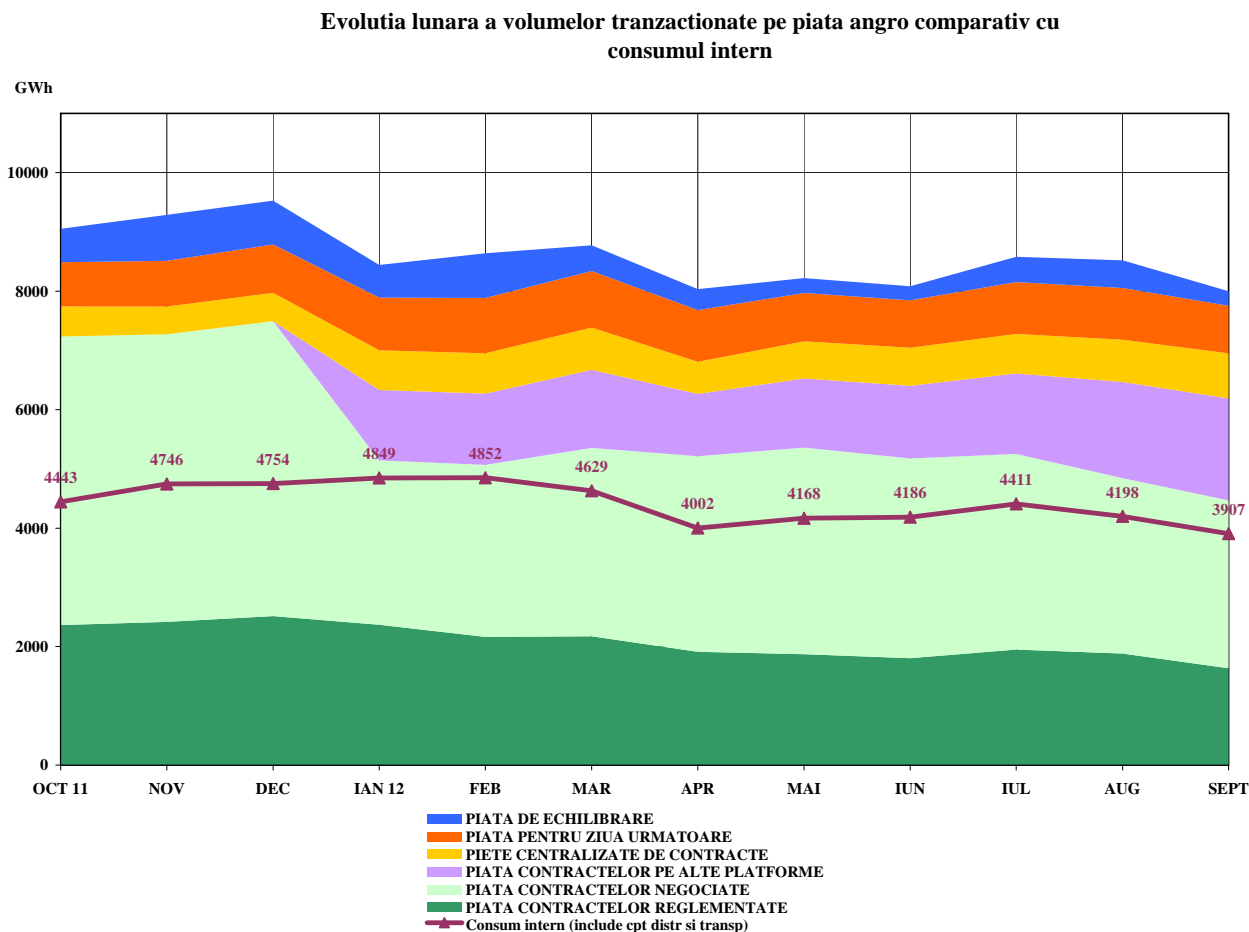
The volumes traded and the average prices on each type of contracts and on the main components of the wholesale market are presented in the following tables for September 2012 compared to the month before and September 2011:

<b>TRANSACTIONS ON THE WHOLESALE MARKET</b>	<b>August 2012</b>	<b>September 2012</b>	<b>September 2011</b>
<b>1. BILATERAL CONTRACTS' MARKET</b>			
traded volume (GWh)	<b>6469</b>	<b>6189</b>	<b>7252</b>
% from internal consumption (%)	201.19	197.81	180.42
average price (lei/MWh)	155.8	158.4	173.5
<b>1.1. Sales on regulated contracts</b>			
traded volume (GWh)	<b>1883</b>	<b>1633</b>	<b>2052</b>
% from internal consumption (%)	153.35	151.42	161.64
average price (lei/MWh)	45.3	41.8	49.1
<b>1.2. Sales on contracts concluded on other platforms *</b>			
traded volume (GWh)	<b>1626</b>	<b>1723</b>	
% from internal consumption (%)	213.35	216.79	-
average price (lei/MWh)	39.1	44.1	
<b>1.3. Sales on negotiated contracts**</b>			
traded volume (GWh)	<b>2961</b>	<b>2833</b>	<b>5200</b>
% from internal consumption (%)	224.94	212.99	187.83
average price (lei/MWh)	71.3	72.5	124.4
<b>2. EXPORT***</b>			
traded volume (GWh)	<b>61</b>	<b>44</b>	<b>168</b>
% from internal consumption (%)	273.23	167.84	209.19
average price (lei/MWh)	1.5	1.1	4.0
<b>3. CENTRALISED MARKETS OF CONTRACTS</b>			
delivered volume (GWh)	<b>712</b>	<b>762</b>	<b>430</b>
% from internal consumption (%)	210.51	219.50	171.52
average price (lei/MWh)	17.1	19.5	10.3
<b>4. DAY AHEAD MARKET</b>			
traded volume (GWh)	<b>874</b>	<b>801</b>	<b>683</b>
% from internal consumption (%)	274.59	212.18	252.97
average price (lei/MWh)	21.0	20.5	16.3
<b>5. INTRADAY MARKET****</b>			
traded volume (GWh)	<b>0.704</b>	<b>0.244</b>	<b>1.055</b>
% from internal consumption (%)	335.90	289.82	234.16
average price (lei/MWh)	0.017	0.006	0.025
<b>6. BALANCING MARKET</b>			
traded volume (GWh)	<b>464</b>	<b>249</b>	<b>441</b>
% from internal consumption (%)	11.2	6.4	10.6
upward volume (GWh)	<b>332</b>	<b>124</b>	<b>356</b>
average negative imbalance price(lei/MWh)	321.61	275.63	299.15
downward volume (GWh)	<b>132</b>	<b>125</b>	<b>85</b>
average positive imbalance price (lei/MWh )	45.66	36.54	104.90
<b>INTERNAL CONSUMPTION (includes distribution and transmission losses) (GWh)</b>	<b>4154</b>	<b>3907</b>	<b>4179</b>

Note:	*	After a large consultation process with market participants, starting with January 2012, the contracts concluded on other platforms (such as ICAP, TFS) have been separately identified; before this, these volumes had been comprised within negotiated contracts
	**	Supply contracts to consumers and export contracts are not included; volumes traded on negotiated contracts do not include the quantities resulted from the processing contracts concluded between the fuel suppliers and the generators, as this activity is not subject of ANRE regulations and not comprised within the market participants' reports
	***	Export volumes correspond to the quantities for which CN Transelectrica SA applied extraction component of transmission tariff for export. which in some cases are different to those reported as traded by participants
	****	The average monthly price has been calculated based on monthly traded volume and transaction value published by SC Opcom SA

The percentage of electricity quantities from the internal consumption (see table from above) offers a dimensional reference for each of the specified markets. Prices include only the injection component of the transmission tariff, in this way being comparable within a month and making possible the comparison with the previous month.

The following graph presents the evolution of the relation between the volumes sold on each market and the estimated internal consumption between October 2011 – September 2012.

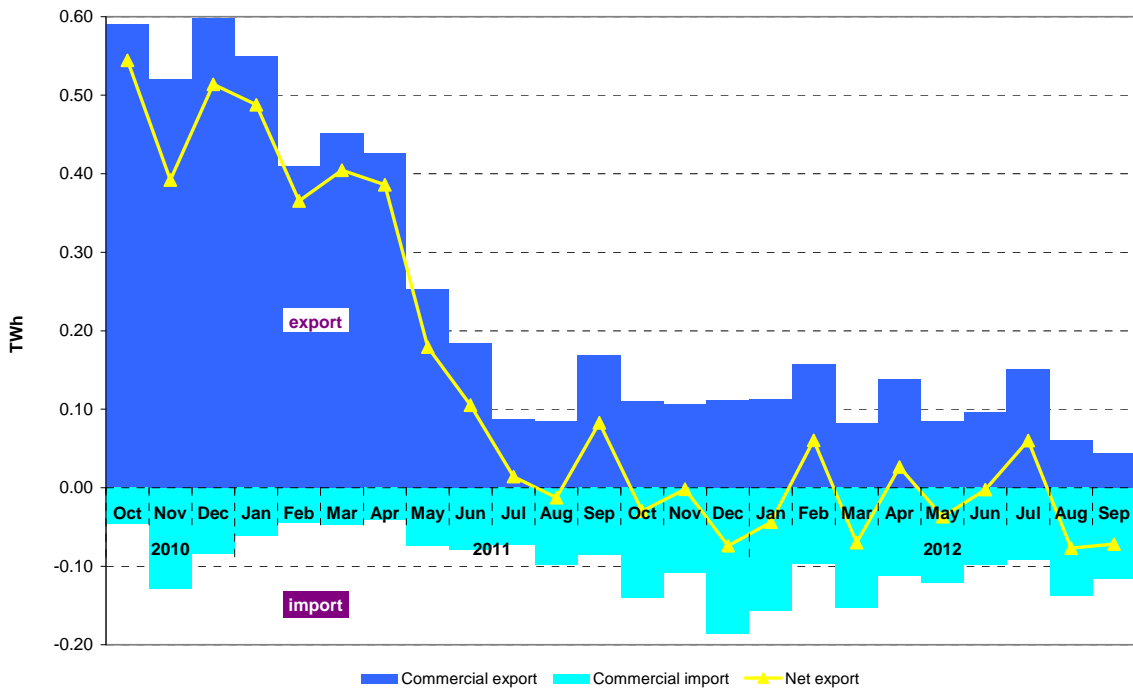


*Source: Monthly reports of wholesale market participants. SC Opcom SA and CN Transelectrica SA – processed by MG*

*Note: In the above graph, the volumes traded on negotiated contracts' market do not include the export trades*

The following graph presents the monthly values of commercial export (quantities for which the extraction component of transmission tariff was applied), commercial import (quantities for which the injection component of transmission tariff was applied) and the net export (export minus import) in the last 24 months:

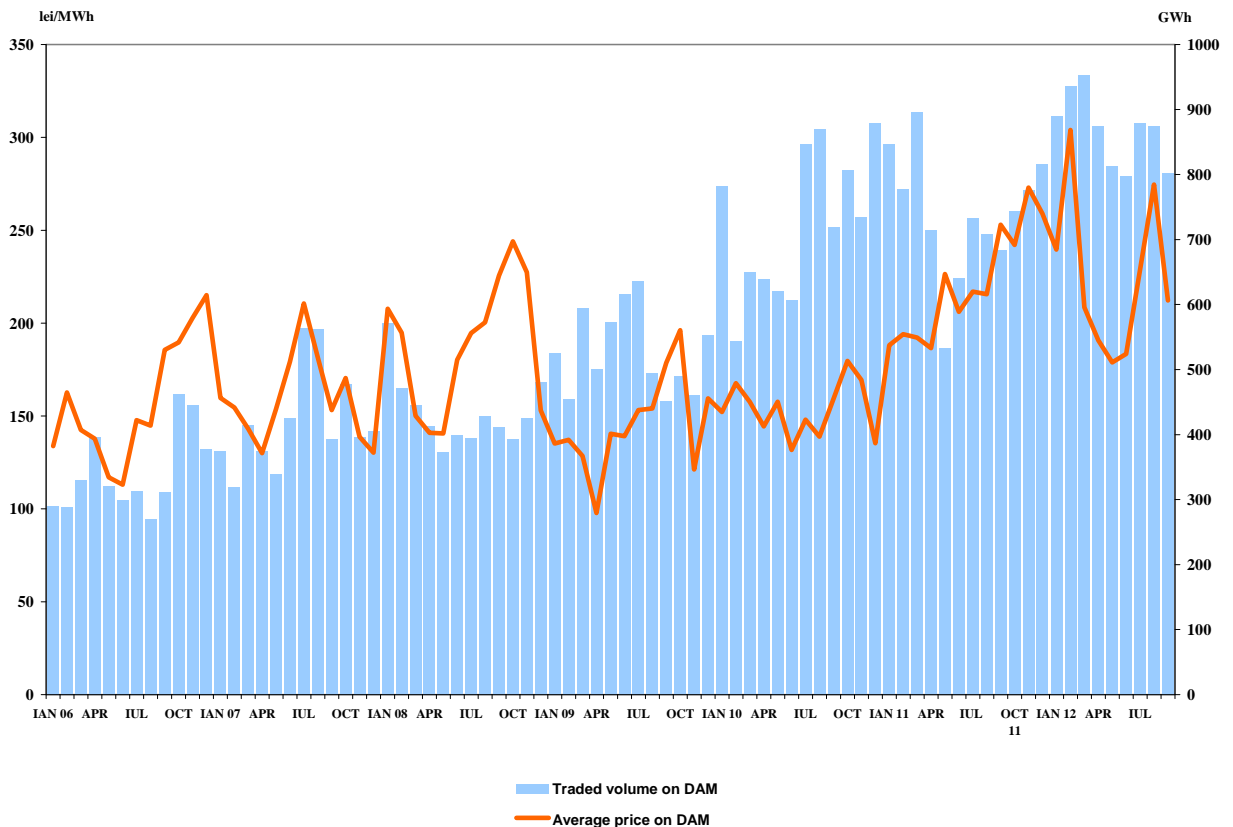
Monthly evolution of export, import and net export of electricity for the last 2 years



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

The following graph presents the volumes and the monthly average prices on DAM starting with January 2006.

Monthly evolution of the traded volume and average prices on DAM



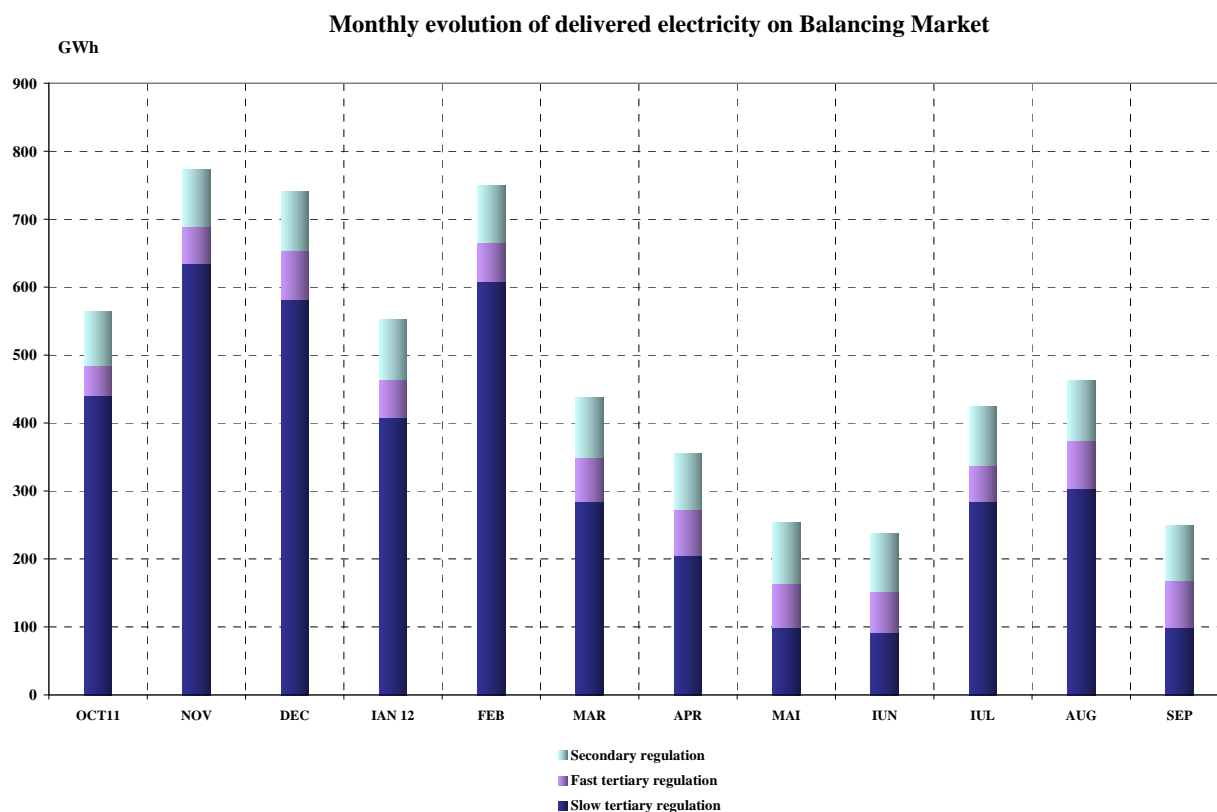
Source: Monthly reports of SC Opcom SA and CN Traselectrica SA – processed by MG

Balancing electricity is determined by the dispatch orders (accepted offers) received by generators. After settlement, the actual electricity delivered by generators on balancing market is determined based on the measured (approved) values; the relation between the accepted and delivered electricity in September 2012 is presented in the following table:

September 2012	Dispatch order (GWh)	Delivered electricity (GWh)	Deviation (%)
<b>Secondary regulation</b>	<b>81</b>	<b>81</b>	
<i>upward</i>	34	34	
<i>downward</i>	47	47	
<b>Fast tertiary regulation</b>	<b>79</b>	<b>69</b>	<b>12</b>
<i>upward</i>	24	22	7
<i>downward</i>	55	47	14
<b>Slow tertiary regulation</b>	<b>107</b>	<b>99</b>	<b>8</b>
<i>upward</i>	71	68	4
<i>downward</i>	36	31	15
<b>TOTAL</b>	<b>267</b>	<b>249</b>	
<i>upward</i>	129	124	
<i>downward</i>	138	125	
<b>INTERNAL CONSUMPTION</b>		<b>3907</b>	
<i>% share of traded volumes from internal consumption</i>		<b>6.4%</b>	

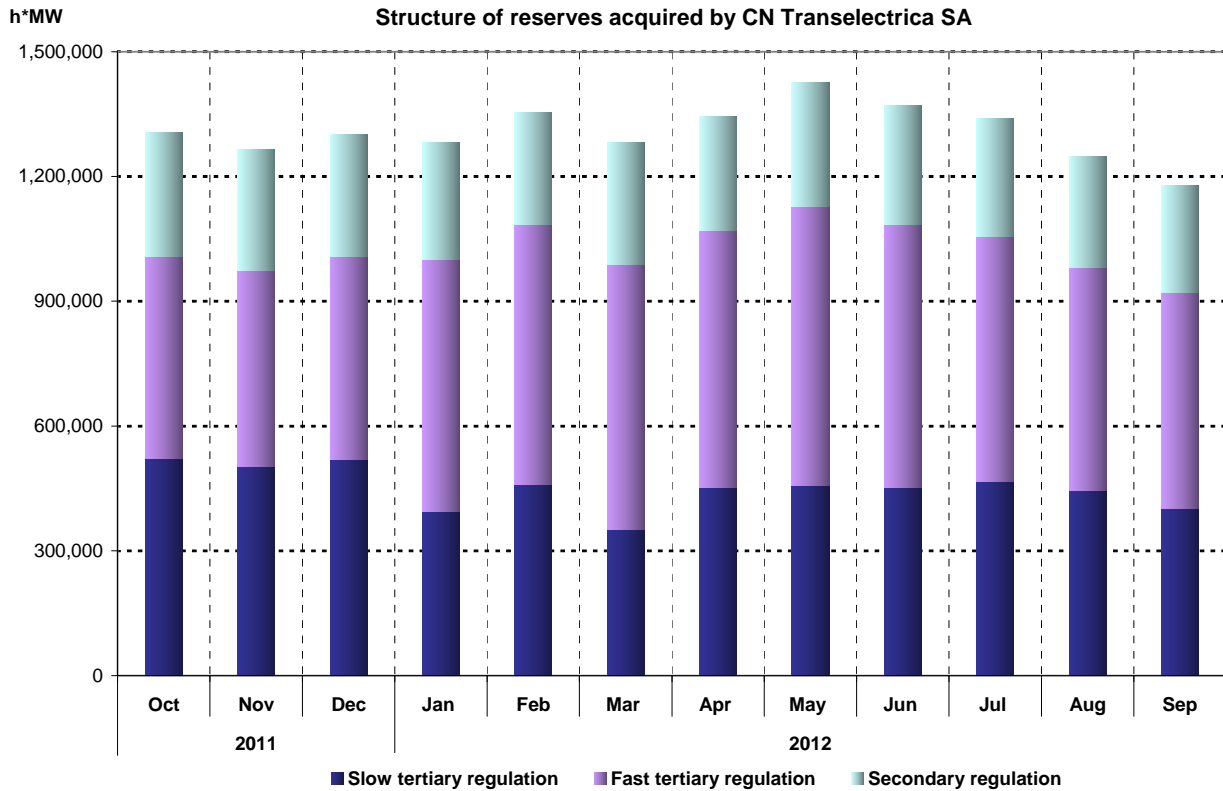
Source: Monthly reports of CN Traselectrica SA – processed by MG

The structure of balancing electricity delivered in the system on each type of regulation starting from October 2011 is presented in the graph below:



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

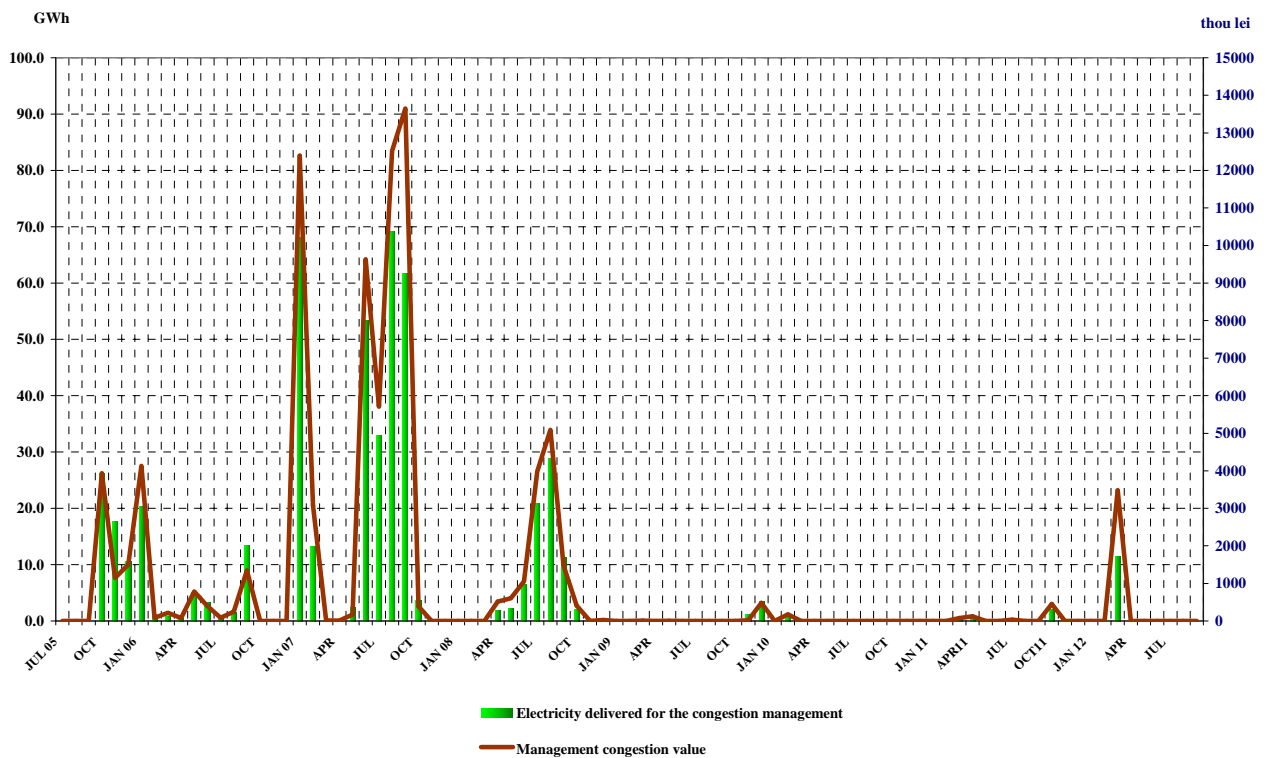
For comparison, the following graph presents the evolution of reserves (ancillary services, i.e. obligations of generators to maintain their contracted capacities available for dispatching/offering on BM) acquired/paid by CN Traselectrica SA starting from October 2011:



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

The following graph presents the evolution of electricity traded by CN Traselectrica SA on the Balancing Market for covering the electricity used for congestion management (in order to solve the congestions occurred within the transmission grid) and the evolution of the values of these transactions starting from July 2005.

Monthly evolution of the volume and value of the electricity delivered for the congestion management



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

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

### Generators

The structure of electricity sales obligations contracted before delivery day by the electricity generators with dispatchable units in August 2012 compared to previous month and September 2011 was the following:

Transaction type	- GWh -		
	August 2012	September 2012	September 2011
<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
Regulated to incumbents, thermal generators	721.06	600.44	748.58
Regulated to incumbents, hydro generator	221.76	206.51	244.84
Regulated to incumbents, nuclear generator	524.20	457.79	442.92
Regulated for distribution losses, thermal generators	208.03	165.12	180.90
Regulated for distribution losses, hydro generator	43.91	40.41	24.17
Regulated for distribution losses, nuclear generator	163.79	157.61	104.28
Regulated for transmission losses, thermal generator	0.00	0.00	73.82
Regulated, to other generators (with return of obligation within a year)	0.00	4.61	232.79
Negotiated, to other generators	0.00	0.00	227.58
Negotiated, to suppliers	780.51	711.83	1157.48
Contracts concluded on centralized markets (CMBC, CMBC-NC, RCE)	688.27	756.71	429.72
Supply to consumers (regulated and competitive)	319.82	303.83	302.11
Export	0.00	0.00	63.49
DAM	432.73	538.78	417.21
<b>Total</b>	<b>4104.09</b>	<b>3943.64</b>	<b>4649.90</b>

Source: Monthly reports of generators – processed by MG

## Suppliers

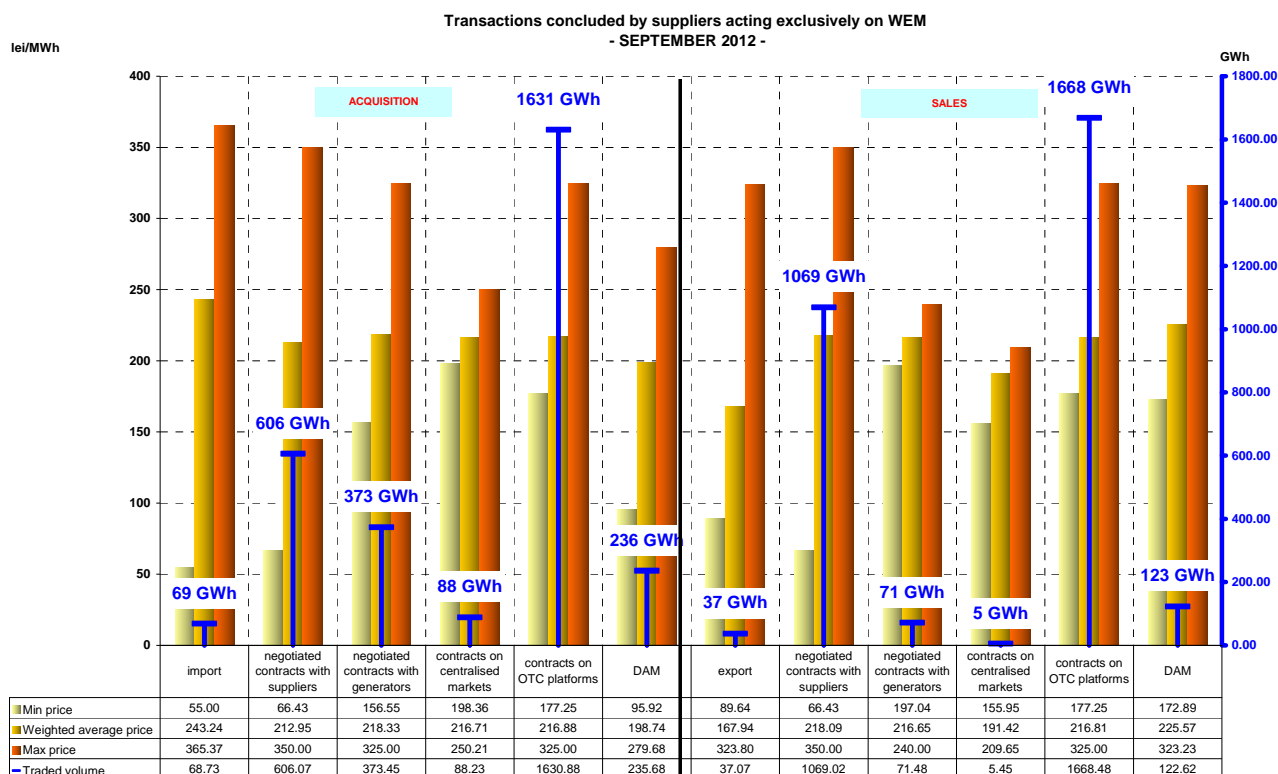
In September 2012, 78 companies having as main activity the supply of electricity concluded transactions on the electricity market; from these, 36 suppliers traded electricity exclusively on the wholesale market and 42 suppliers on both retail and wholesale markets (in this category are also included the 5 incumbent suppliers).

### Suppliers acting exclusively on WEM

The following table shows the activity for September 2012 compared to September 2011 of the suppliers acting exclusively on WEM, acquisitions and sales being split by categories of markets/participants:

	- GWh -	
Transactions' structure of suppliers acting exclusively on WEM	September 2011	September 2012
<b>Acquisitions</b>		
Import	22.53	68.73
Negotiated contracts with suppliers	2196.01	606.07
Negotiated contracts with generators	61.62	373.45
Contracts concluded on centralized markets	11.22	88.23
Contracts on OTC platforms	0.00	1630.88
DAM	58.23	235.68
<b>Sales</b>		
Export	94.01	37.07
Negotiated contracts with suppliers	2138.06	1069.02
Negotiated contracts with generators	43.20	71.48
Contracts concluded on centralized markets	0.00	5.45
Contracts on OTC platforms	0.00	1668.48
DAM	140.80	122.62

In addition to the data from the table above, the following graph presents the minimum, average and maximum actual prices by categories of transactions completed by the suppliers acting exclusively on WEM (traders) in September 2012:



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

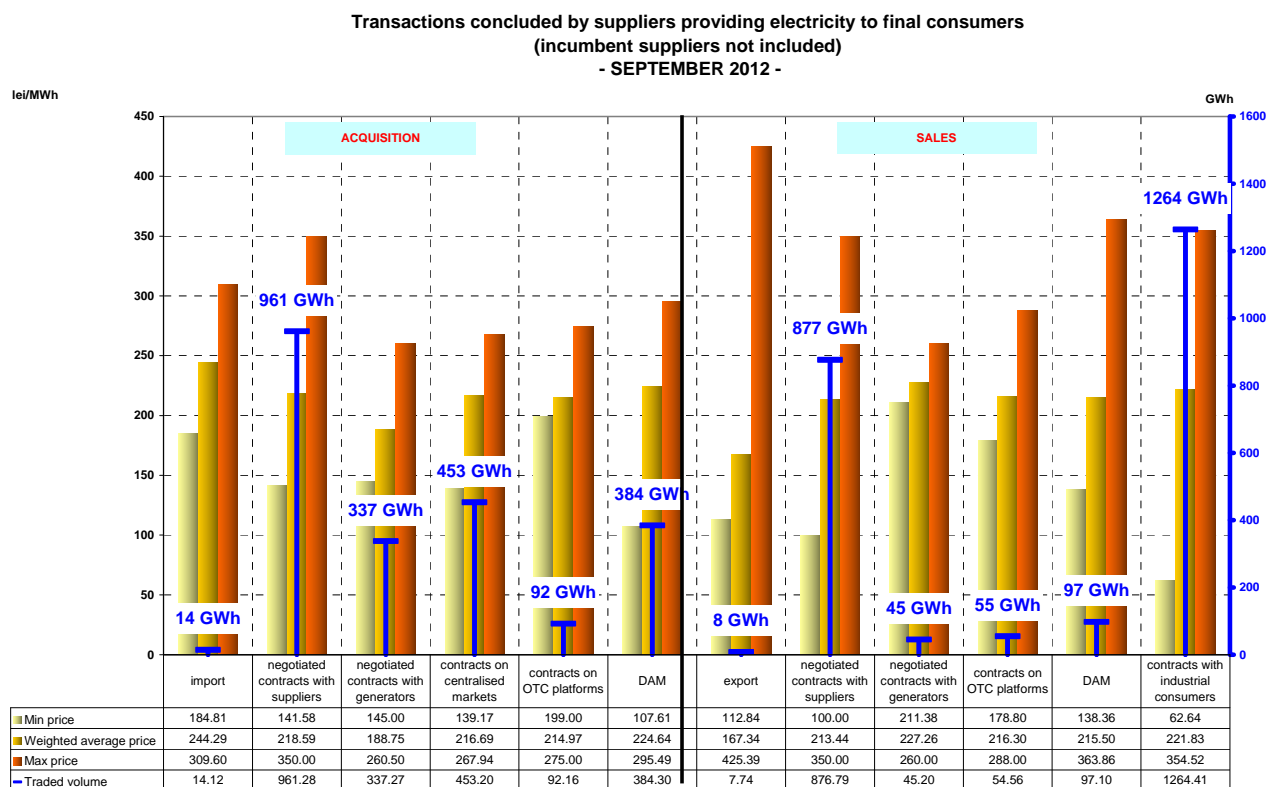
Active suppliers on REM (the incumbent suppliers are not included)

The following table presents aggregated information on transactions volume and structure for suppliers providing electricity to final consumers, on the competitive market, for September 2012 and September 2011.

- GWh -

Transactions' structure of suppliers providing electricity to final consumers (the incumbent suppliers are not included)	September 2011	September 2012
<b>Acquisitions</b>		
Import	32.75	14.12
Negotiated contracts with suppliers	1040.79	961.28
Negotiated contracts with generators	1095.86	337.27
Contracts concluded on centralized markets	360.89	453.20
Contracts on OTC platforms	-	92.16
DAM	330.12	384.30
<b>Sales</b>		
Export	10.38	7.74
Negotiated contracts with suppliers	1296.02	876.79
Negotiated contracts with generators	136.48	45.20
Contracts concluded on centralized markets	0.00	0.00
Contracts on OTC platforms	0.00	54.56
DAM	108.48	97.10
Contracts with industrial consumers	1459.82	1264.41

In addition to the data from the table above, the following graph presents the sales structure and the minimum, average and maximum actual prices by categories of transactions completed by suppliers providing electricity to final consumers in September 2012:



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

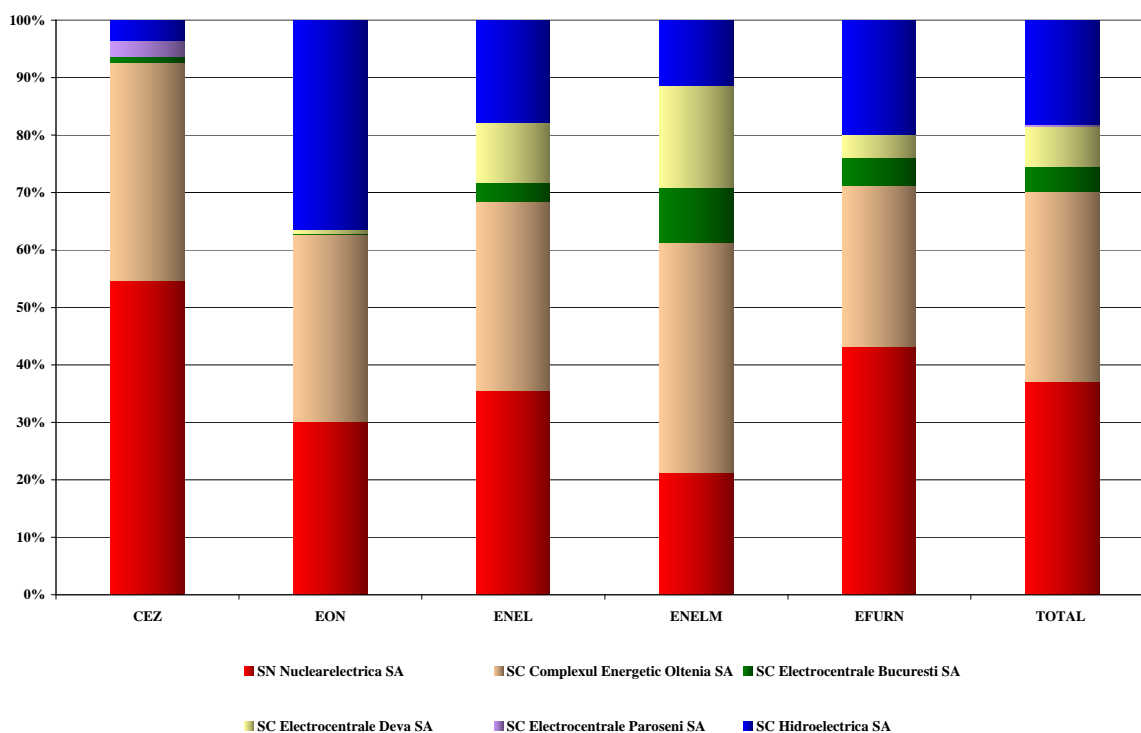
### Incumbent suppliers

Electricity acquisition structure of incumbent suppliers (before the delivery day), for supplying the regulated market consumers, is presented in the table below, for September 2012 compared to the situation of September 2011:

Acquisition structure of incumbent suppliers for regulated REM component	- GWh -	
	September 2011	September 2012
Regulated contracts with generators	1469.32	1291.56
Negotiated contracts	11.29	13.73
Contracts concluded on centralized markets	0.00	70.92
Intraday	0.00	0.00
DAM	67.88	167.25

The structure of the electricity purchased by the incumbent suppliers from the main generators on regulated contracts is presented in the following graph for September 2012:

**Electricity acquisition from main generators, on regulated contracts, of incumbent suppliers for delivering electricity to final consumers on regulated market  
SEPTEMBER 2012**



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

Under the Memorandum of Understanding approved by the Romanian Government in its meeting of 13 March 2012 and in accordance with the obligations assumed by the Romanian Government in relation with the IMF, World Bank and European Commission there has been approved the timetable for the phasing out of regulated electricity tariffs to final consumers who choose not to exercise their eligibility rights.

Under these circumstances, the incumbent suppliers apply a new tariff for the active power to the non-household customers who do not exercise their eligibility rights called the “Competitive Market Component” (CMC).

Therefore, starting with 1st September 2012, the incumbent suppliers display this tariff component separately in the bills of non-household customers who do not exercise their eligibility rights, which was proposed by each incumbent supplier and finally approved by ANRE, in accordance with the provisions of ANRE Order no. 30/2012 for approving the Methodology to set up prices and tariffs to the final customers who chose not to exercise their eligibility rights.

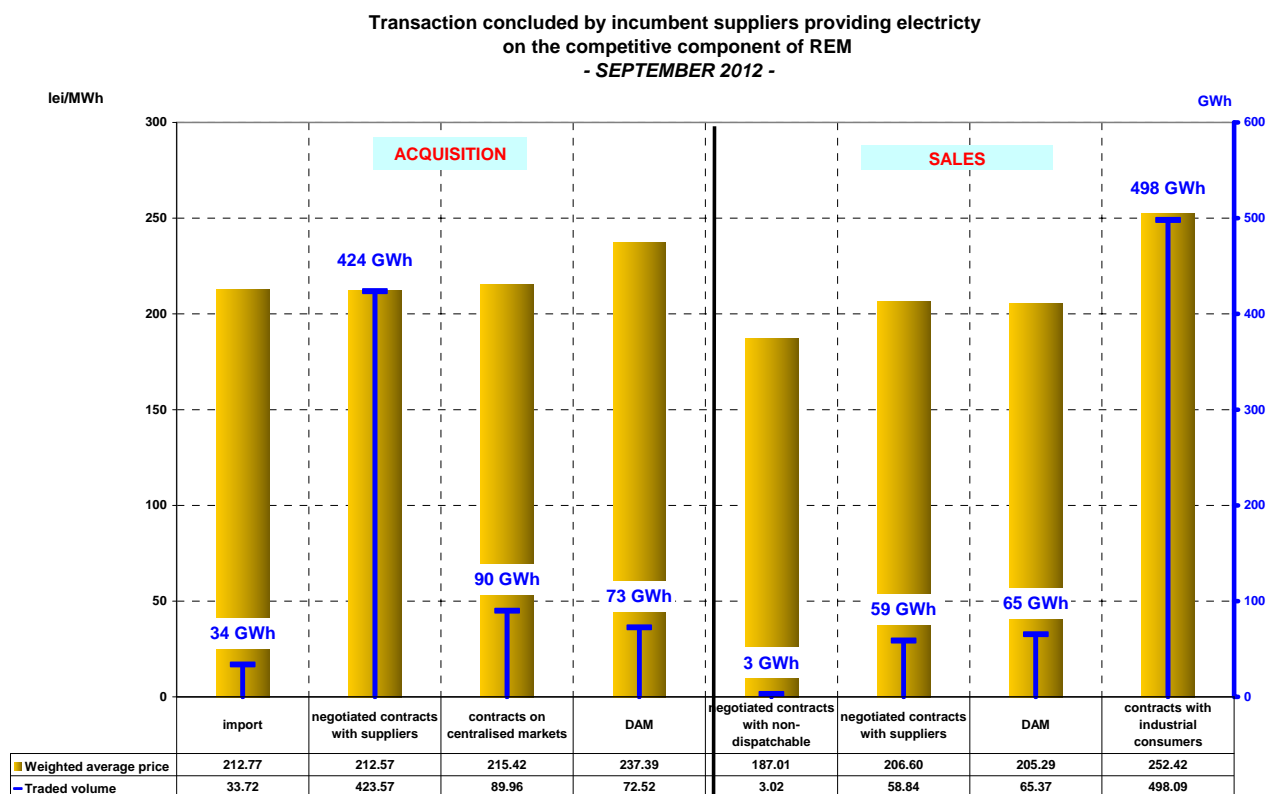
The following table presents the electricity acquisition structure of incumbent suppliers for CMC (before the delivery day) for September 2012.

Acquisition structure of incumbent suppliers for CMC	Quantity [GWh]	Average price [lei/MWh]
Negotiated contracts	3.42	245.18
Contracts concluded on centralized markets	27.81	243.89
Contracts IntraDay	0.00	0.00
DAM	41.20	229.04
<b>TOTAL</b>	<b>72.43</b>	<b>235.39</b>

Similar to the situation presented for the regulated REM, the table below presents the structure of incumbent suppliers’ transactions (before the delivery day), corresponding to the competitive REM (energy supplied at negotiated prices to the consumers who renounced to regulated tariffs) for September 2012 compared to September 2011:

Transactions’ structure of incumbent suppliers for competitive REM component	- GWh -	
	September 2011	September 2012
<b>Acquisitions</b>		
Import	29.79	33.72
Negotiated contracts with suppliers	386.11	423.57
Contracts concluded on centralized markets	0.00	89.96
DAM	205.23	72.52
<b>Sales</b>		
Negotiated contracts with suppliers	200.16	58.84
Negotiated contracts with distributors	0.00	0.00
Contracts concluded on centralized markets	1.07	0.00
DAM	0.73	65.37
Final consumers	479.13	498.09

The structure by types of sources/destinations of the traded volumes combined with the actual average prices of the incumbent suppliers corresponding to the competitive segment of REM is presented in the following graph for September 2012:



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

### Main distribution operators

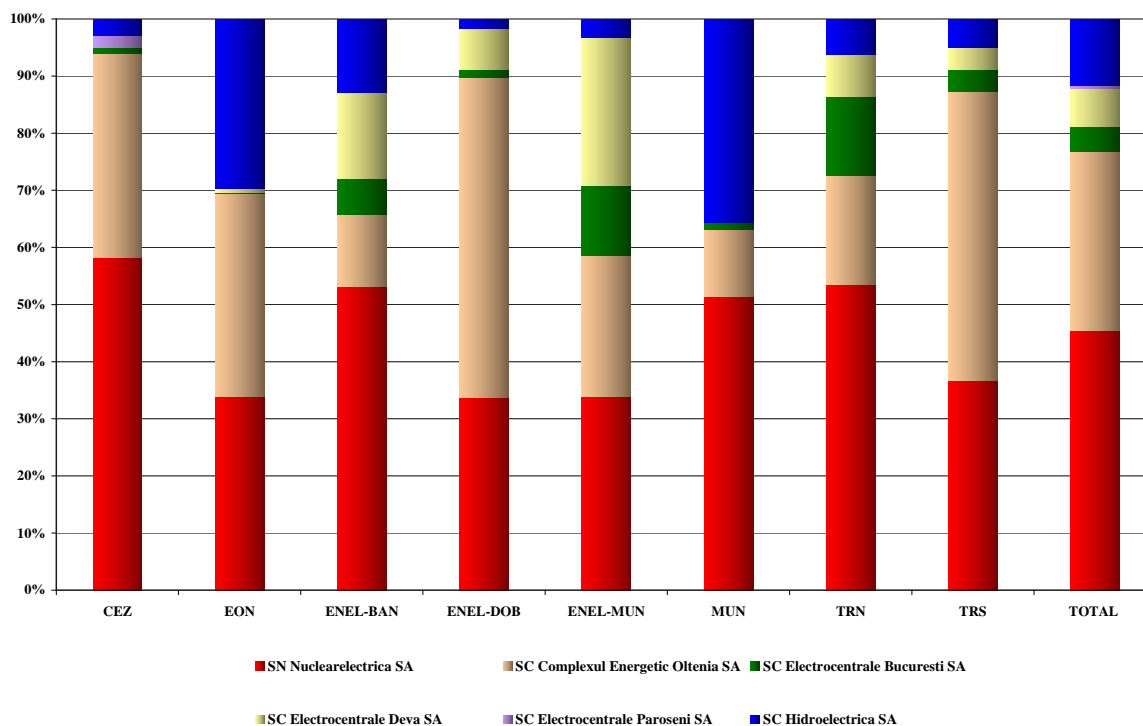
The following table shows the electricity acquisition structure of main distribution operators (before the delivery day), for covering the distribution network losses, for September 2012 compared to September 2011:

- GWh -

Acquisition structure	September 2011	September 2012
Regulated contracts with generators	311.76	365.76
Negotiated contracts with suppliers	1.07	0.00
DAM	14.72	13.70

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 September 2012:

Electricity acquisition of distribution operators from main generators, on regulated contracts, for covering the distribution losses  
SEPTEMBER 2012



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 non-concentrated 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.

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

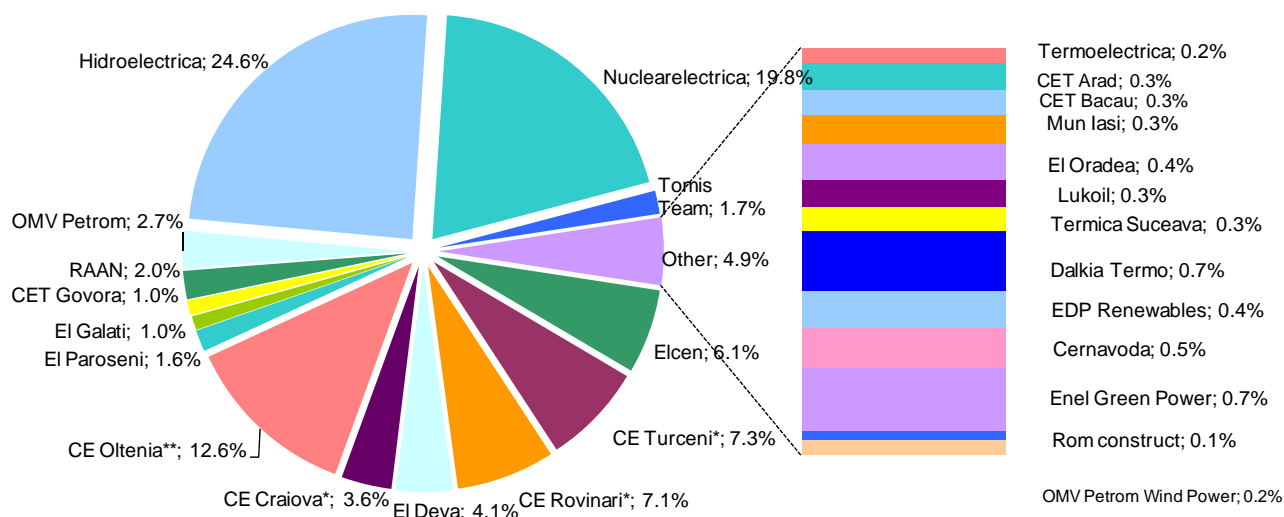
### Concentration indicators and market shares of the electricity generators

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 September 2012, calculated based on electricity delivered into the networks by the generators with dispatchable units.

Concentration indicators - September 2012 -	C1 (%)	C3 (%)	HHI
Value	33.6	72.6	2084

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 9 months from 2012. These market shares are calculated based on the electricity delivered into networks and separately for CE Rovinari, CE Turceni and CE Craiova until the moment CE Oltenia obtained its generation license.

**Market share of generators with dispatchable units by delivered electricity  
January-September 2012**



\* 01 January - 10 June 2012  
\*\* 11 June - 30 September 2012

**Structure indicators:**  
C1 - 24.6%  
C3 - 57.0%  
HHI - 1346

Source: Monthly reports of generators – processed by MG

A component of the WEM where direct competition between generators exists is the Balancing Market (BM). The values of concentration indicators on this market 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 for September 2012:

Structure/concentration indicators of BM - September 2012 -	Regulation					
	Secondary		Fast tertiary		Slow tertiary	
	upward	downward	upward	downward	upward	downward
C1 - % -	57	54	61	46	34	35
C3 - % -	100	100	94	96	82	95
HHI	4864	4765	4514	3469	2445	3032

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 generators have different levels of capabilities for ensuring this type of service, this market has an important regulated component. The relationship between regulated and competitive components on the Ancillary Services Market (ASM) as well as the main concentration indicators on each type of reserve (secondary, fast tertiary and slow tertiary) are presented in the following table for September 2012:

Concentration indicators on ASM - September 2012 -		Secondary reserve	Fast tertiary reserve	Slow tertiary reserve
regulated component	contracted quantity (h*MW)	257400	518400	252000
	C1 (%)	51.9	87.2	50.0
	C3 (%)	98.3	96.9	85.7
competitive component	contracted quantity (h*MW)	0	0	151200
	C1 (%)	-	-	37.7
	C3 (%)	-	-	86.9
	HHI	-	-	2841

### Concentration Indexes for the Day Ahead Market

Day Ahead Market (DAM) is a voluntary market, opened both for buying and selling for all types of market participants: generators, suppliers, grid operators, under applicable regulations.

The concentration indicators on DAM reflects the level of competition between sellers and between buyers respectively, the dynamics of both influencing the price level. The following table presents C1, C3 and HHI for buying and for selling side of DAM in September 2012, based on quantities traded by participants on this market.

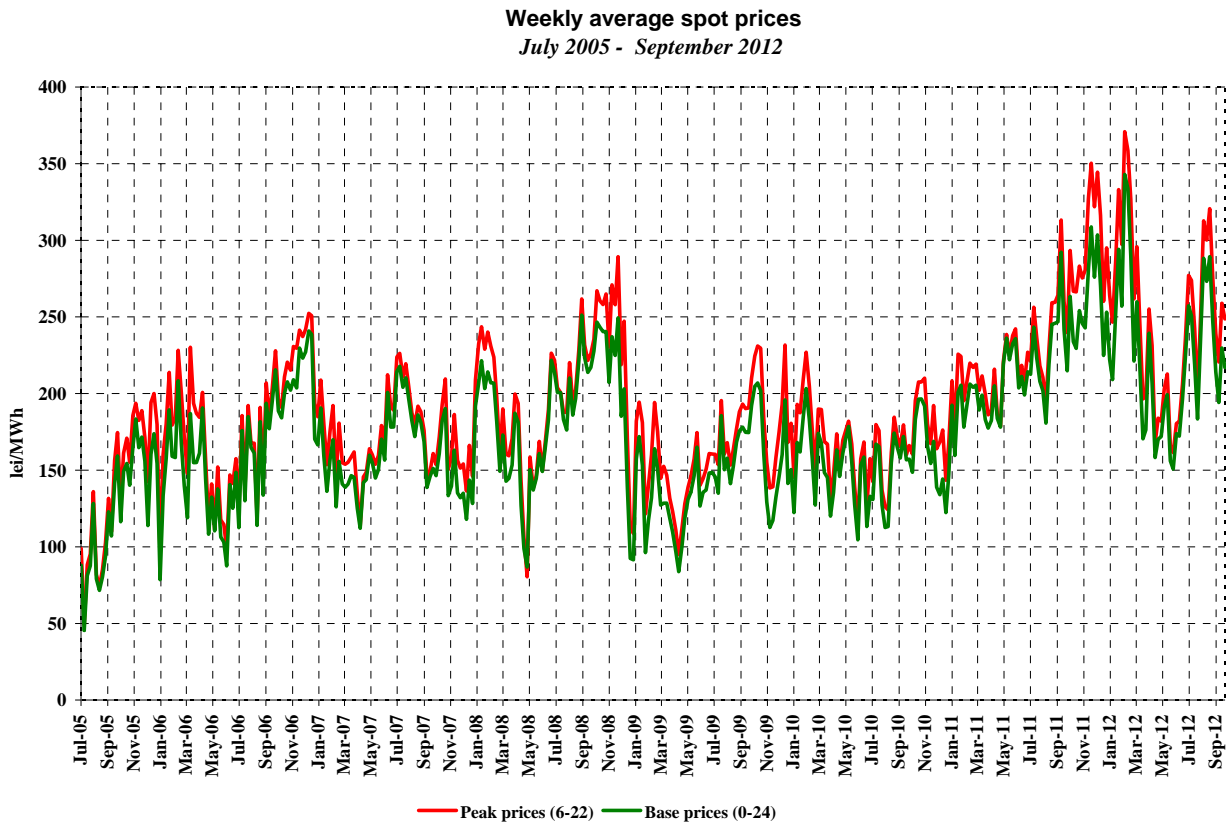
Concentration indicators on DAM - September 2012 -	C1 (%)	C3 (%)	HHI
Buying transactions	16.81	35.26	708
Selling transactions	19.38	47.94	939

### **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 evolutions of hourly and daily average prices on DAM in September 2012 are presented in the following graphs, along with the prices on 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.



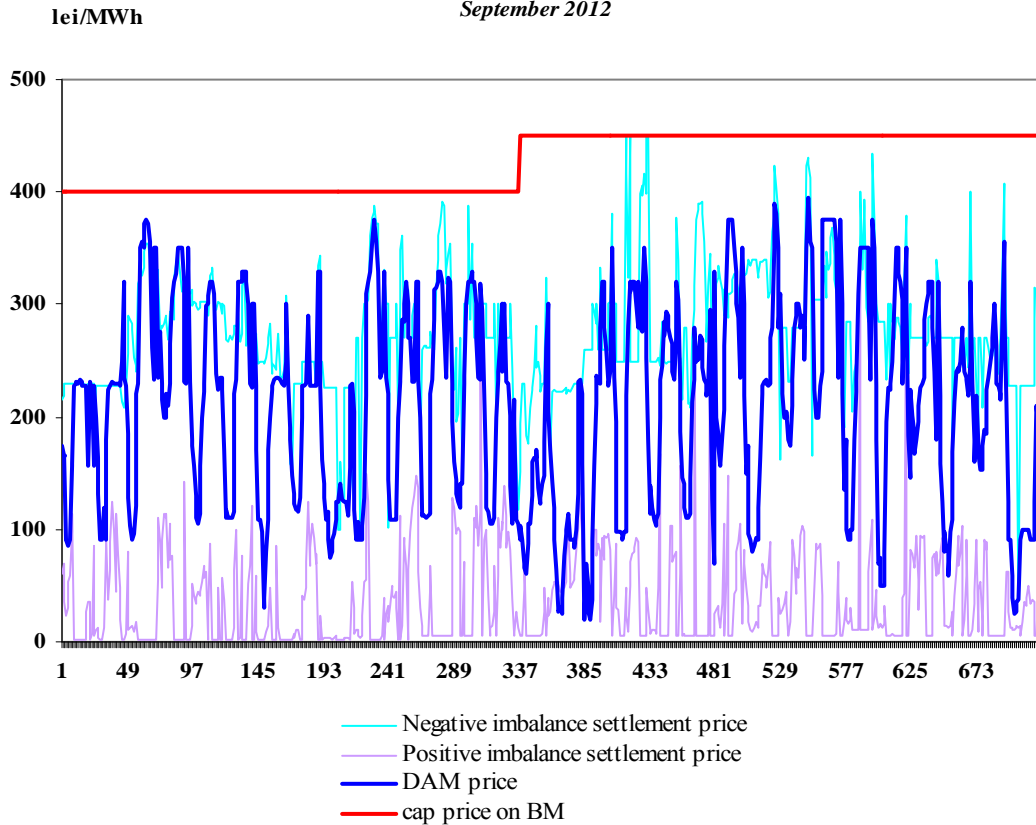


*Source: Daily reports of SC Opcom SA – processed by MG*

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.

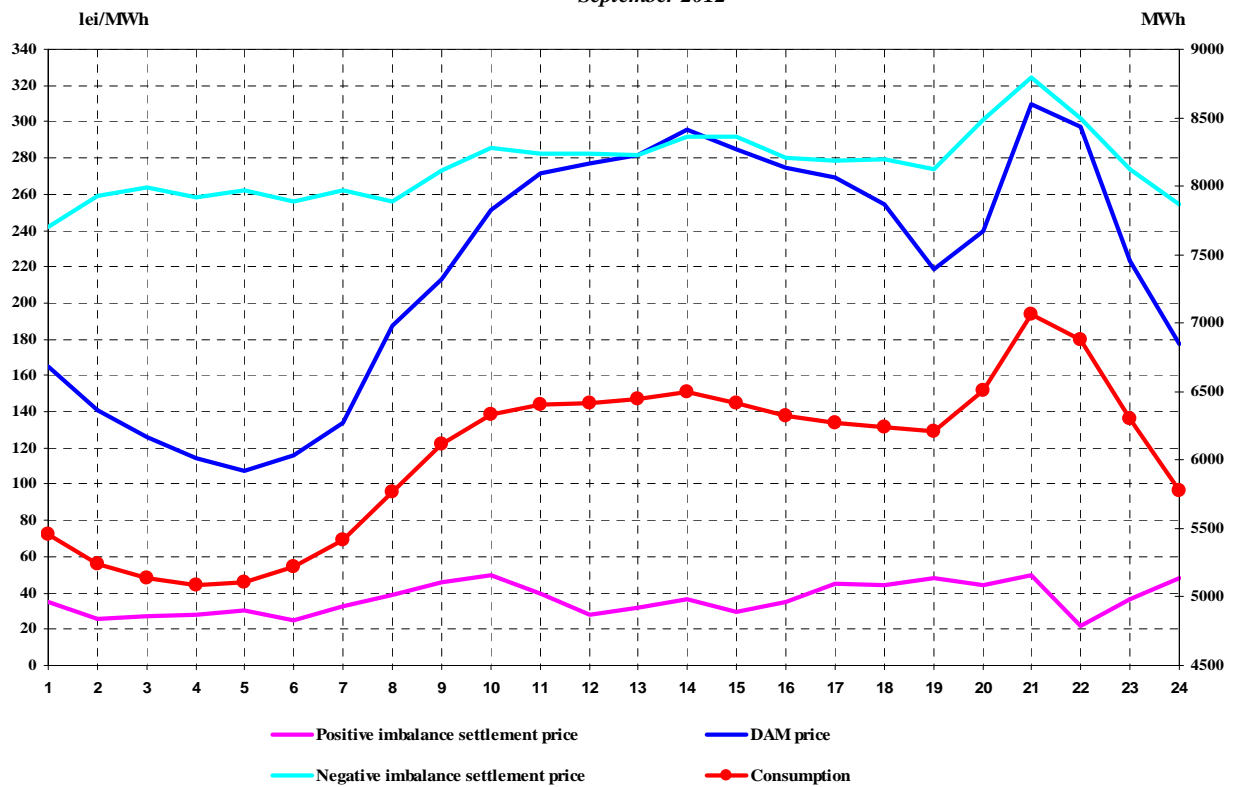
The settlement prices (MCP on DAM, negative imbalance settlement price and positive imbalance settlement price) are represented on the same graph, showing the two markets correlation degree. In the first graph the prices are expressed in hourly values, in the second graph in hourly average values compared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

**Hourly settlement prices**  
September 2012



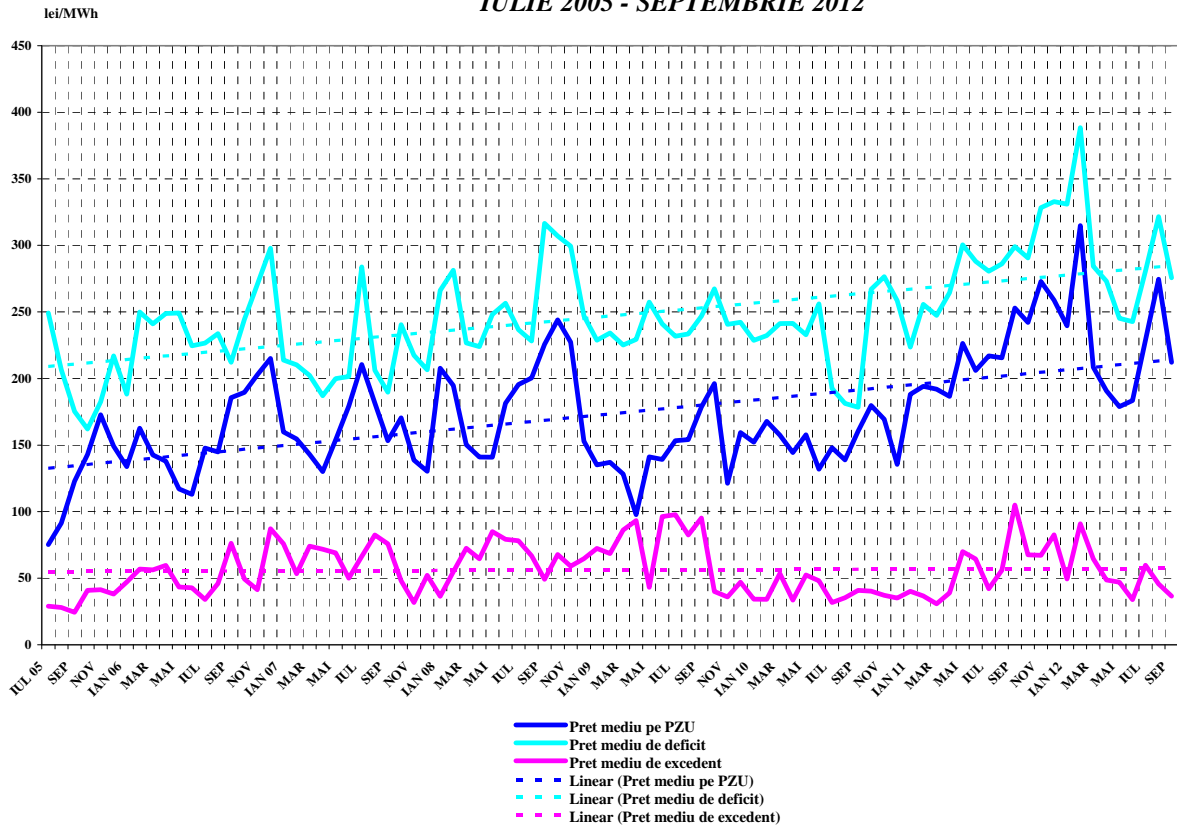
Source: Daily/monthly reports of SC Opcom SA – processed by MG

**Hourly average settlement prices and internal consumption**  
September 2012



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

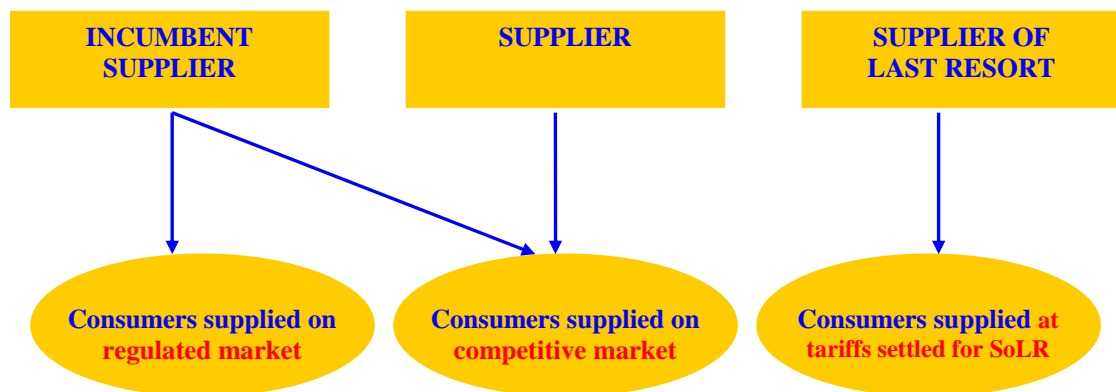
**Preturi medii lunare inregistrate pe PZU si PE**  
**IULIE 2005 - SEPTEMBRIE 2012**



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

### III. RETAIL ELECTRICITY MARKET

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



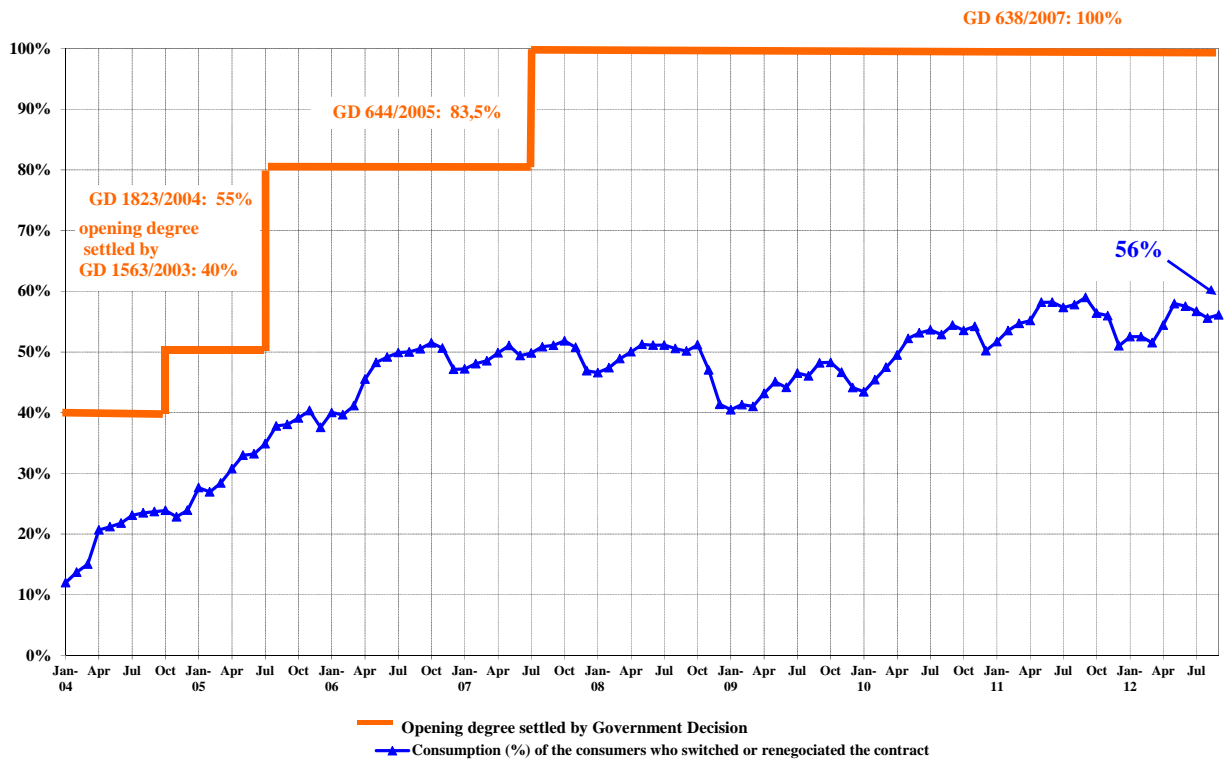
#### 2. Steps in the opening process of the electricity market

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 – September 2012. The values presented are cumulated from the beginning of the opening process and are presented monthly:

Opening degree evolution for electricity market  
January 2004 - September 2012

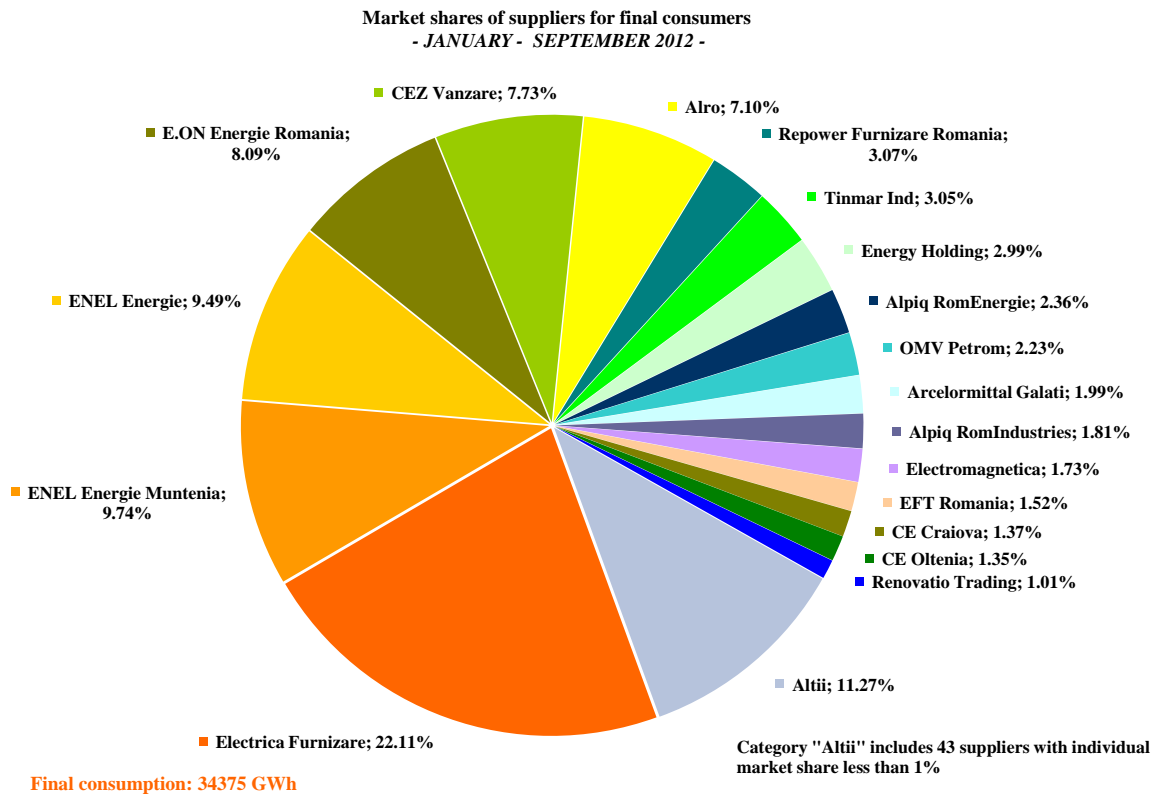


Source: Monthly reports of the final consumers' suppliers – processed by MG

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

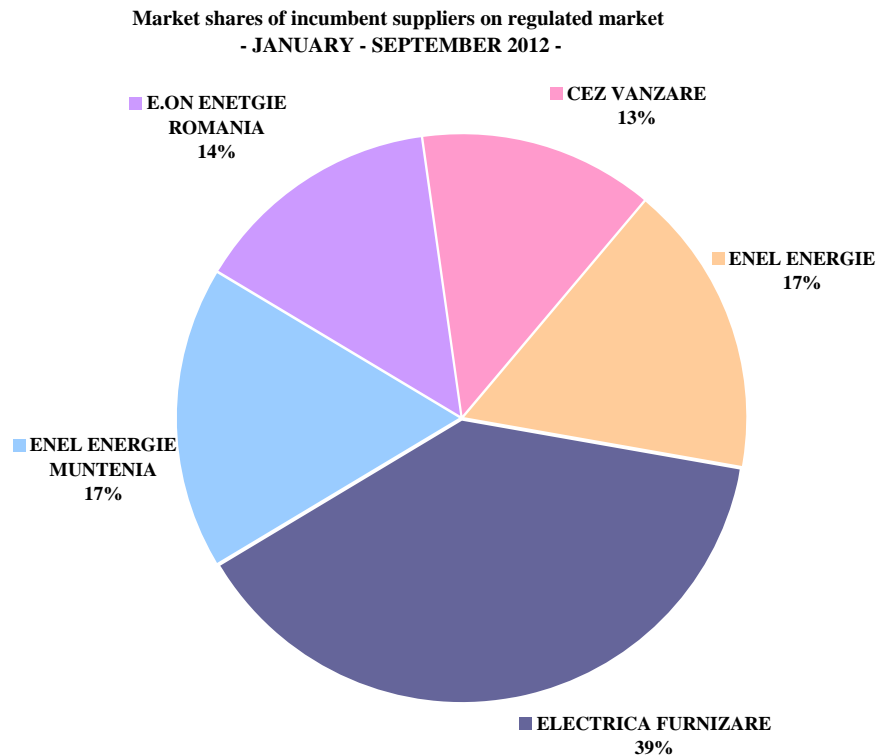
In the following three graphs there are presented the market shares of electricity suppliers on the retail market, calculated:

- a) for all suppliers (including the incumbents) on REM – based on the electricity supplied to the consumers on regulated tariffs as well as to the consumers who switched their supplier or renegotiated their contract;



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

- b) for incumbent suppliers - based on the electricity supplied to the consumers at regulated tariffs:

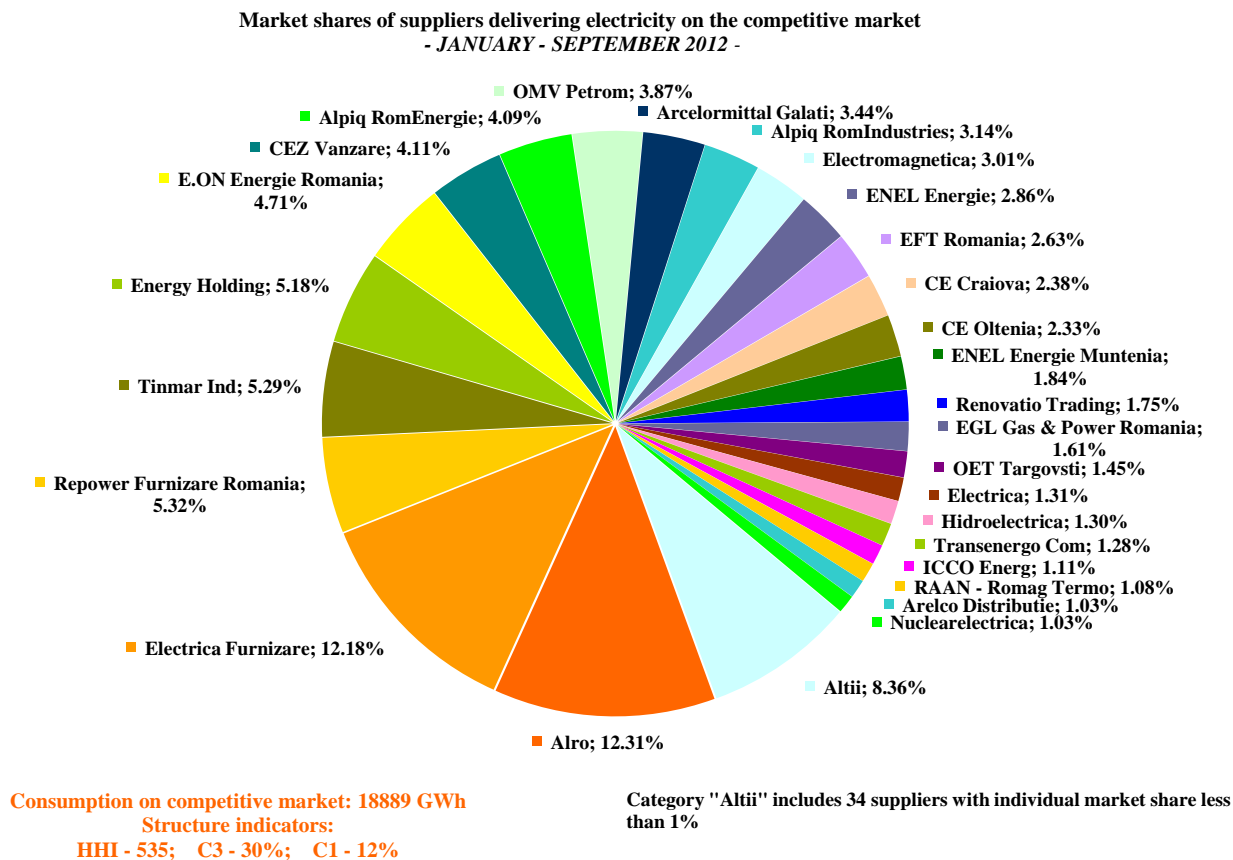


Consumption of consumers supplied at regulated tariffs: 15386 GWh

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

and

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



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

The structure indicators were calculated without considering the principle of dominance. The delivered electricity (used for calculating the market shares) comprises the self-consumption of large industrial consumers who possess supply licenses and acquire electricity from the wholesale market as competitive suppliers.

The values of market indicators were calculated without taking into consideration the dominance principle. The delivered electricity used for determining the market share of each supplier comprises the self-consumption of the largest industrial consumer which owns a supply license and based on it acquired its electricity from the WEM as a competitive supplier.

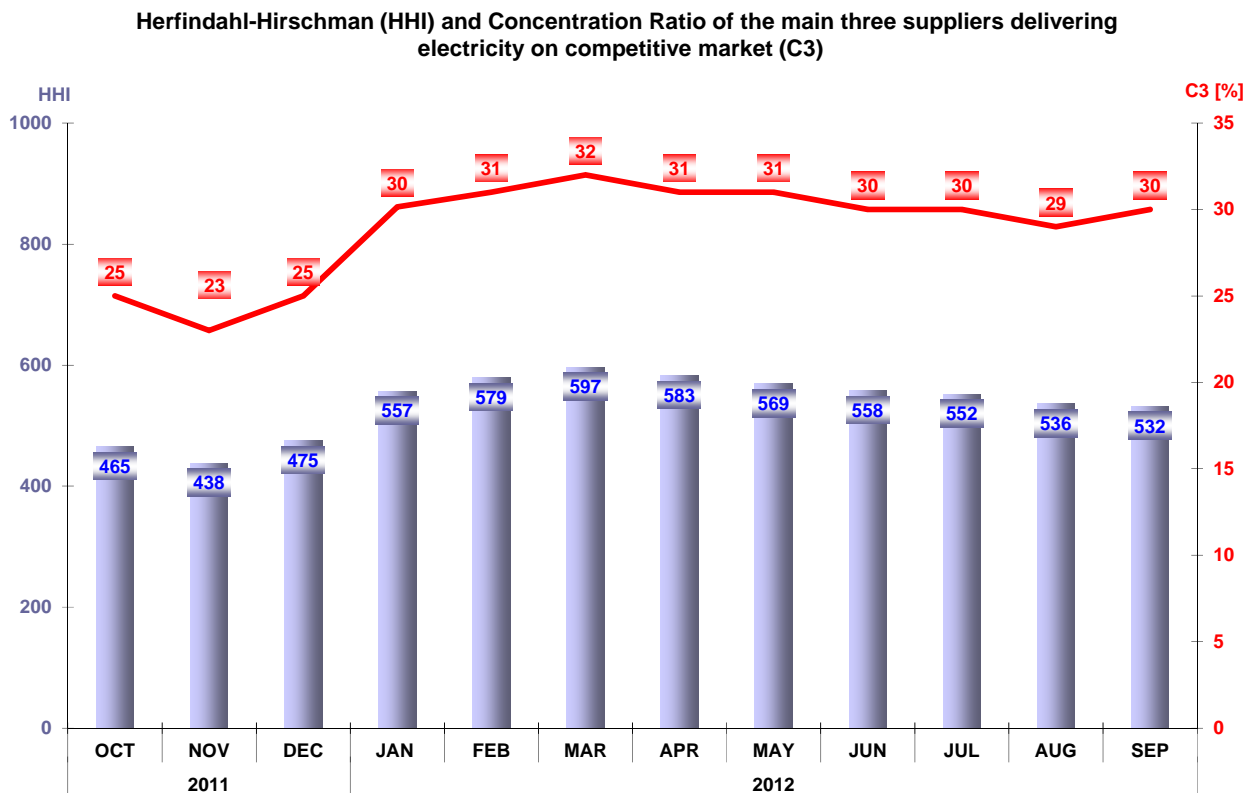
The electricity supplied to the final consumers used for calculating the market share of every supplier includes also the self-consumption of that particular supplier (e.g. consumers with supply license who buy electricity for themselves from WEM as competitive suppliers).

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 September 2012:

Number of suppliers	Share of sales to final consumers from total sales transactions			
	100%	75% - 100%	50% - 75%	<50%
Competitive	6	10	7	14
Incumbent	2	2	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 for October 2011 – September 2012 in the following graph:



Source: Monthly reports of the suppliers – processed by MG

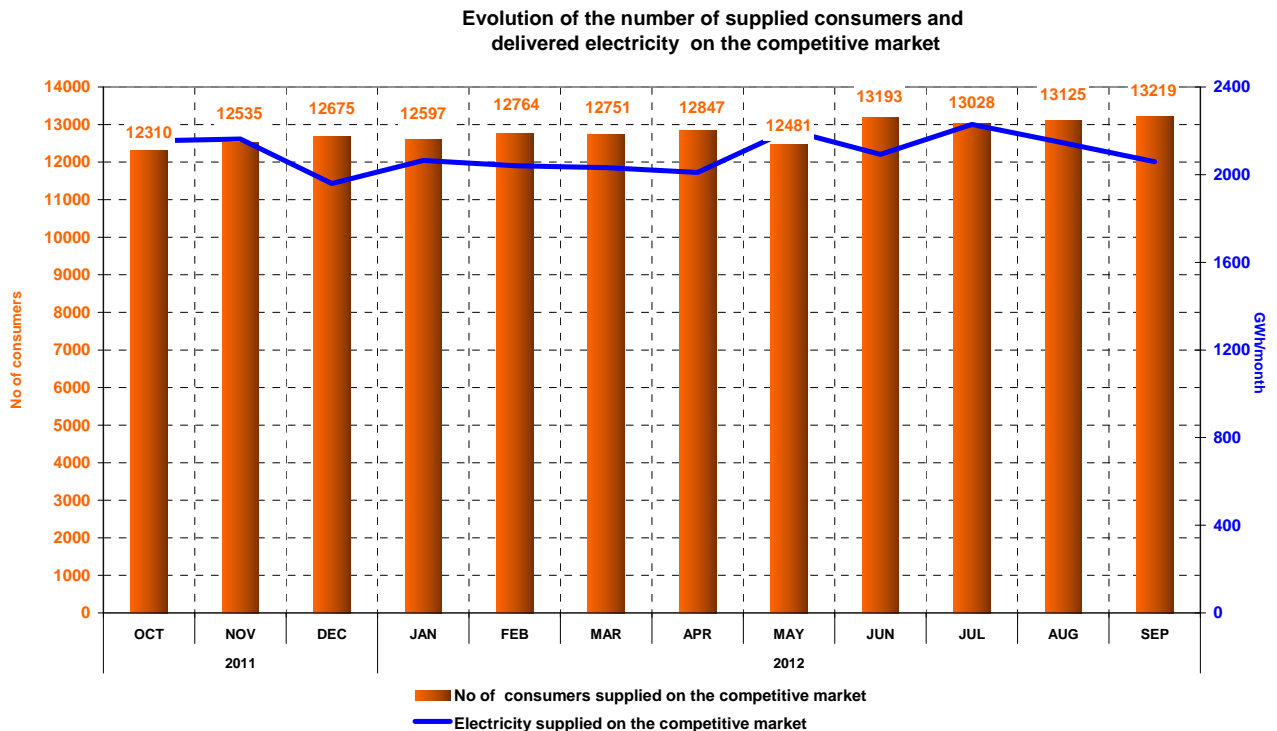
The table below shows the values of structure indicators of competitive component of REM for and the number of active suppliers in September 2012, calculated for each consumer category as defined by the European Council Directive no. 90/377/EEC, modified by the Commission Decision no. 2007/394/EC:

Indicators - September 2012	Consumer category							Total REM
	IA	IB	IC	ID	IE	IF	Other	
C1 - % -	51	26	26	16	14	22	27	12
C3 - % -	78	52	45	35	35	53	48	30
HHI	3030	1267	1088	705	794	1309	1225	532
Consumption - GWh -	4.5	105	166	487	221	220	855	2059
No. of SUPPLIERS	23	41	41	42	20	12	18	51
No. of incumbent suppliers	5	5	5	5	3	3	2	5
No. of competitive suppliers	14	31	30	32	15	9	9	37
No. of producers	4	5	6	5	2	0	7	9

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

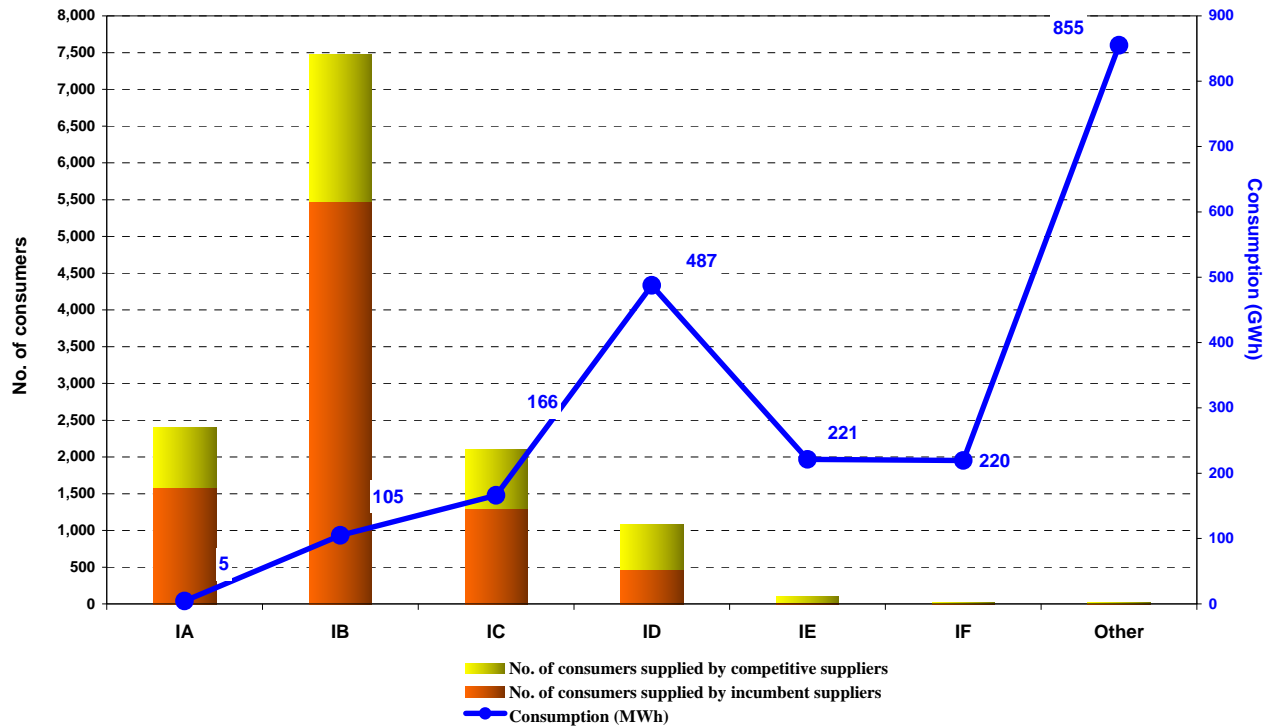
Number of consumers supplied on the competitive market is presented as total value from the beginning of the market opening process; for September 2012 this number is split into categories, according to the provisions of the European Council Directive no. 90/377/EC, with subsequent modifications. The 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	



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

Number of consumers supplied on competitive market and the consumption of each category of consumers  
- SEPTEMBER 2012 -

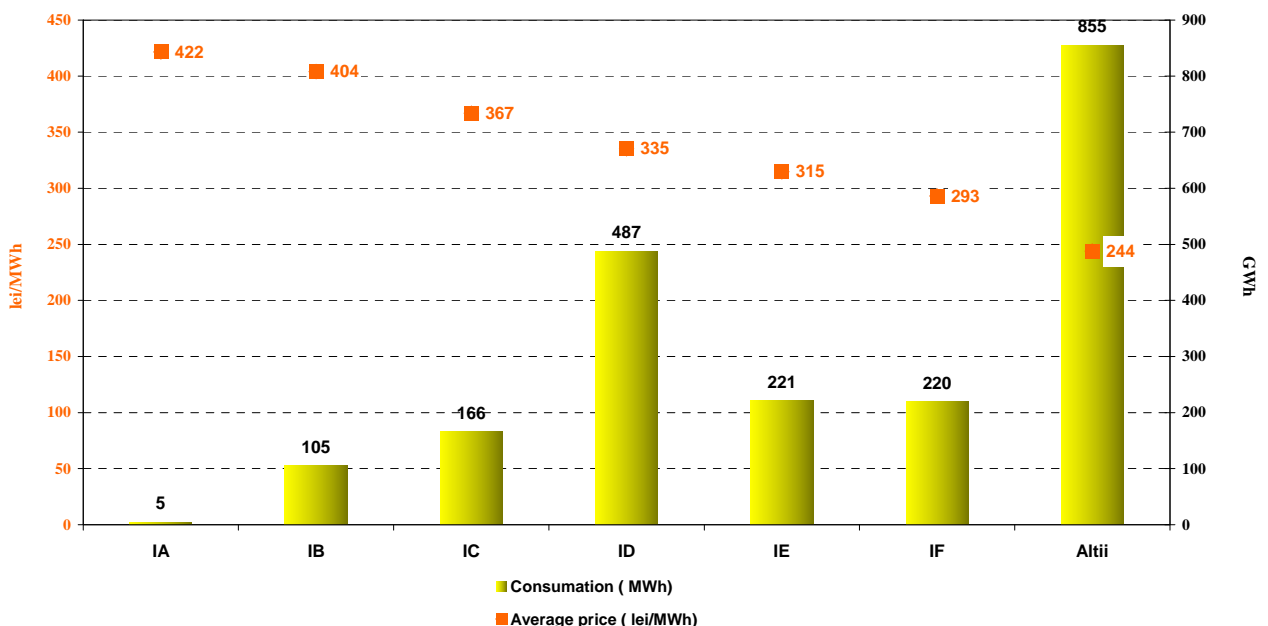


Source: Monthly reports of the suppliers – processed by MG

### 7. Average selling prices of consumers supplied on the competitive market

The following graph presents the average selling prices of consumers supplied on the competitive market, based on the structure defined according to the European Council Directive no. 90/377/EC, with the subsequent modifications.

Average price and energy consumption on types of consumers applied on competitive market  
- SEPTEMBER 2012 -



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

Note: The average selling price on each category was calculated as weighted average of prices applied by suppliers with quantities supplied according to the provisions of the European Directive. The average prices do not include VAT, excise or other taxes but include the supplied services (injection and extraction components of transmission, system services, distributi, market settlement, imbalance, BRP aggregated tax, metering). Splitting consumers into categories was based on their annual consumption forecast, according to the provisions of above mentioned Directive.

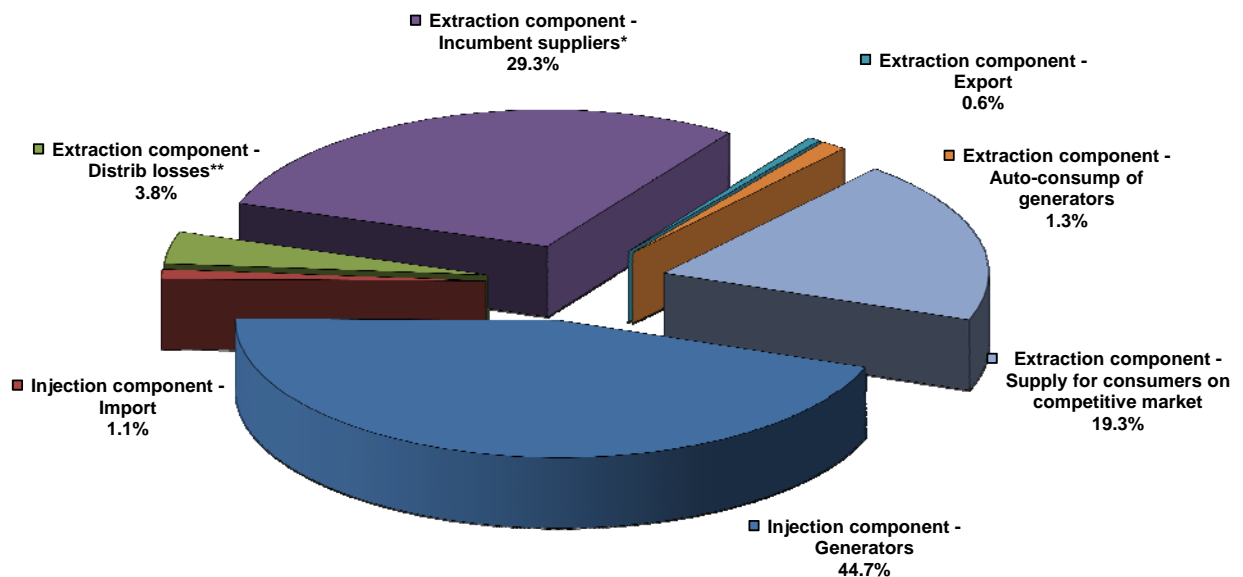
#### IV. TRANSMISSION AND SYSTEM OPERATOR C.N. TRANSELECTRICA S.A.

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 September 2012.

CN Transelectrica SA structure of revenues from transmission services  
- September 2012 -



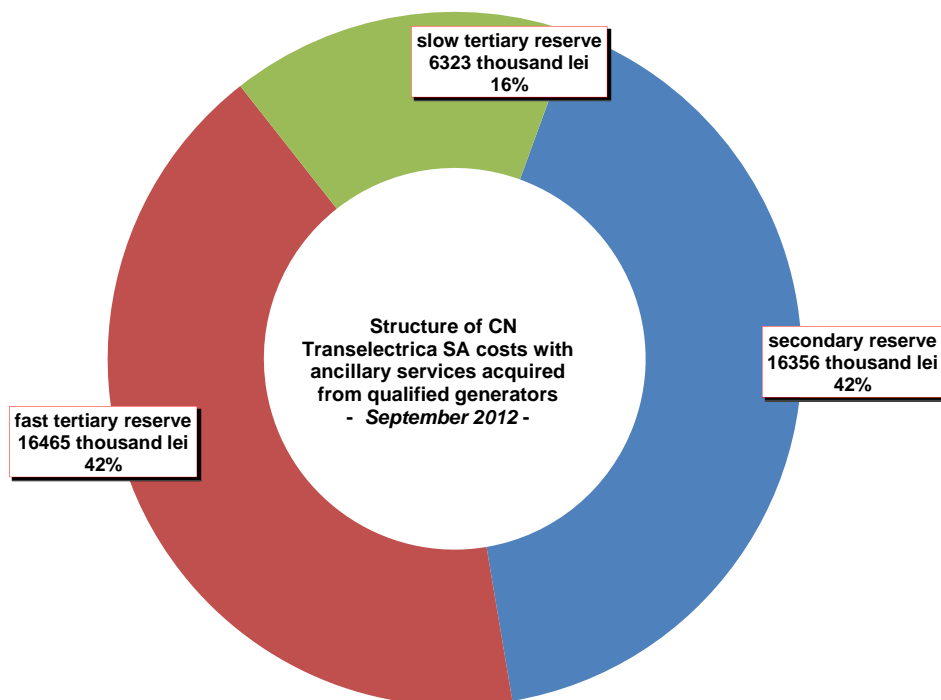
\* for electricity extracted from their own licence areas as well as from other areas

\*\*for electricity extracted by the 8 main distribution operators for covering distribution losses

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

In order to perform the system operator tasks, CN Transelectrica SA assesses and contracts reserves (ancillary services) from qualified generators, which are integrated on BM. The ancillary services which may be used are reserves for secondary, fast tertiary, slow tertiary regulation and reactive energy. With the implementation of the support scheme for high efficiency cogeneration from July 2011, the slow tertiary reserve from cogeneration has been eliminated.

The following graph presents the costs of ancillary services CN Transelectrica SA had to pay in September 2012. In order to cover these costs and its own operating costs, TSO applies a regulated tariff for system services.



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

#### IV. EVOLUTION OF MARKET RULES IN SEPTEMBER 2012

In September 2012, ANRE issued the Decision no. 2384/19.09.2012 of ANRE President for approving the quantities produced in high efficiency cogeneration which benefit of bonus scheme in August 2012.

No regulation with impact on retail electricity market was issued.

#### V. EXPLANATIONS AND ABBREVIATION

##### 1. Explanations

- *Self-consumption of generators* – in the graph regarding the revenues of CN Transelectrica SA the self-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 OMV 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
- ASM – Ancillary Services 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