ROMANIAN ENERGY REGULATORY AUTHORITY

GENERAL DIRECTION OF ELECTRICITY MARKET

REPORT ON RESULTS OF MONITORING THE ROMANIAN ELECTRICITY MARKET

MAY 2013

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

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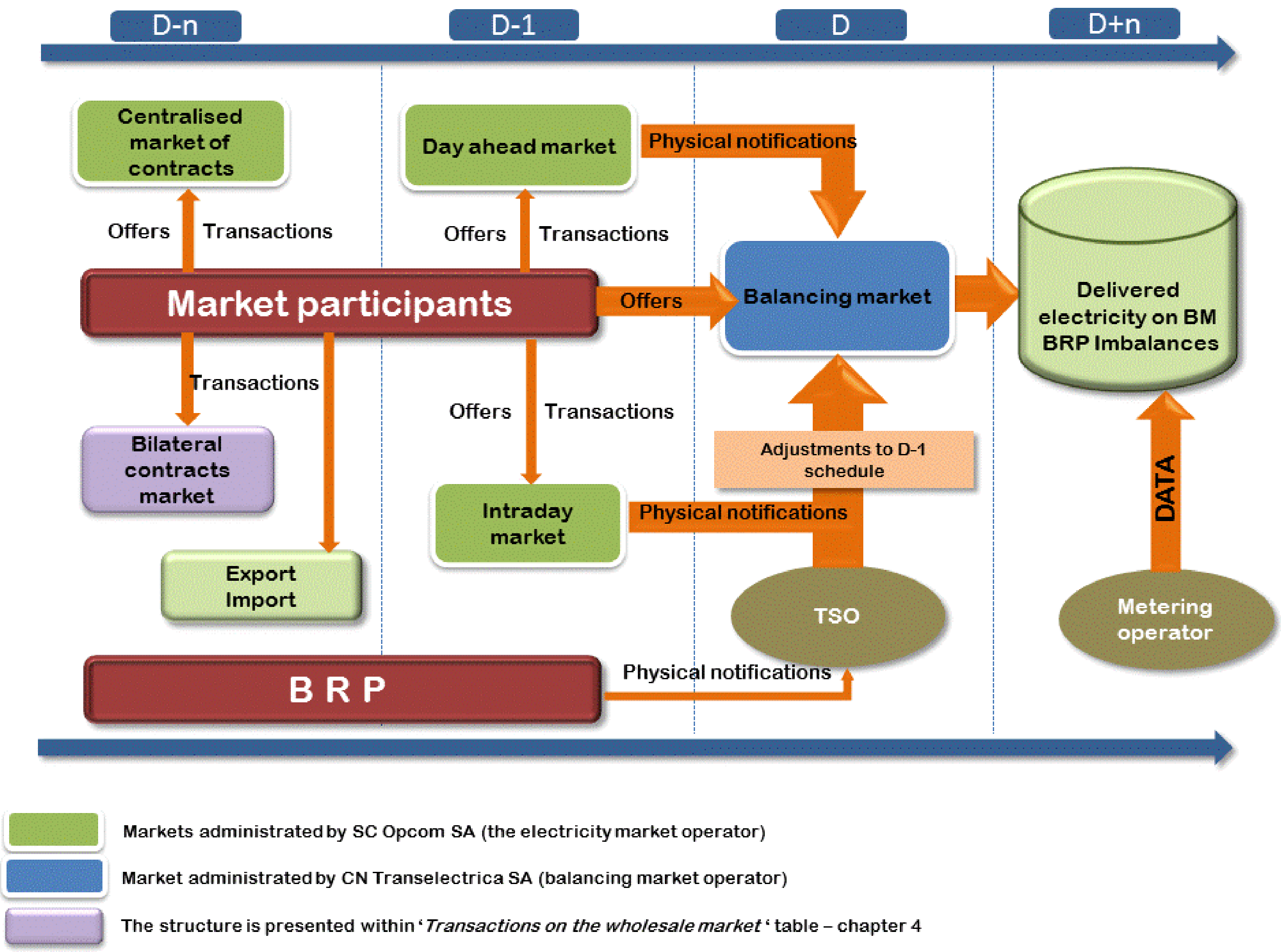
I. MAIN EVENTS IN THE DEVELOPMENT OF THE ROMANIAN ELECTRICITY MARKET

- 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 disolved;
- 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%;
- December 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 negociation;
- 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/December 2010 – launch of bilateral coordinated auctions for capacity allocation on interconections 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 – a new entity obtaines the generation license and enters on the electricity market - Complexul Energetic Oltenia SA, established in a dual system through merger of the former SNLO Tg. Jiu, Complexul Energetic Turceni, Complexul Energetic Rovinari and Complexul Energetic Craiova (GD 1024/2011);
- July 2012 – the Law of electricity and natural gas no. 123/2012 has enter into force;
- September 2012 – the application of the first stage from the timetable of phasing out of regulated electricity tariffs to final customers who choose not to exercise their eligibility rights, in accordance with the obligations assumed by the Romanian Government in relation with the IMF, World Bank and European Commission;
- October 2012 – the Law of organisation and operation of the Romanian Energy Regulatory Authority no. 160/2012 has entered into force;
- November 2012 - a new entity obtaines the generation license and enters on the electricity market - Complexul Energetic Hunedoara SA, established through merger of the former Electrocentrale Deva and Electrocentrale Paroseni (GD 1023/2011);
- December 2012 – launch of the organised electricity market for the large customers.

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 May 2013 are presented below split into categories:

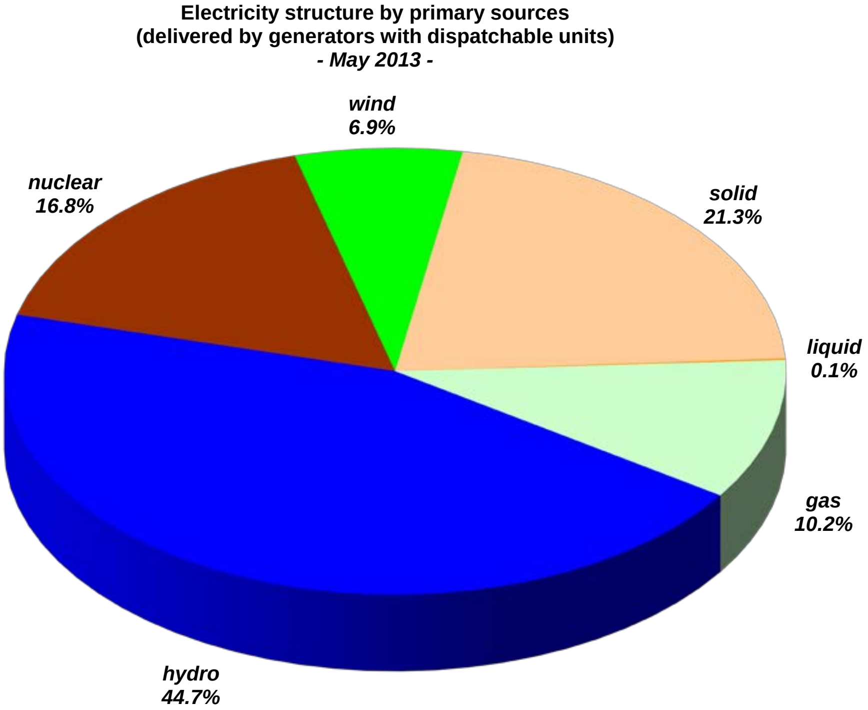
No.	Name
A	***Electricity generators operating dispatching units***
1	SC Alpha Wind SRL
2	SC Blue Line Valea Nucarilor SRL
3	SC Braila Winds SRL
4	SC CAS Regenerabile SRL
5	SC CET Bacău SA
6	SC CET Govora SA
7	SC CET Oradea SA
8	SC Cernavoda Power SRL
9	SC Corni Eolian SRL
10	SC Dalkia Termo Iaşi SRL
11	SC Dalkia Termo Prahova SRL
12	SC EDP Renewables Romania SRL
13	SC Electrocentrale Bucureşti SA
14	SC Electrocentrale Grup SA
15	SC Electrocentrale Galaţi SA
16	SC Enel Green Power Romania SRL
17	SC Eolica Dobrogea One SRL
18	SC Hidroelectrica SA
19	SC Ovidiu Development SRL
20	SC Peştera Wind Farm SRL
21	SC Romconstruct Top SRL
22	SC Termica SA Suceava
23	SC Total Electric SRL
24	S.N.G.N. ROMGAZ S.A.
25	SC Termoelectrica SA
26	SC Tomis Team SRL
A1	***Electricity generators operating dispatching units and acting also as suppliers on the competitive market***
27	RAAN
28	SN Nuclearelectrica SA
29	SC OMV Petrom SA
32	SC CE Hunedoara SA
30	SC CE Oltenia SA
31	SC CET Arad SA
32	SC Lukoil Energy & Gaz Romania SRL
33	SC OMV Petrom Power Park SRL
B	***Transmission System Operator***
1	CN TRANSELECTRICA SA
C	***DAM, Bilateral Contracts Market, Intra-Day, Green Certificates Market Operator***
1	SC OPCOM SA
D	***Distribution network operators***
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 FDEE Electrica Distributie Muntenia Nord SA
7	SC FDEE Electrica Distributie Transilvania Sud SA
8	SC FDEE Electrica Distributie Transilvania Nord SA
E	***Suppliers of last resort***
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 Electrica Furnizare SA

No.	Name
F	***Electricity Suppliers acting exclusively on the wholesale market***
1	Alpiq Energy SE
2	SC AMV Style SRL
3	SC Bitt-Reen SRL
4	CEZ as
5	Danske Commoditiesa/s Aarhus
6	E&T ENERGIE Handelsgesellschaft
7	SC Edison Trading SpA
8	SC Electrica SA
9	SC Enel Trade Romania SRL
10	SC Energy Market Consulting SRL
11	SC Entrex Services SRL
12	E.ON Global Commodities SE
13	SC Ezpada SRL
14	Ezpada SRO
15	Freepoint Commodities Europe Ltd
16	GEN-I trgovanje in prodaja elektricne energije
17	GEN-I Bukarest Electricity Trading and Sales
18	SC Kaufof Com SRL
19	SC Iberdola Romania SRL
20	SC Lord Energy SRL
21	SC Lorfa SRL
22	OMV Trading GmbH
23	RWE Supply Trading GmbH
24	SC Repower Generation SRL
25	Repower Trading Ceska Republica
26	SC Repower Vanzari Romania SRL
27	SC Rudnap SRL
28	Statkraft Markets GmbH
29	SC Statkraft Romania SRL
30	SC Verbund Trading România SRL

No.	Name
G	***Electricity Suppliers acting also on the retail market***
1	SC Aderro G.P. Energy SRL
2	SC Alpiq RomIndustries SRL
3	SC Alro SA
4	SC Arcelormittal Galati SA
5	SC Arelco Power SRL
6	SC Axpo Energy Romania SRL
7	SC Biol Energy SRL
8	SC C-Gaz & Energy Distributie SRL
9	SC EFE Energy SRL
10	SC Electricom SA
11	SC Electromagnetica SA
12	SC Energotrans SRL
13	SC Energy Distribution Services SRL
14	SC Energy Financing Team Romania SRL
15	SC Energy Holding SRL
16	SC Energy Network SRL
17	SC Enex SRL
18	SC Ennet Grup SRL
19	SC Enol Grup SA
20	SC Fidelis Energy SRL
21	SC GDF SUEZ Energy Romania SA
22	SC General Com Invest SRL
23	SC Getica 98 COM SRL
24	SC KDF Energy SRL
25	SC ICCO Energ SRL
26	ILIOTOMI Impex GRPA
27	SC ICPE Electrocond Technologies SA
28	SC Luxten LC SA
29	Magyar Aramszolgaltato KFT
30	SC Monsson Energy Trading SRL
31	OET Obedineni Energini Targovtsi
32	SC P.C. Management & Consulting SRL
33	SC Renovation Trading SRL
34	SC Repower Furnizare Romania SRL
35	SC Romenergo SA
36	SC Romenergy Industry SRL
37	SC TEN Transilvania Energie SRL
38	SC Tinmar Ind SA
39	SC Transformer Supply SRL
40	SC Transenergo Com SA

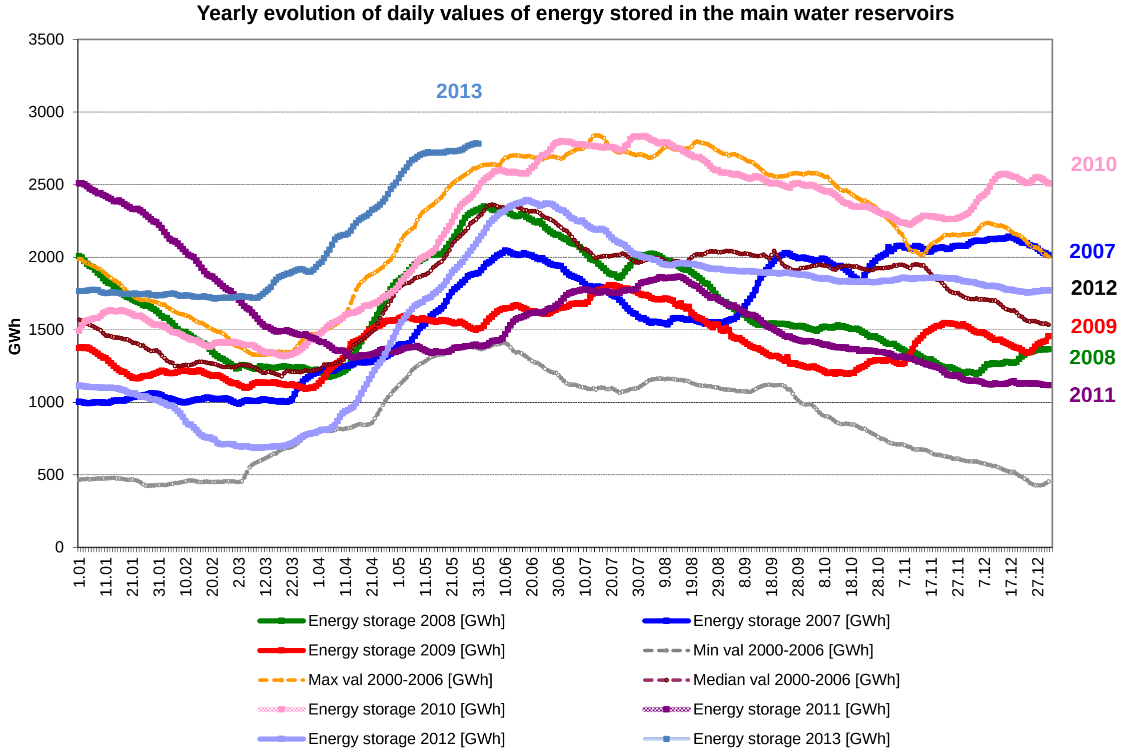
*) The electricity market participants report to ANRE technical/commercial data according to the *Methodology of wholesale electricity market monitoring for assessing the competition level on market and preventing the abuse of dominant position*, approved by ANRE Order no. 35/2006 as well as to the *Methodology of retail electricity market monitoring*, approved by ANRE Order no. 60/2008. The table does not include the Balancing Responsible Parties (BRP). The BRP updated list is published on the Balancing Market Operator website - www.transelectrica.ro.

3. Generation structure of National Energy System on resources types



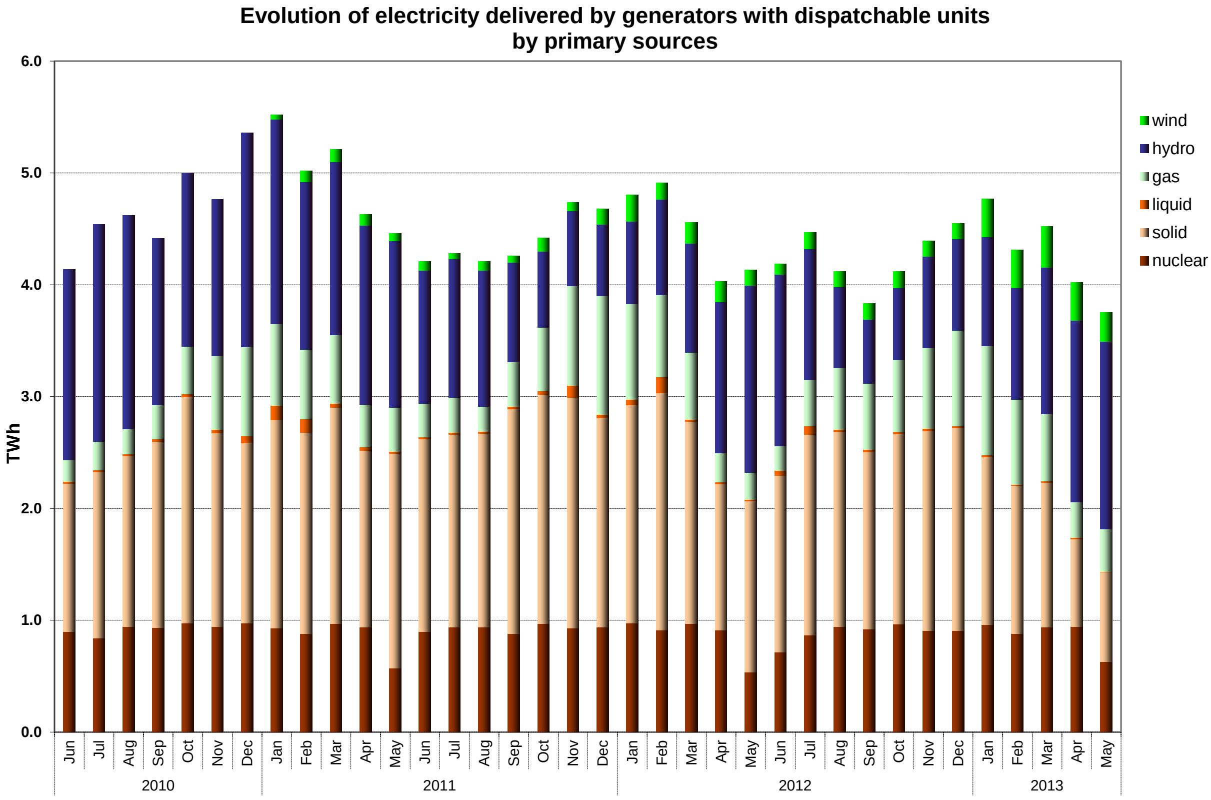
Source: Monthly reports of generators – processed by MG

The electricity generated from hydro resources and the energy stored in the main water reservoirs is directly correlated. The following graph presents the evolution of daily amounts of energy storage during 2013 compared to the values of the last 6 years and compared to minimum, maximum and median values from 2000-2006.



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 May 2013, compared to data for similar period of 2012:

No	INDICATOR	MU	May 2012	May 2013	%	Jan-May 2012	Jan-May 2013	%
0	1	2	3	4	5=4/3*100	3	4	5=4/3*100
1	Generated electricity	TWh	4.42	3.99	90.27	24.41	23.12	94.72
2	Delivered electricity	TWh	4.13	3.75	90.80	22.44	21.39	95.32
3	Import	TWh	0.12	0.07	58.33	0.64	0.29	45.31
4	Export	TWh	0.08	0.04	50.00	0.58	0.48	82.76
5	Internal consumption	TWh	4.17	3.78	90.65	22.50	21.19	94.18
6	Consumption of household consumers on the regulated market	TWh	0.94	0.92	97.87	5.12	4.98	97.27
7	Consumption of non-households consumption	TWh	2.85	2.57	90.18	14.09	13.38	94.96
7.1	*on the regulated market*	TWh	*0.65*	*0.55*	*84.62*	*3.73*	*3.42*	*91.69*
7.2	*on the competitive market*	TWh	*2.20*	*2.02*	*91.81*	*10.36*	*9.96*	*96.14*
8	Transmission–Injection component	TWh	4.20	3.77	89.76	22.89	21.60	94.36
9	Transmission–Extraction component	TWh	4.29	3.92	91.38	23.19	22.20	95.73
10	Actual transmission grid losses	TWh	0.09	0.09	100.00	0.44	0.46	104.55
11	Heat generated for delivery	Tcal	675.43	639.35	94.66	8624.84	8257.86	95.75
12	Heat in co-generation	Tcal	569.91	506.87	88.94	7451.42	6459.39	86.69

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 customers 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 neither the electricity sold by generators for covering the transmission losses nor the electricity sold by nondispatchable but bigger than 10 MW generators;
4. The transmission tariff – extraction component and the system service tariff are applied to 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 between suppliers, as well as contracts concluded on centralized markets: CMBC (centralized market of bilateral contracts), CMBC-CN (centralized market of partially stardardised bilateral contracts, with continuous negotiation), transactions on DAM (day-ahead market), on ID (Intraday Market and on BM (Balancing Market).

When entering into force, the Law no. 123/2012 on Electricity and Natural Gas has set the 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. Consequently, two new centralized markets are in progress at Opcom level – the organized framework of contracting energy for large final customers 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 May 2013 compared to the month before and May 2012.

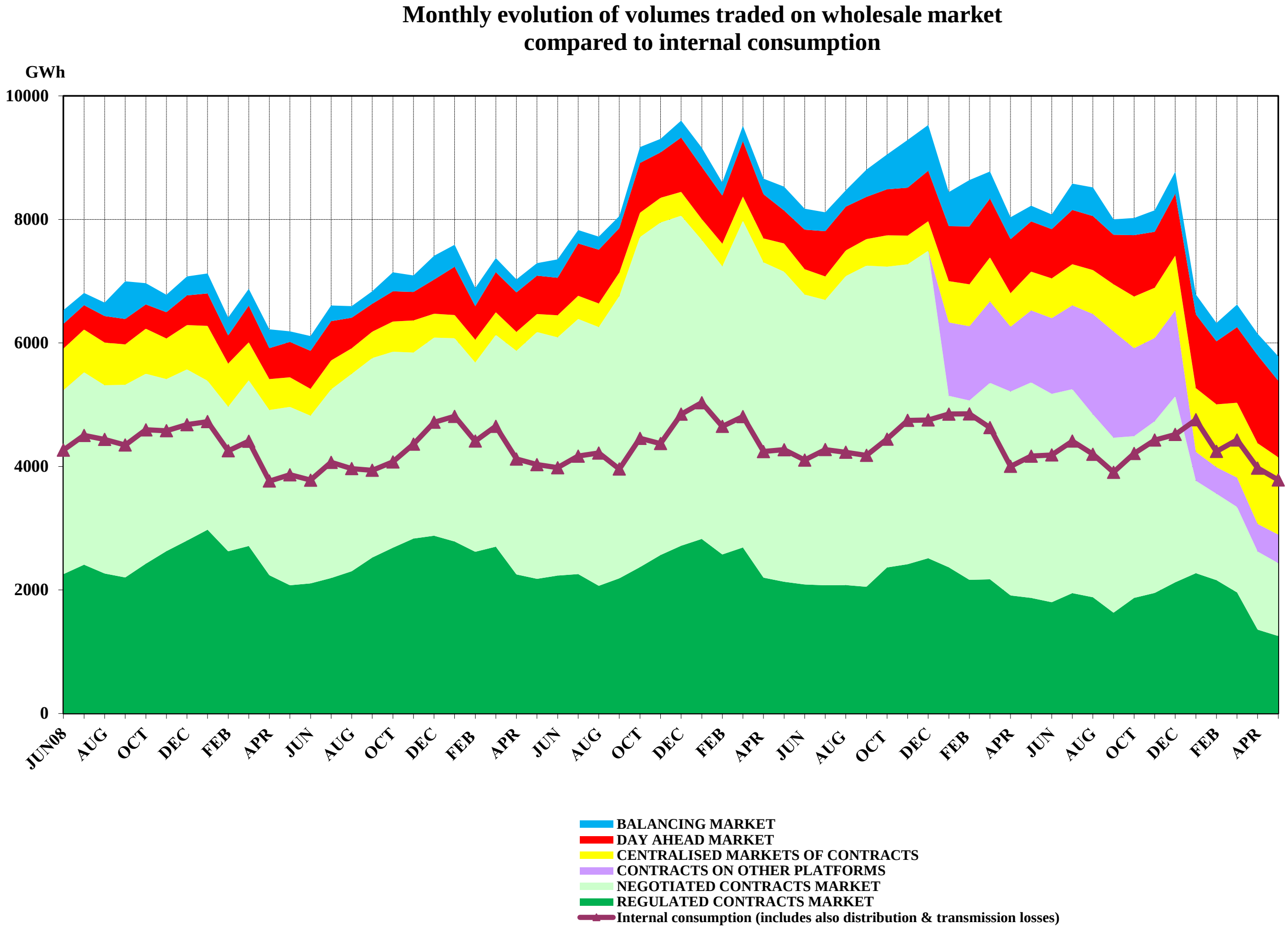
The aggregated volumes and the average prices for April 2013 and May 2013 on OTC contracts and on negotiated contracts are reported by the market participants at their own risk and they should reflect only the ongoing contracts which had been concluded before Law no. 123/2012 entered into force.

TRANSACTIONS ON THE WHOLESALE MARKET	**April 2013**	**May 2013**	**May 2012**
1. BILATERAL CONTRACTS' MARKET			
traded volume (GWh)	**3070**	**2897**	**6527**
average price (lei/MWh)	178.61	178.92	179.58[4)]
% from internal consumption (%)	77.2	76.6	156.6
1.1. Sales on regulated contracts			
traded volume (GWh)	**1358**	**1255**	1872
average price (lei/MWh)	162.82	162.74	144.18
% from internal consumption (%)	34.2	33.2	44.9
1.2. Sales on contracts concluded on other platforms			
traded volume (GWh)	**446**	**461**	1166
average price (lei/MWh)	222.46	222.46	204.11
% from internal consumption (%)	11.2	12.2	28.0
1.3. Sales on negotiated contracts[1)]			
traded volume (GWh)	**1265**	**1181**	3489
average price (lei/MWh)	180.10	179.12	190.38[4)]
% from internal consumption (%)	31.8	31.2	83.7
2. EXPORT			
traded volume[2)] (GWh)	**105**	**39**	**85**
average price (lei/MWh)	144.02	103.93	158.21
% from internal consumption (%)	2.6	1.0	2.0
3. CENTRALISED MARKETS OF CONTRACTS			
traded volume (GWh)	**1307**	**1252**	**628**
average price (lei/MWh)	214.06	209.73	209.83
% from internal consumption (%)	32.9	33.1	15.1
4. DAY AHEAD MARKET			
traded volume (GWh)	**1424**	**1239**	**813**
average price (lei/MWh)	141.63	121.63	178.86
% from internal consumption (%)	35.8	32.8	19.5
5. INTRADAY MARKET			
traded volume (GWh)	**-**	**0.190**	**0.045**
average price[3)] (lei/MWh)	-	189.92	207.73
% from internal consumption (%)	-	0.005	0.001
6. BALANCING MARKET			
traded volume (GWh)	**349**	**396**	**254**
% from internal consumption (%)	8.8	10.5	6.1
upward volume (GWh)	**134**	**156**	**98**
average negative imbalance price(lei/MWh)	241.62	200.95	245.20
downward volume (GWh)	**215**	**240**	**156**
average positive imbalance price (lei/MWh)	29.15	32.07	46.94
INTERNAL CONSUMPTION (includes distribution and transmission losses) (GWh)	**3975**	**3783**	**4168**

Note:	1)	Supply contracts to customers 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
	2)	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
	3)	The average monthly price has been calculated based on monthly traded volume and transaction value published by SC Opcom SA
	4)	Modifications due to updating sent by several market participants reports

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.

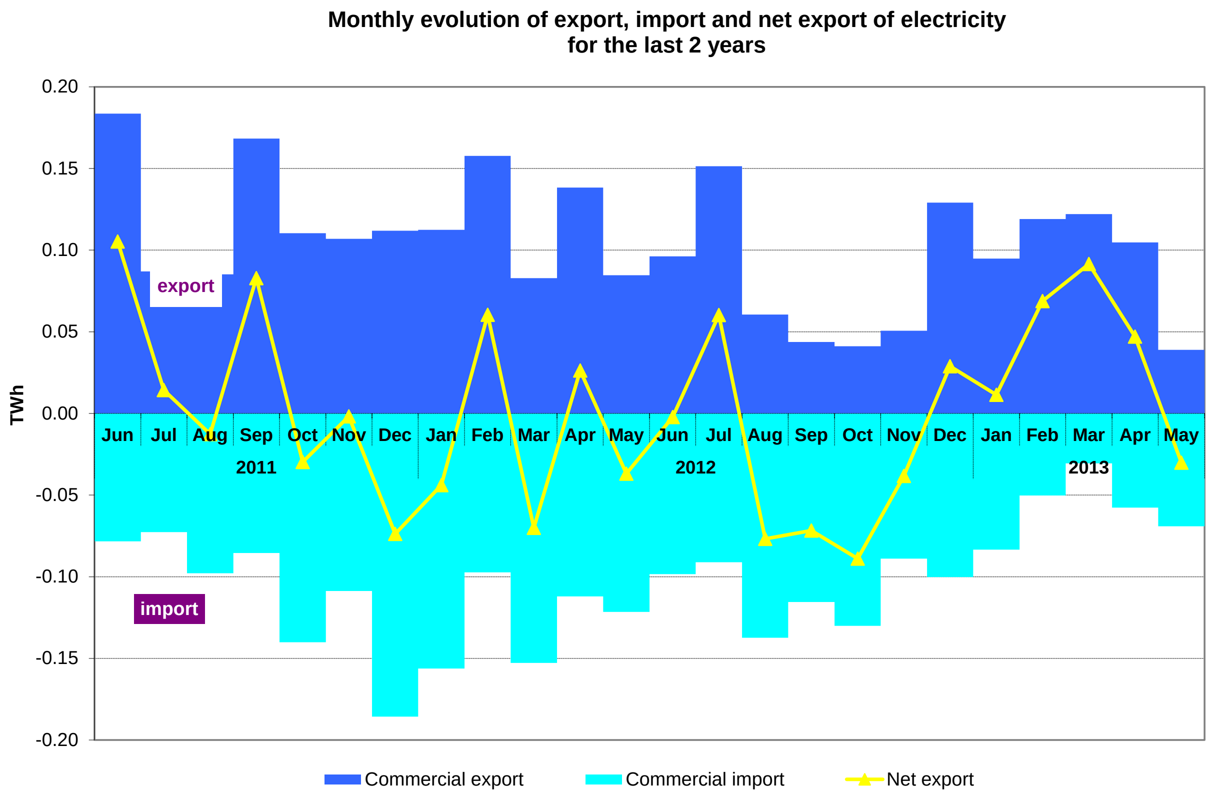
The following graph presents the evolution of the relation between the volumes sold on each market and the estimated internal consumption, during the last 5 years.



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

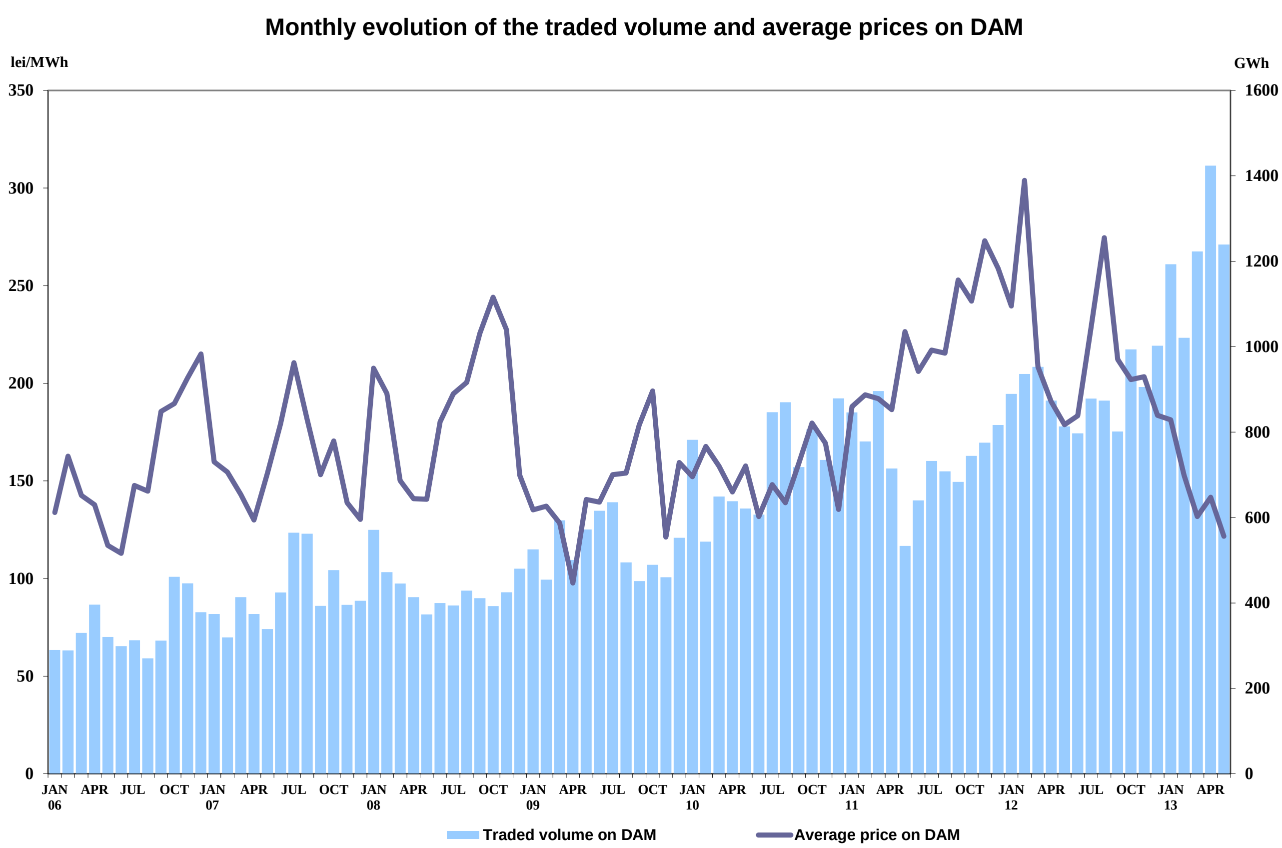
Note: In the above graph, the volumes traded on negociated contracts' market do not include the export trades

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:



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

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



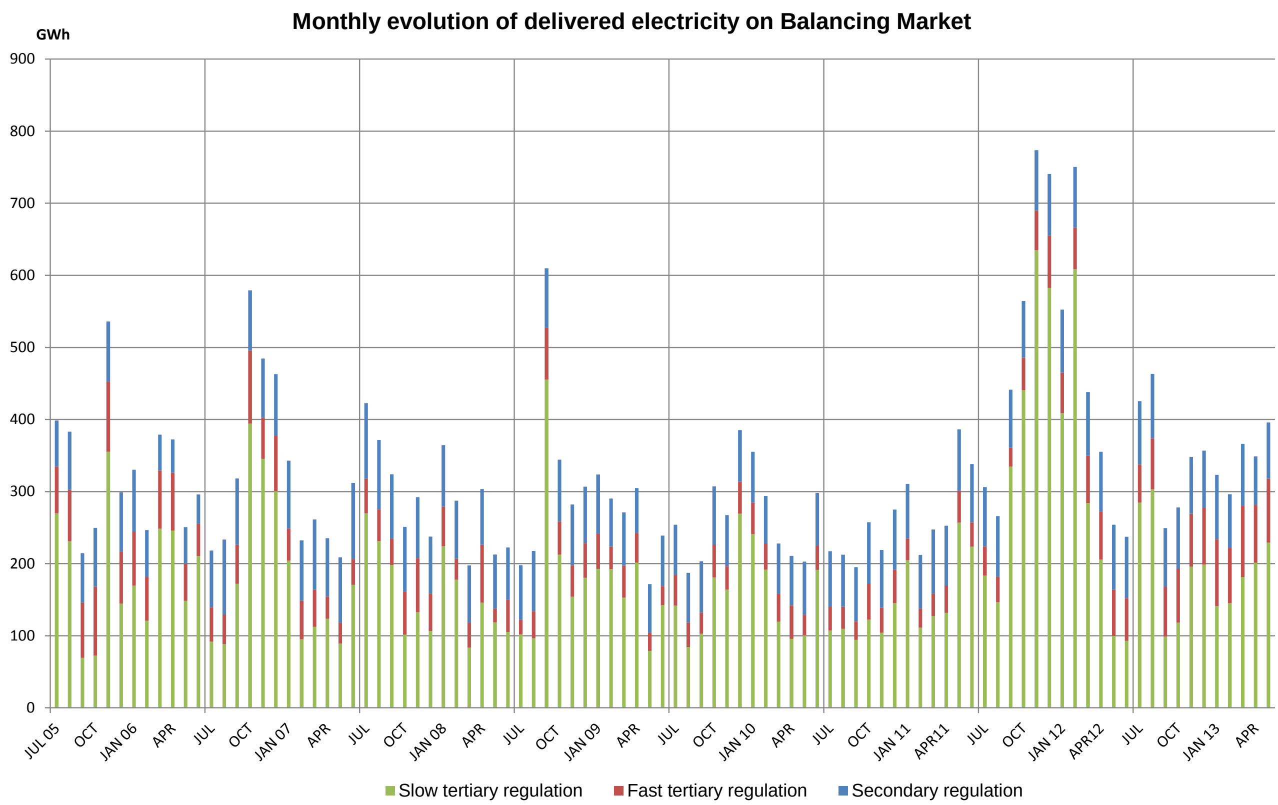
Source: Monthly reports of SC Opcom SA and CN Transelectrica SA – processed by MG

Balancing electricity is determined by the dispatch orders (accepted offers) received by generators. After settlement, the actual electricity delivered by generators on balancing market is determined based on the measured (approved) values; the relation between the accepted and delivered electricity in May 2013 presented in the following table:

May 2013	Dispatch order (GWh)	Delivered electricity (GWh)	Deviation (%)
Secondary regulation	**78**	**78**	
upward	44	44	
downward	34	34	
Fast tertiary regulation	**93**	**88**	**5**
upward	81	78	4
downward	12	10	11
Slow tertiary regulation	**236**	**229**	**3**
upward	35	34	4
downward	201	196	2
TOTAL	**407**	**396**	
upward	160	156	
downward	247	240	
INTERNAL CONSUMPTION		**3783**	
% share of traded volumes from internal consumption		***10.5%***	

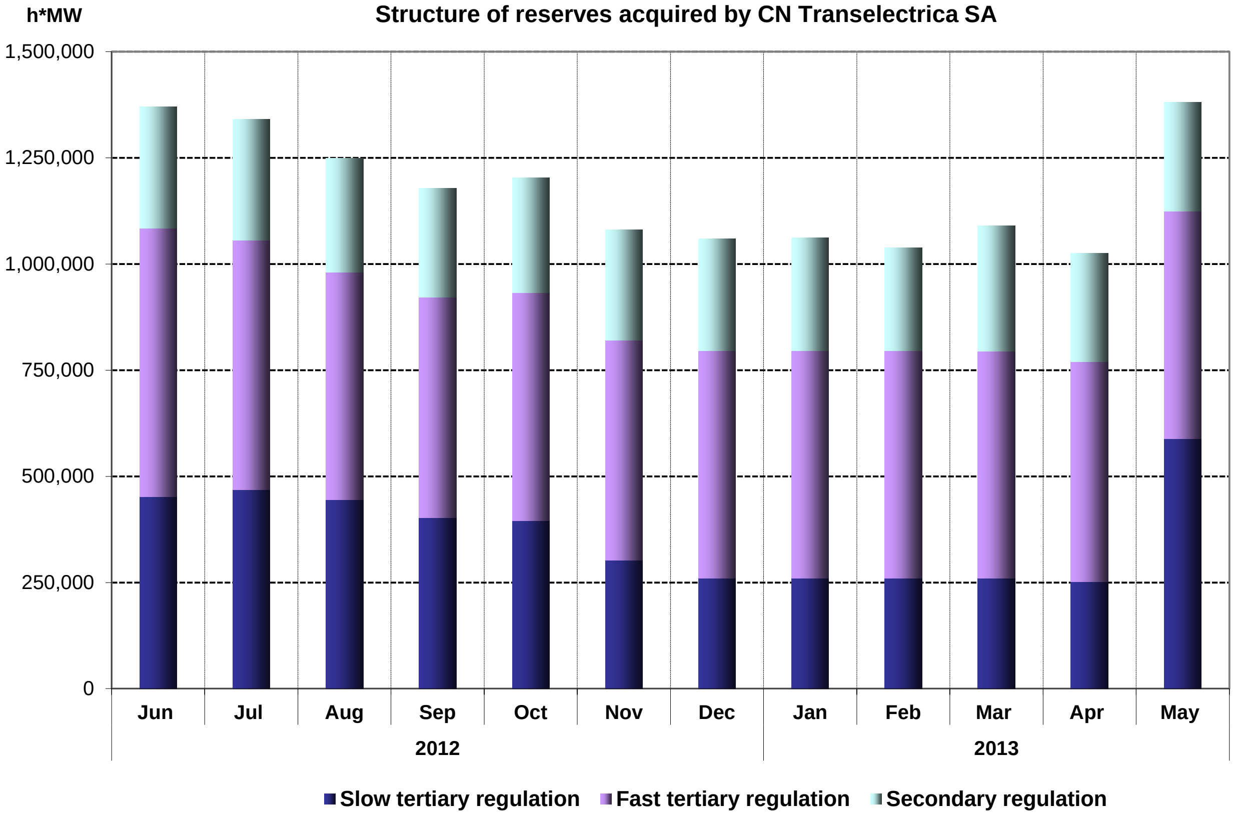
Source: Monthly reports of CN Transelectrica SA – processed by MG

The structure of balancing electricity delivered in the system on each type of regulation starting from July 2005 is presented in the graph below:



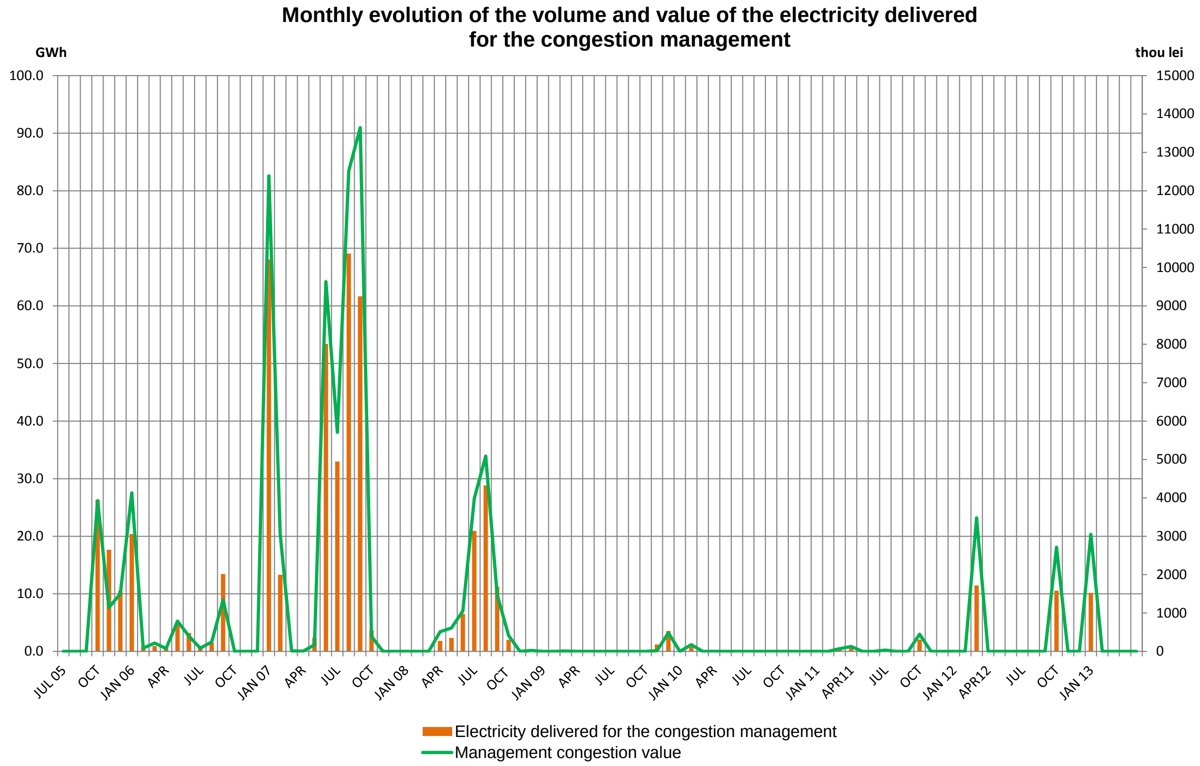
Source: Monthly reports of CN Transelectrica SA – processed by MG

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 Transelectrica SA on the last 12 months:



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

The following graph presents the evolution of electricity traded by CN Transelectrica 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.



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 May 2013 compared to previous month and May 2012 was the following:

- GWh -

Transaction type	April 2012	May 2013	May 2012
0	**1**	**2**	**3**
Regulated to incumbents, thermal generators	470.55	489.79	716.41
Regulated to incumbents, hydro generator	429.37	458.85	473.95
Regulated to incumbents, nuclear generator	458.37	306.35	296.98
Regulated for distribution losses. thermal generators	0.00	0.00	194.78
Regulated for distribution losses, hydro generator	0.00	0.00	86.57
Regulated for distribution losses, nuclear generator	0.00	0.00	93.74
Regulated to other generators	0.00	0.00	9.60
Negotiated to other generators	0.00	0.00	2.64
Negotiated to suppliers	561.21	540.54	984.61
Contracts concluded on centralized markets	965.33	961.06	602.07
Regulated and competitive supply to customers	275.80	247.64	292.43
Export	0.00	0.00	62.91
DAM	1103.67	951.93	432.69
Total	**4264.30**	**3956.17**	**4249.36**

Source: Monthly reports of generators – processed by MG

Suppliers

In May 2013, 75 companies having as main activity the supply of electricity concluded transactions on the electricity market; from these, 30 suppliers traded electricity exclusively on the wholesale market and 45 suppliers on both retail and wholesale markets (in this category are also included the 5 suppliers of last resort).

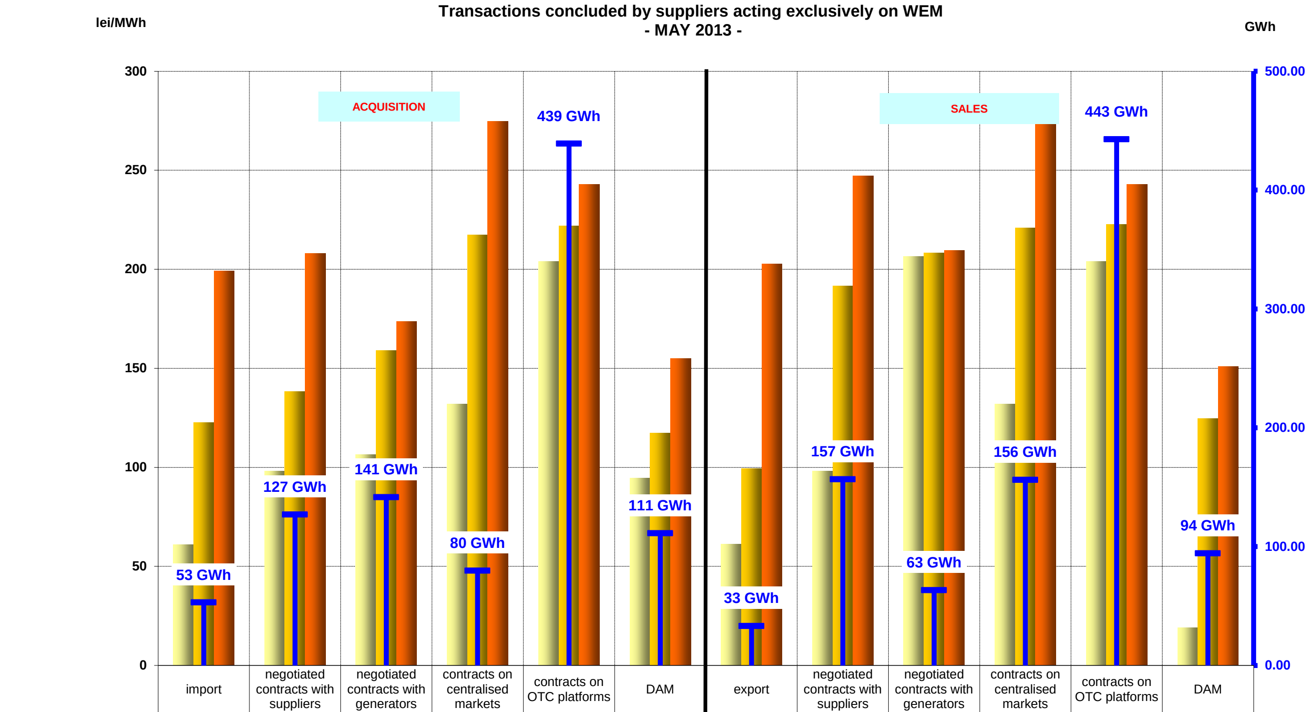
Suppliers acting exclusively on WEM

The following table shows the activity for May 2013 compared to May 2012 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	May 2012	May 2013
Acquisitions		
Import	52.86	52.90
Negotiated contracts with suppliers	862.98	126.85
Negotiated contracts with generators	88.88	141.46
Contracts concluded on centralized markets	71.56	79.68
Contracts on OTC platforms	1026.64	438.96
DAM	85.61	111.14
Sales		
Export	18.30	33.16
Negotiated contracts with suppliers	864.92	156.62
Negotiated contracts with generators	78.90	63.24
Contracts concluded on centralized markets	4.00	156.13
Contracts on OTC platforms	1138.68	442.68
DAM	111.05	94.24

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 May 2013.



	import	negotiated contracts with suppliers	negotiated contracts with generators	contracts on centralised markets	contracts on OTC platforms	DAM	export	negotiated contracts with suppliers	negotiated contracts with generators	contracts on centralised markets	contracts on OTC platforms	DAM
Min price	61.00	98.09	106.41	132.00	204.00	94.66	61.32	98.09	206.50	132.00	204.00	19.04
Weighted average price	122.67	138.39	159.18	217.33	221.85	117.29	99.35	191.65	208.17	220.94	222.58	124.74
Max price	199.20	208.00	173.78	274.70	243.00	155.01	202.65	247.28	209.50	280.00	243.00	150.95
Traded volume	52.90	126.85	141.46	79.68	438.96	111.14	33.16	156.62	63.24	156.13	442.68	94.25

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

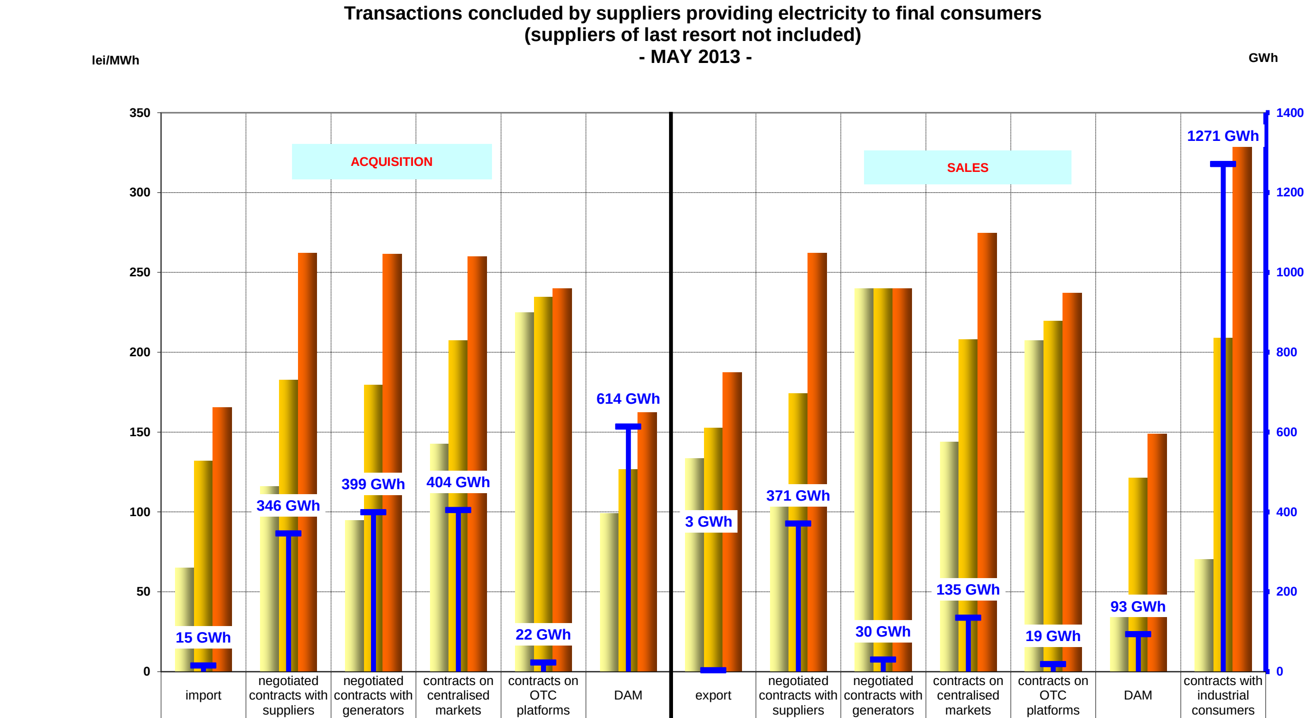
Active suppliers on REM (the suppliers of last resort are not included)

The following table presents aggregated information on transactions volume and structure for suppliers providing electricity to final consumers, on the competitive market, for May 2013 and May 2012.

- GWh -

Transactions' structure of suppliers providing electricity to final customers (the suppliers of last resort are not included)	**May 2012**	**May 2013**
Acquisitions		
Import	38.62	15.06
Negotiated contracts with suppliers	990.86	345.83
Negotiated contracts with generators	886.41	399.08
Contracts concluded on centralized markets	325.93	404.30
Contracts on OTC platforms	139.00	22.32
DAM	336.49	613.57
Sales		
Export	3.61	3.11
Negotiated contracts with suppliers	1196.74	370.55
Negotiated contracts with generators	48.20	29.60
Contracts concluded on centralized markets	22.16	134.71
Contracts on OTC platforms	26.96	18.60
DAM	154.69	93.30
Contracts with industrial customers	1349.53	1271.17

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 customers in May 2013:



	import	negotiated contracts with suppliers	negotiated contracts with generators	contracts on centralised markets	contracts on OTC platforms	DAM	export	negotiated contracts with suppliers	negotiated contracts with generators	contracts on centralised markets	contracts on OTC platforms	DAM	contracts with industrial consumers
Min price	65.04	115.99	94.73	142.46	225.00	99.21	133.41	115.99	239.99	143.69	207.50	38.24	70.32
Weighted average price	131.83	182.69	179.55	207.45	234.53	126.52	152.66	174.05	239.99	208.07	219.64	121.39	209.02
Max price	165.30	262.10	261.60	260.00	240.00	162.37	187.48	262.10	239.99	274.70	237.10	148.75	341.45
Traded volume	15.06	345.83	399.08	404.30	22.32	613.57	3.11	370.55	29.60	134.71	18.60	93.30	1271.17

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

Suppliers of last resort

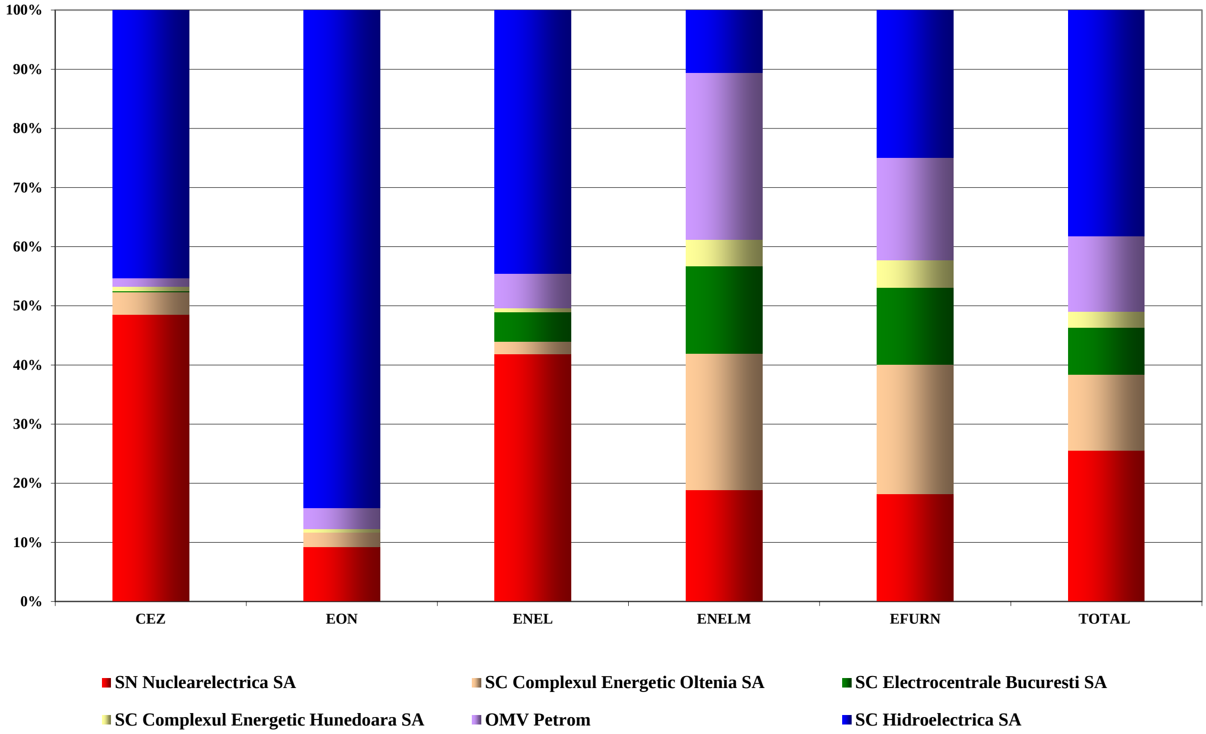
Electricity acquisition structure of suppliers of last resort (before the delivery day), for supplying the regulated market customers, is presented in the table below, for May 2013 compared to the situation of May 2012:

- GWh -

Acquisition structure of suppliers of last resort for regulated REM component	May 2012	May 2013
Regulated contracts with generators	1497.34	1261.06
Negociated contracts	22.37	33.27
Contracts concluded on centralized markets	25.31	174.19
Intraday	0.00	0.00
DAM	56.89	127.00

The structure of the electricity purchased by the suppliers of last resort from the main generators on regulated contracts is presented in the following graph for May 2013:

Electricity acquisition from main generators, on regulated contracts, of the suppliers of the last resort for delivering electricity to final consumers on regulated market
MAY 2013



Source: Monthly reports of the suppliers of last resort – processed by MG

Starting with 1st September 2012, the suppliers of last resort 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).

This tariff component is separately displayed in the bills of non-household customers who do not exercise their eligibility rights. This tariff was proposed by each supplier of last resort 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 suppliers of last resort for CMC (before the delivery day) for May 2013.

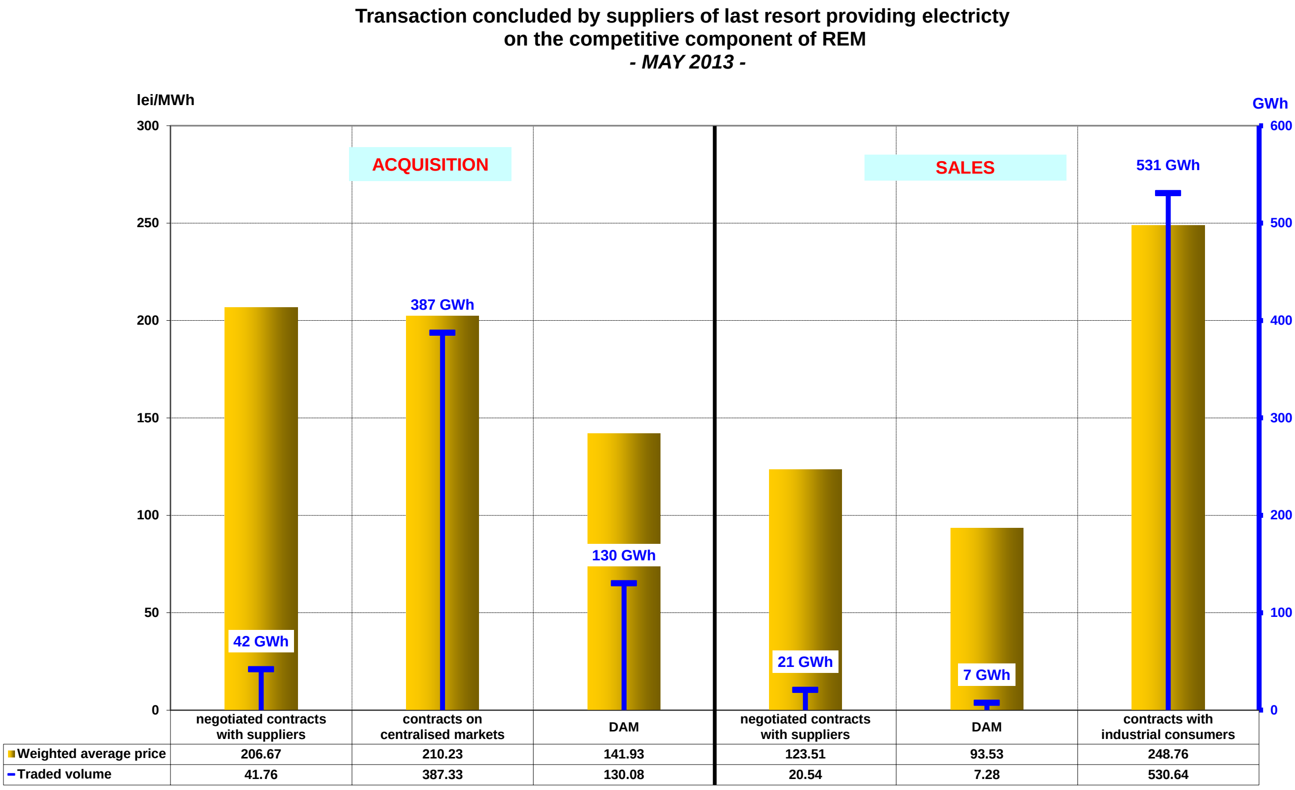
Acquisition structure of incumbent suppliers for CMC	Quantity [GWh]	Average price [lei/MWh]
Negotiated contracts	33.27	241.20
Contracts concluded on centralized markets	174.19	231.16
Contracts IntraDay	0.00	0.00
DAM	59.20	145.48
TOTAL	**266.66**	**213.90**

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 customers who renounced to regulated tariffs) for May 2013 compared to May 2012:

- GWh -

Transactions' structure of suppliers of last resort for competitive REM component	May 2012	May 2013
Acquisitions		
Import	30.22	0.00
Negotiated contracts with suppliers	498.83	41.76
Contracts concluded on centralized markets	127.88	387.33
DAM	265.64	130.08
Sales		
Negotiated contracts with suppliers	313.37	20.54
Negotiated contracts with generators	0.00	0.00
Contracts concluded on centralized markets	0.00	0.00
Contracts on OTC platforms	0.00	0.00
DAM	53.39	7.28
Final customers	562.36	530.64

The structure by types of sources/destinations of the traded volumes combined with the actual average prices of the suppliers of last resort corresponding to the competitive segment of REM is presented in the following graph for May 2013:



Source: Monthly reports of the suppliers of last resort – processed by MG

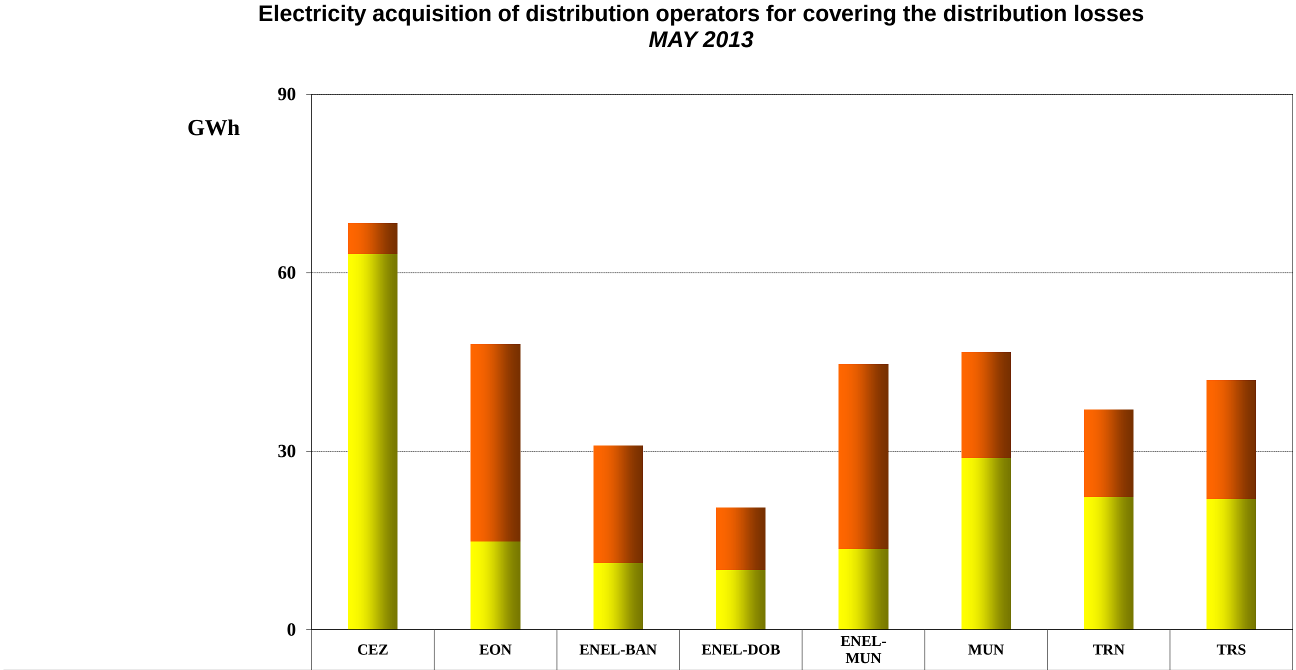
Main distribution operators

The following table shows the electricity acquisition structure of main distribution operators (before the delivery day), for covering the distribution network losses, for May 2013 compared to May 2012:

- GWh -

Acquisition structure	**May 2012**	**May 2013**
Regulated contracts with generators	377.96	0.00
Negotiated contracts with suppliers	0.00	0.00
Contracts concluded on centralized markets	0.00	186.24
DAM	35.41	151.74

Starting from 1st April 2013, the 8 main distribution operators had not anymore the possibility to purchase electricity on regulated contracts concluded with the main generators. The electricity purchased for covering their network losses is presented in detail in the following graph, for May 2013:



	CEZ	EON	ENEL-BAN	ENEL-DOB	ENEL-MUN	MUN	TRN	TRS
Acquisition on DAM	5	33	20	10	31	18	15	20
Acquisition on centralized contracts markets	63	15	11	10	14	29	22	22
Acquisition on regulated market	0	0	0	0	0	0	0	0

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.

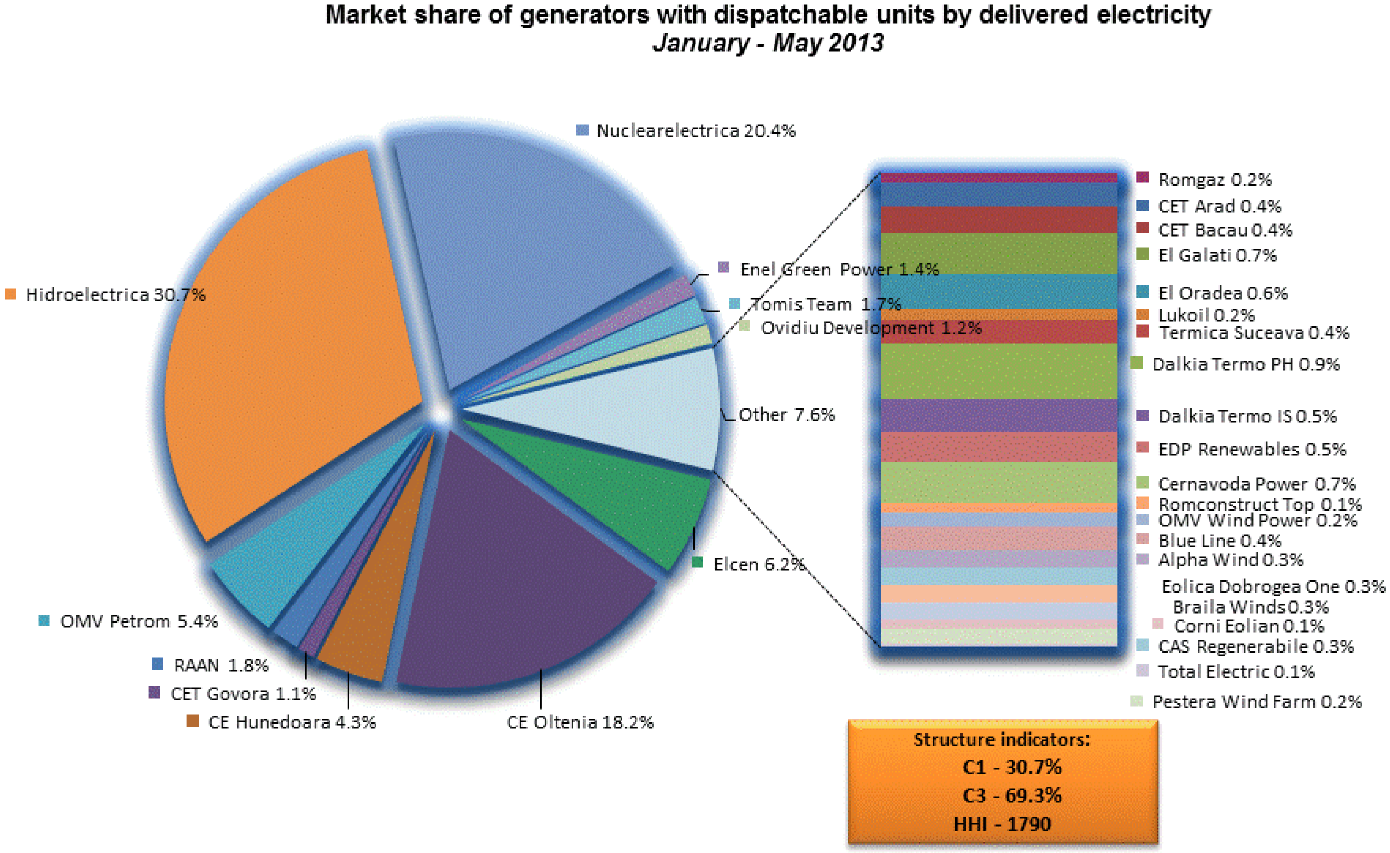
These concentration indicators may be defined for the wholesale market (electricity market or ancillary services market) or for each of its components where direct competition takes place.

<u>Concentration indicators and market shares of the electricity generators</u>

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 May 2013, calculated based on electricity delivered into the networks by the generators with dispatchable units.

Concentration indicators - May 2013 -	**C1 (%)**	**C3 (%)**	**HHI**
Value	**44.6**	**74.9**	**2531**

The following graph presents the market shares of the electricity generators for the first 5 months from 2013, taking into account all the components of wholesale electricity market and calculated based on the electricity delivered into the grid by the dispatchable generators.



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 May 2013:

Structure/concentration indicators of BM - May 2013 -	Regulation					
	Secondary		Fast tertiary		Slow tertiary	
	upward	downward	upward	downward	upward	downward
C1 - % -	73	71	72	59	59	42
C3 - % -	97	98	95	91	95	81
HHI	5704	5473	5483	4002	4330	2806

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

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 May 2013:

Concentration indicators on ASM - May 2013 -		**Secondary reserve**	**Fast tertiary reserve**	**Slow tertiary reserve**
regulated component	**contracted quantity (h*MW)**	**244980**	**535680**	**588528**
	C1 (%)	**61.6**	**80.8**	**58.0**
	C3 (%)	**100**	**91.9**	**100**
competitive component	**contracted quantity (h*MW)**	**11650**	**-**	**-**
	C1 (%)	**100**	**-**	**-**
	C3 (%)	**100**	**-**	**-**
	HHI	**10000**	**-**	**-**

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

<u>Concentration Indexes for the Day Ahead Market</u>

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 May 2013, based on quantities traded by participants on this market.

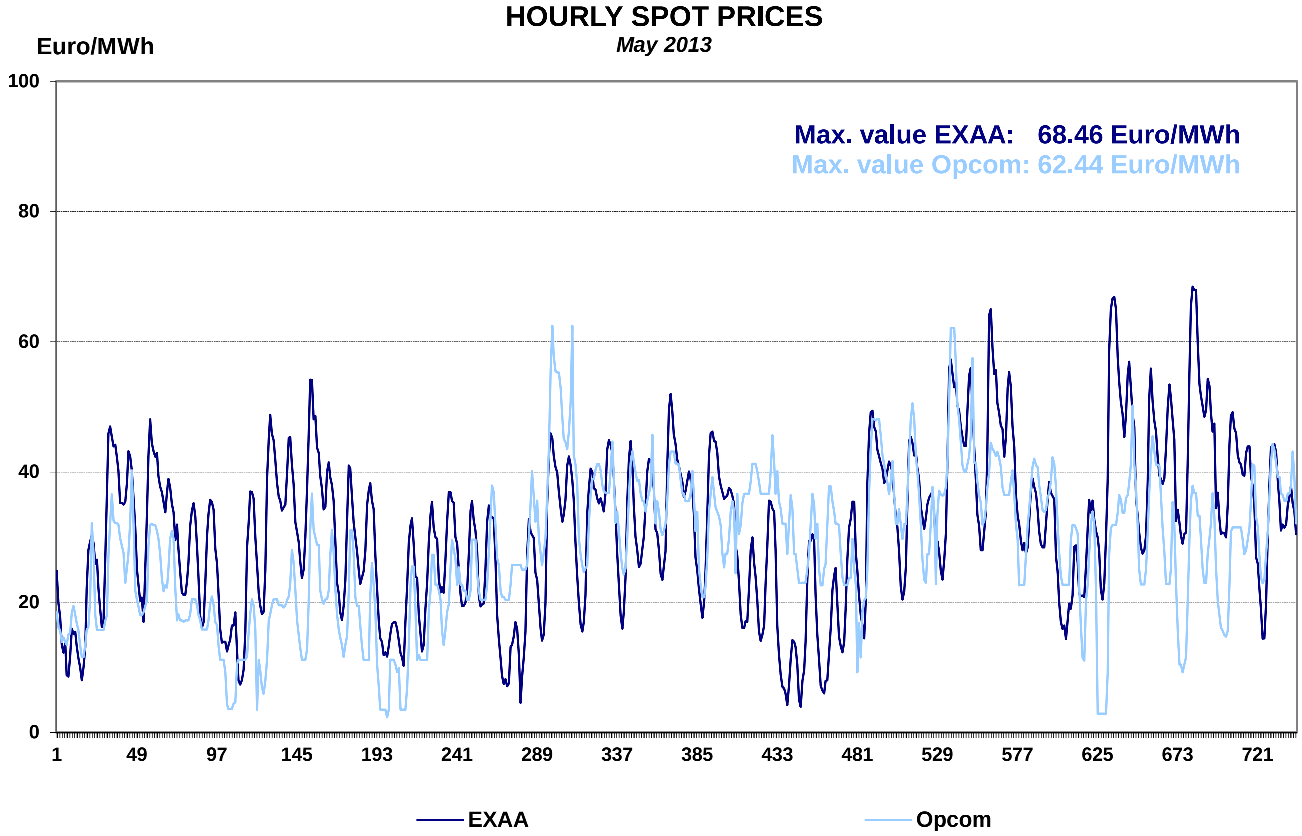
Concentration indicators on DAM - May 2013 -	**C1 (%)**	**C3 (%)**	**HHI**
Selling	**26.74**	**58.08**	**1328**
Buying	**15.11**	**33.95**	**649**

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

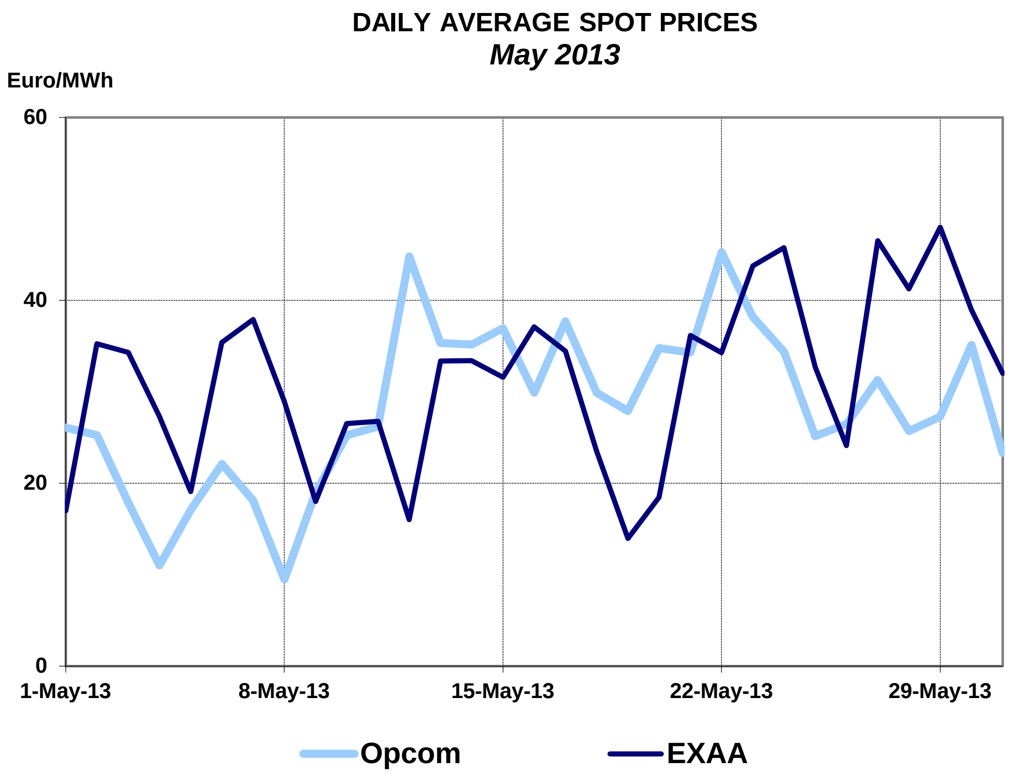
7. Price evolution on wholesale electricity market

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 May 2013 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.

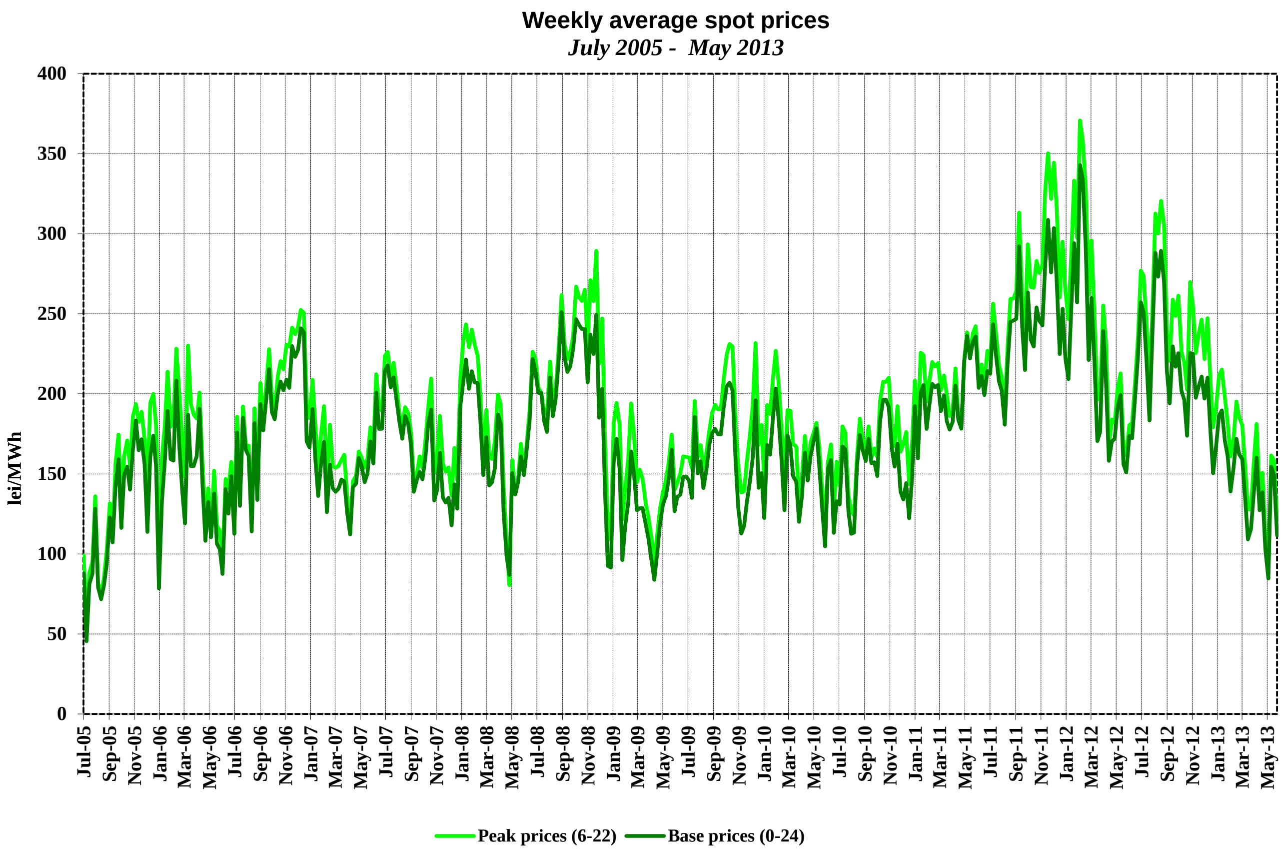


Source: Daily reports of SC Opcom SA and published data of EXAA – processed by MG



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

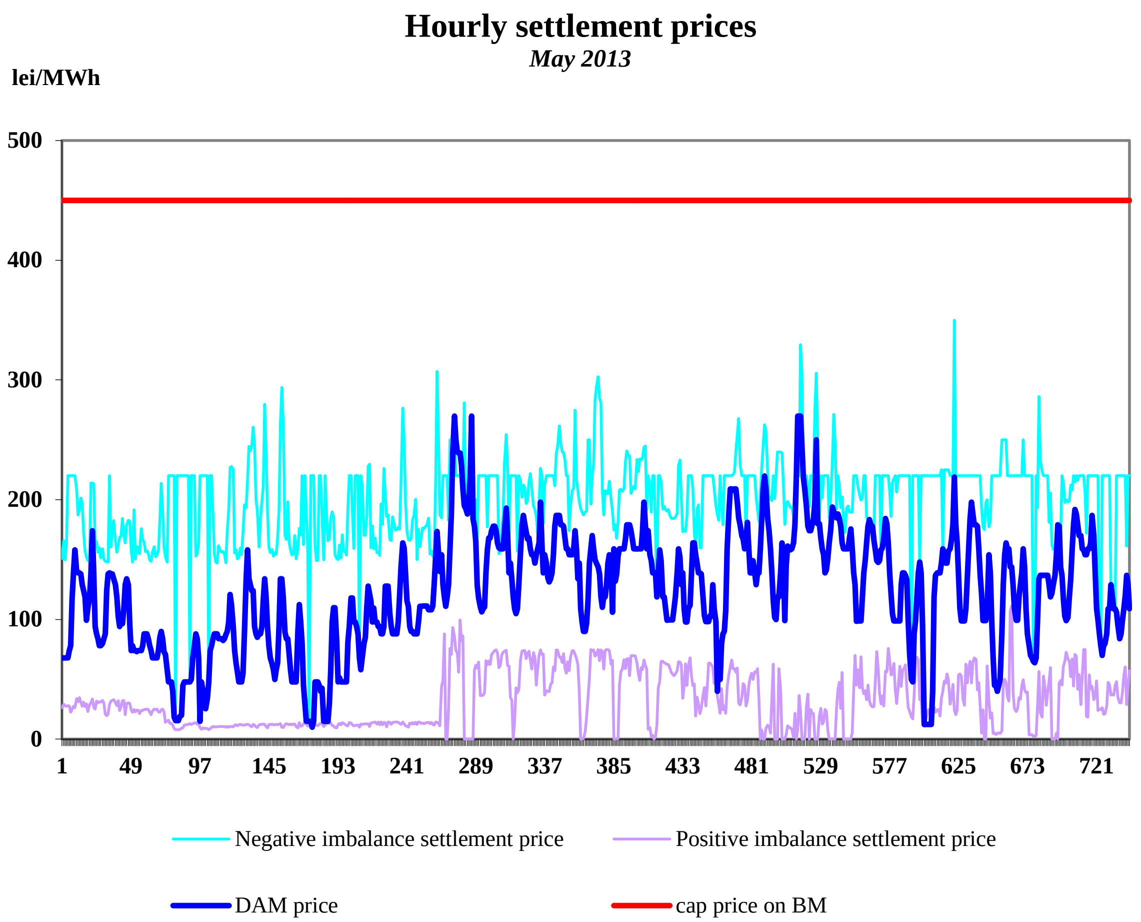
The following graph presents the evolution of weekly average spot prices starting with July 2005:



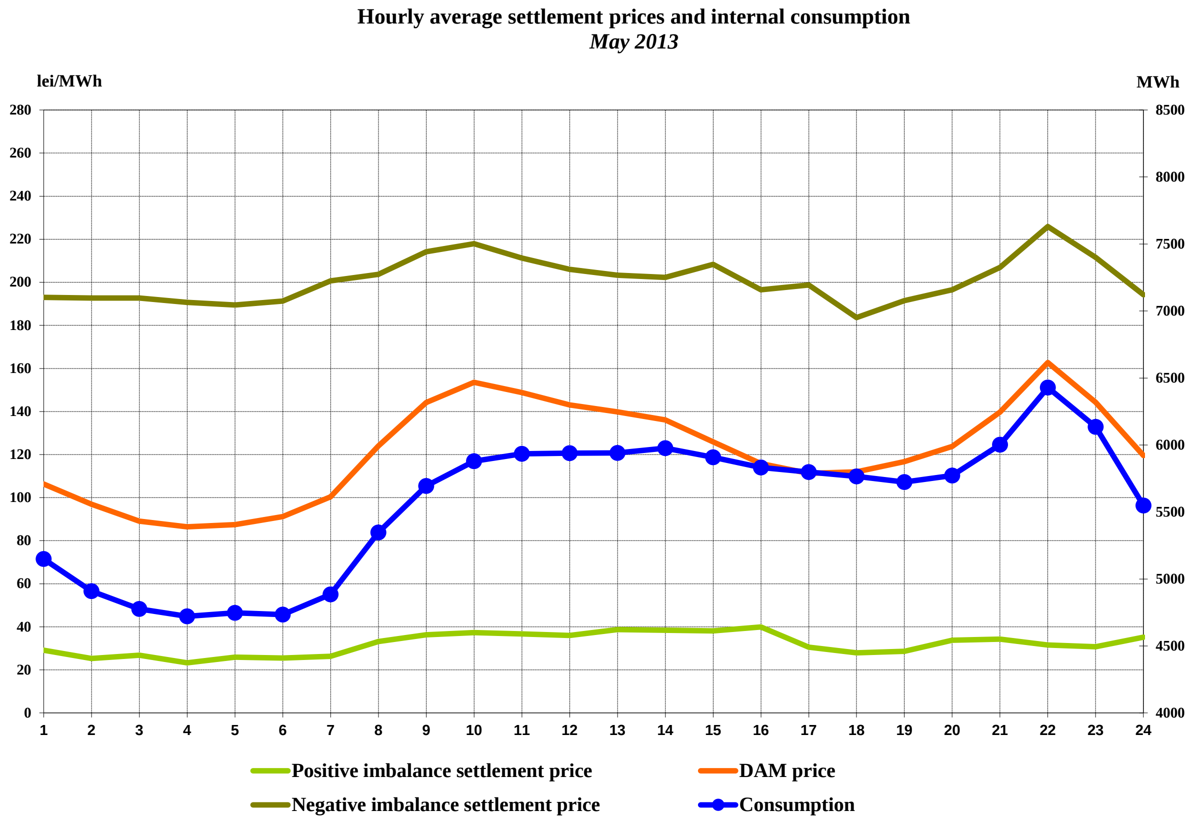
Source: Daily reports of SC Opcom SA – processed by MG

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 generating 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.

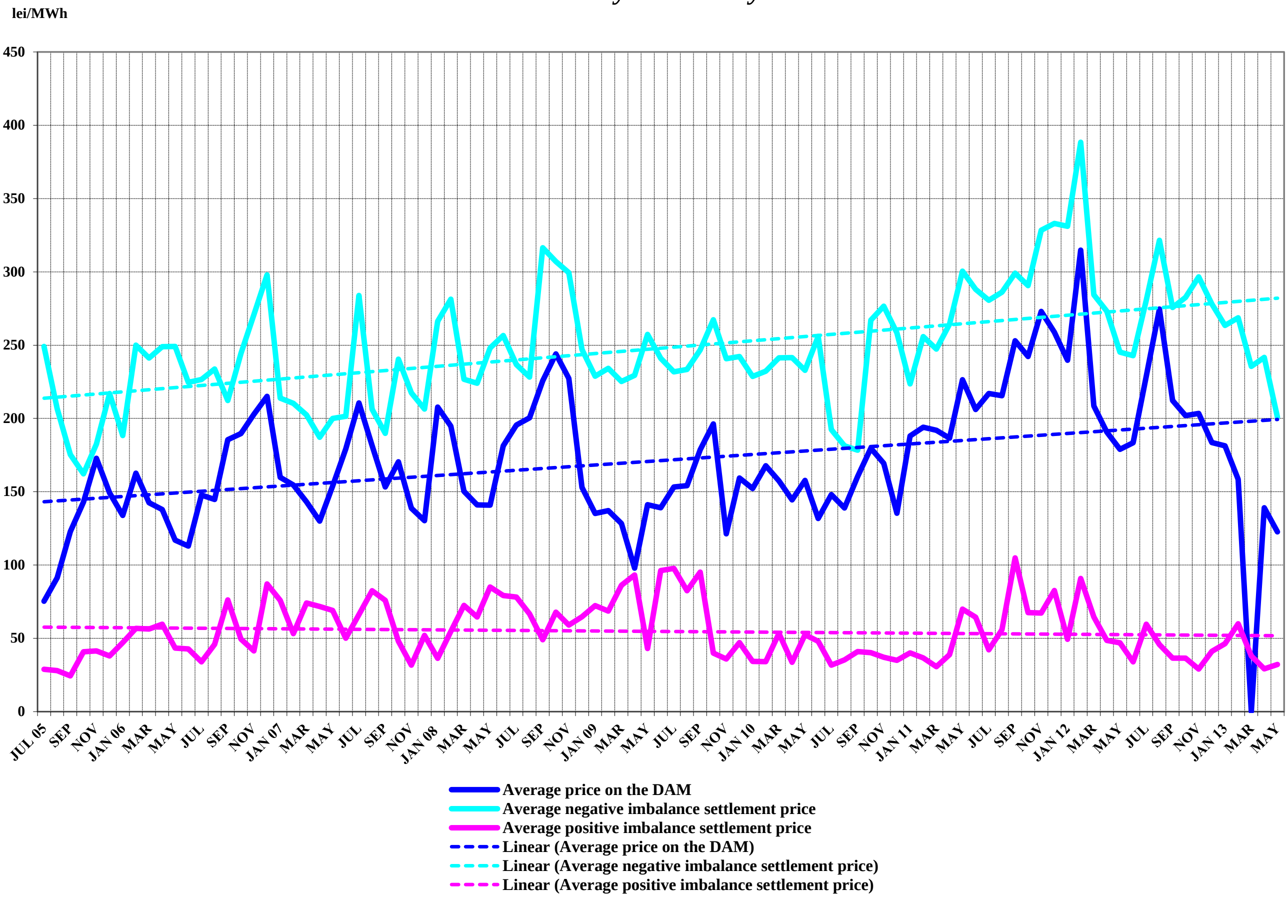


Source: Daily/monthly reports of SC Opcom SA – processed by MG



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

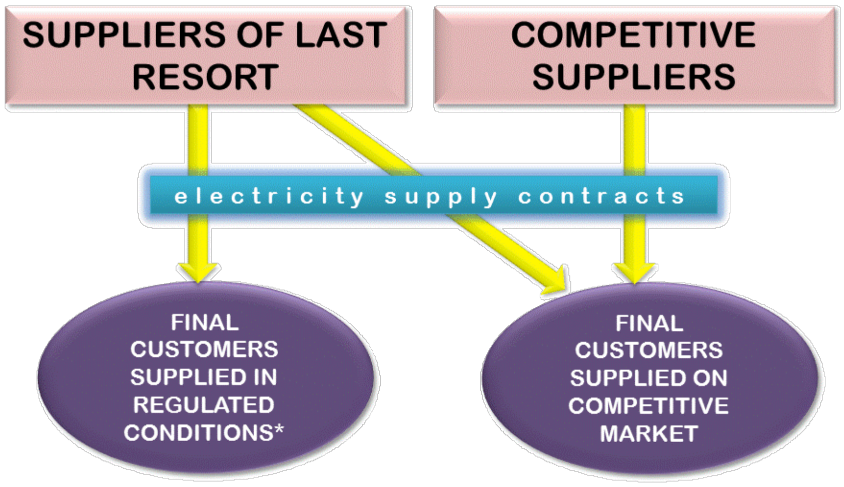
Monthly average prices on DAM and BM
July 2005 - May 2013



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

III. RETAIL ELECTRICITY MARKET

1. Structure of the retail electricity market

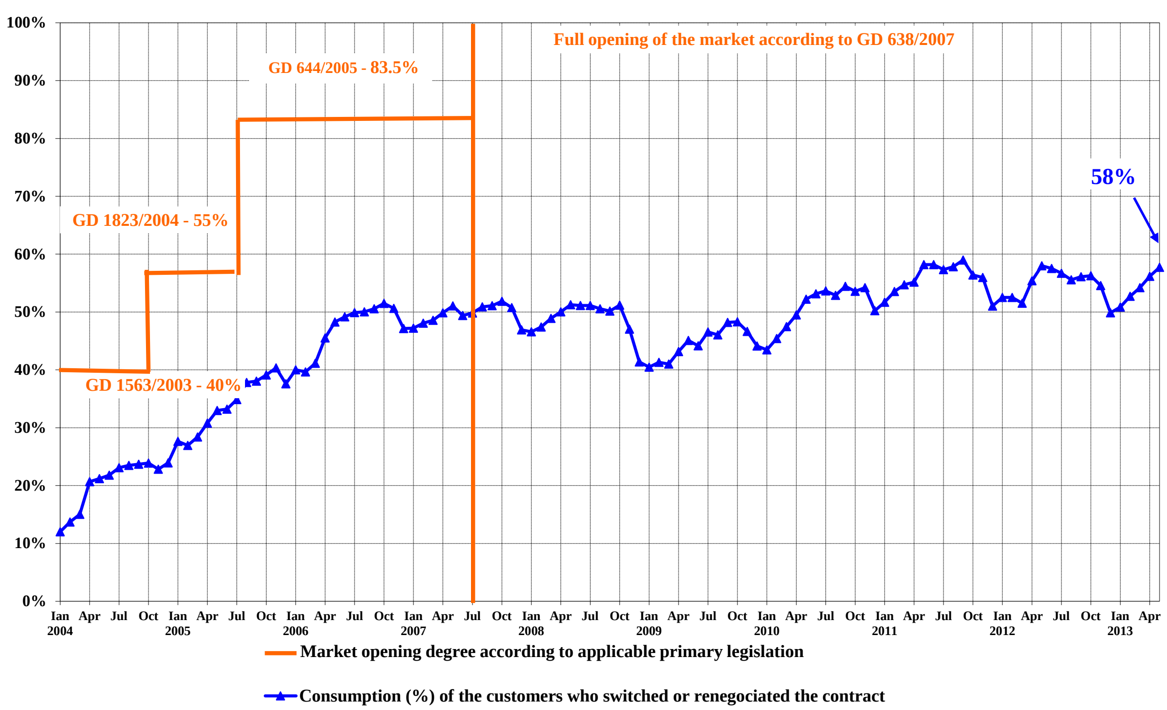


* according to art. 53 (2) and art. 55 (1) from Electricity and Gas Law no. 123/2012

2. Electricity market opening degree

The following graph contains the quota of the consumption from total consumption, of the customers who switched their supplier or renegotiated their contracts with the suppliers operating on the regulated market, during January 2004 – May 2013. The values presented are cumulated from the beginning of the opening process and are presented monthly:

Opening degree evolution of electricity market
January 2004 - May 2013

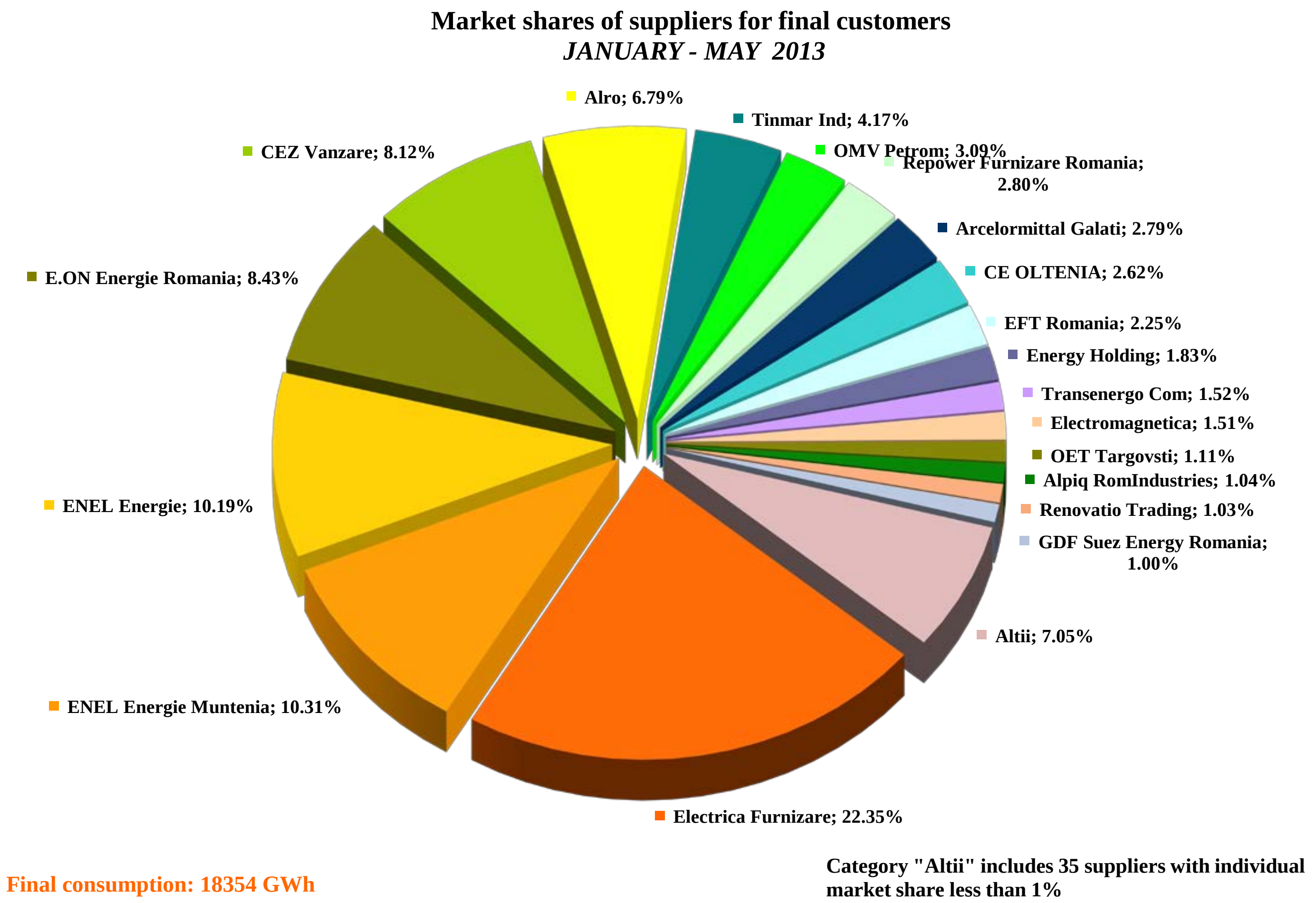


Source: Monthly reports of the final customers' suppliers – processed by MG

3. 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:

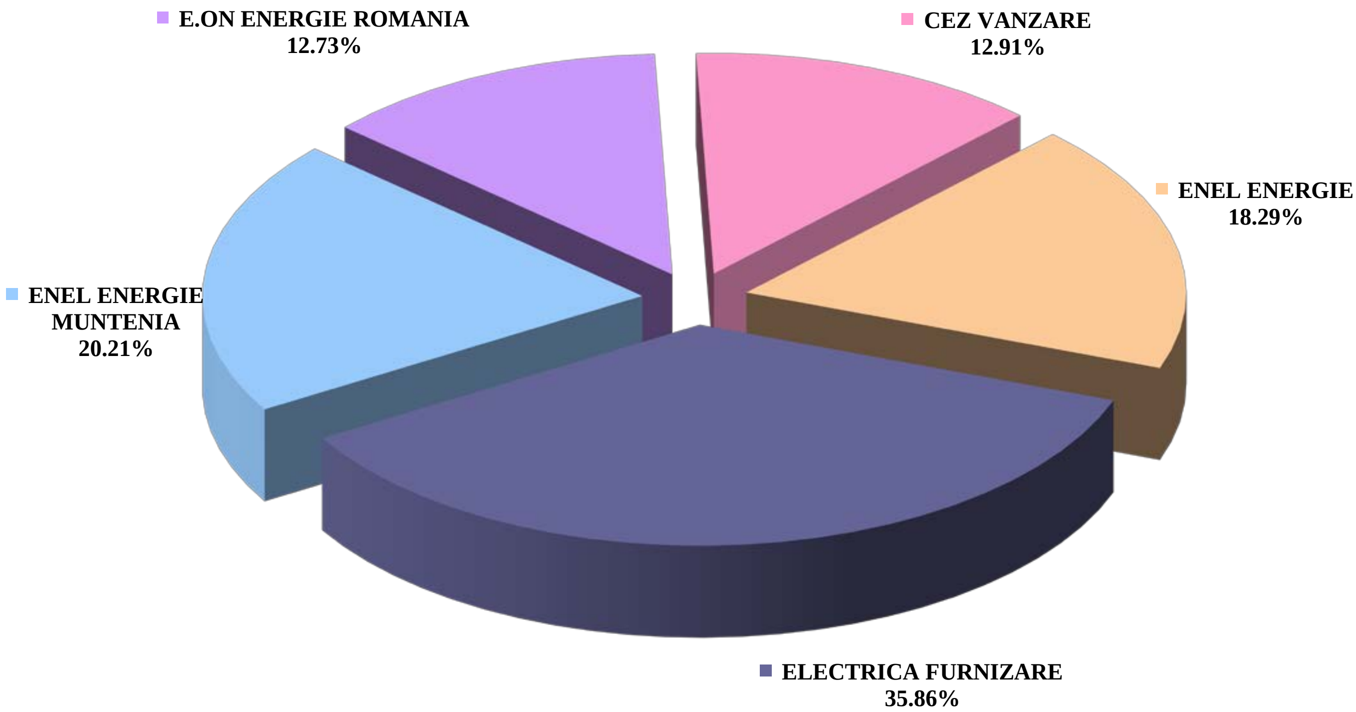
a) for all suppliers (including the suppliers of last resort) on REM – based on the electricity supplied to the customers on regulated tariffs (including CMC) as well as to the customers who switched their supplier or renegociated their contract;



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

b) for suppliers of last resort - based on the electricity supplied to the final customers at regulated tariffs and CMC;

Market shares of suppliers of last resort on regulated market
JANUARY - MAY 2013

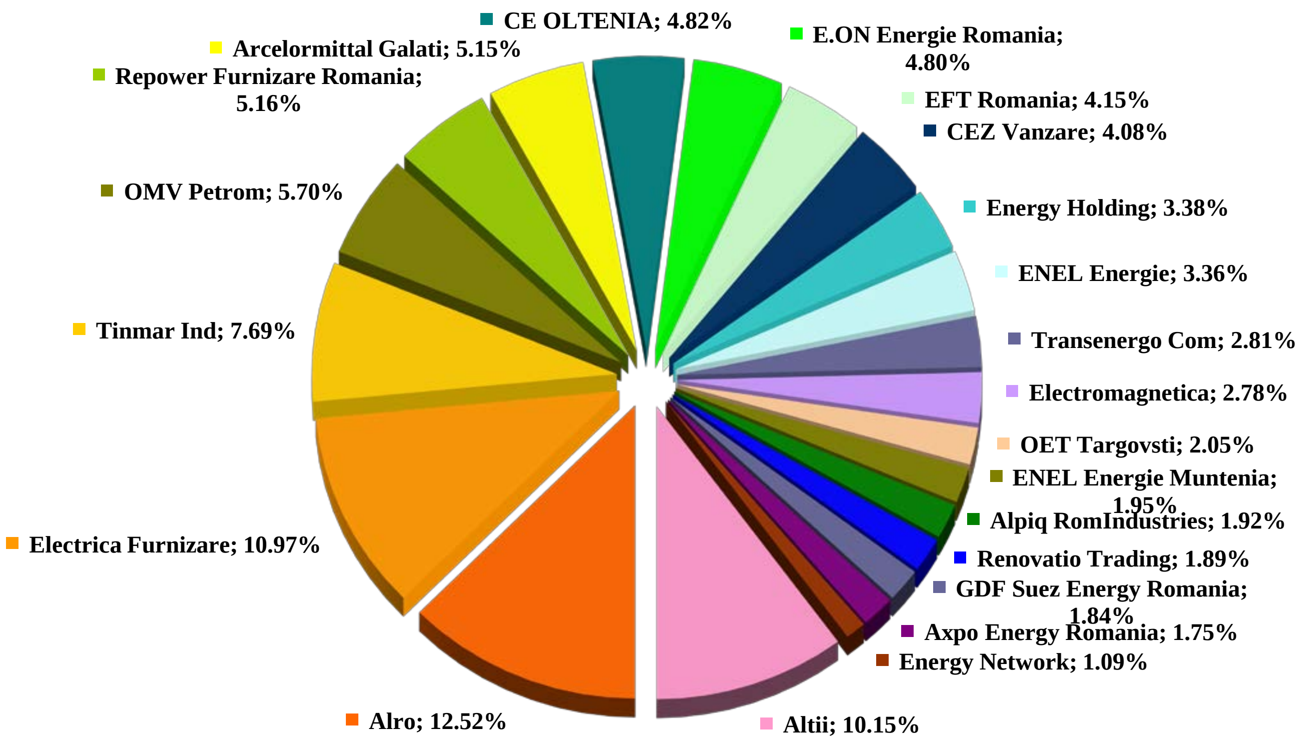


Consumption of customers supplied at regulated tariffs and CMC: 8396 GWh

Source: Monthly reports of the suppliers of last resort – processed by MG and

c) for all suppliers (including the suppliers of last resort) based on the electricity supplied for the customers at negociated prices on competitive component of REM:

Market shares of suppliers delivering electricity on the competitive market
JANUARY - MAY 2013



Consumption on competitive market: 9958 GWh
Structure indicators:
HHI - 561; C3 - 31%; C1 - 13%

Category "Altii" includes 33 suppliers with individual market share less than 1%

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

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

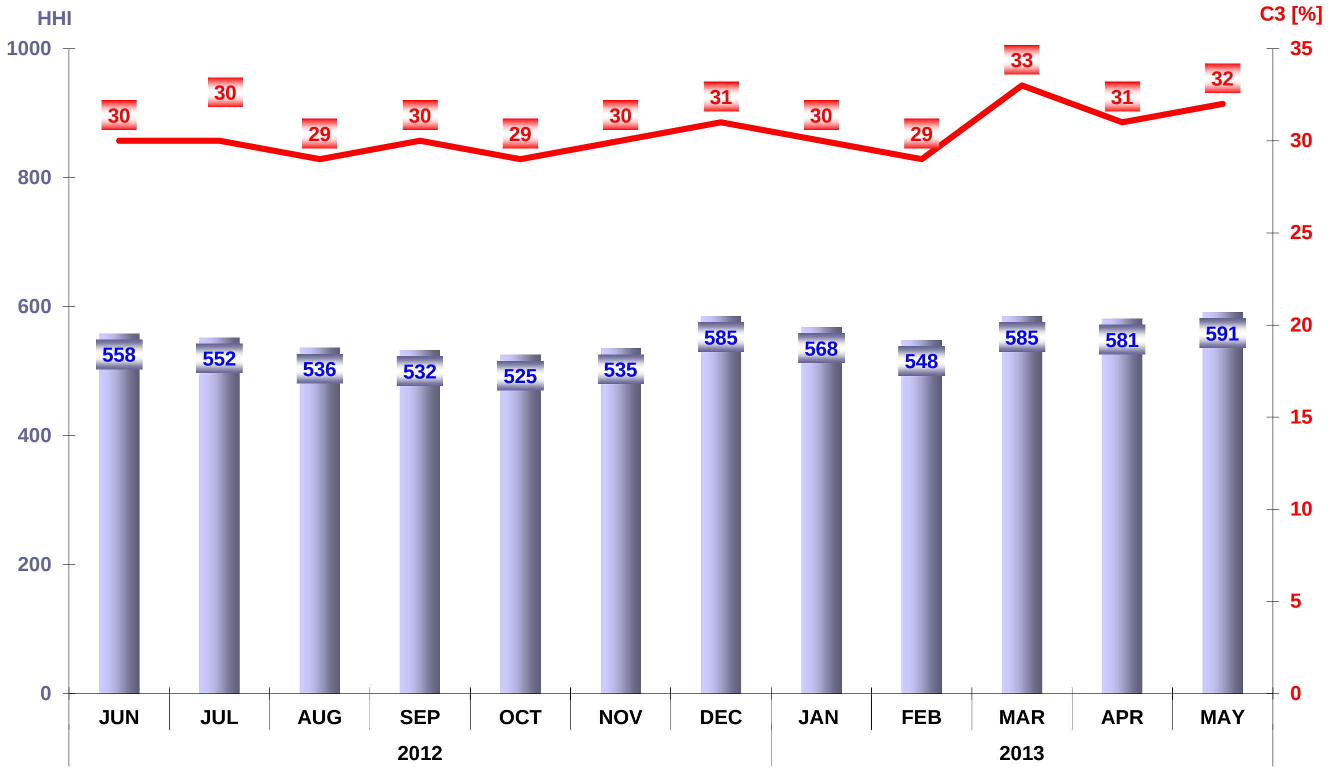
The analysis of the competitive suppliers' activity on the competitive REM component compared to their activity on the WEM is developed based on the weight of the electricity sold to final customers in total electricity sales. The table below presents the number of suppliers acting on the REM, grouped into categories of sales weight during May 2013:

Number of suppliers	**Share of sales to final customers from total sales transactions**			
	100%	**75% - 100%**	**50% - 75%**	**<50%**
Competitive	**5**	**14**	**7**	**14**
Of last resort	**0**	**5**	**0**	**0**

4. 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 June 2012 – May 2013 in the following graph:

Herfindahl-Hirschman (HHI) and Concentration Ratio of the main three suppliers delivering electricity on competitive market (C3)



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 May 2013, calculated for each customer category as defined by the Directive 2008/92/EC of the European Parliament and of the Council:

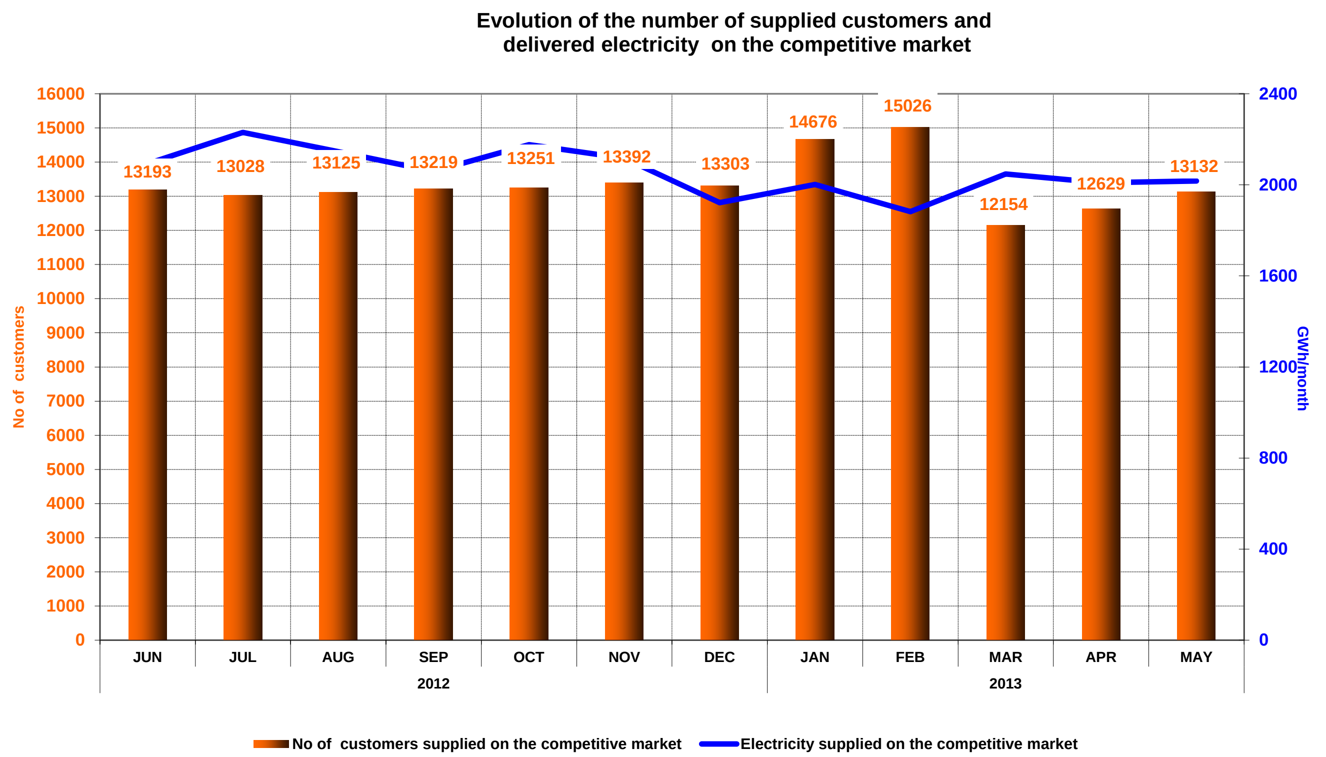
Indicators - May 2013	Consumer category							Total REM
	IA	IB	IC	ID	IE	IF	Other	
C1 - % -	28	28	24	16	16	27	32	**13**
C3 - % -	54	54	41	34	36	48	57	**32**
HHI	1375	1312	990	694	830	1286	1594	**591**
Consumption - GWh -	2.7	111	179	493	255	212	764	**2017**
No. of SUPPLIERS	28	45	43	42	18	12	15	**53**
No. of suppliers of last resort	5	5	5	5	2	3	2	**5**
No. of competitive suppliers	19	36	32	33	15	8	7	**40**
No. of producers	4	4	6	4	1	1	6	**8**

Source: Monthly reports of the suppliers – processed by MG

5. Evolution of customers' number and of electricity delivered

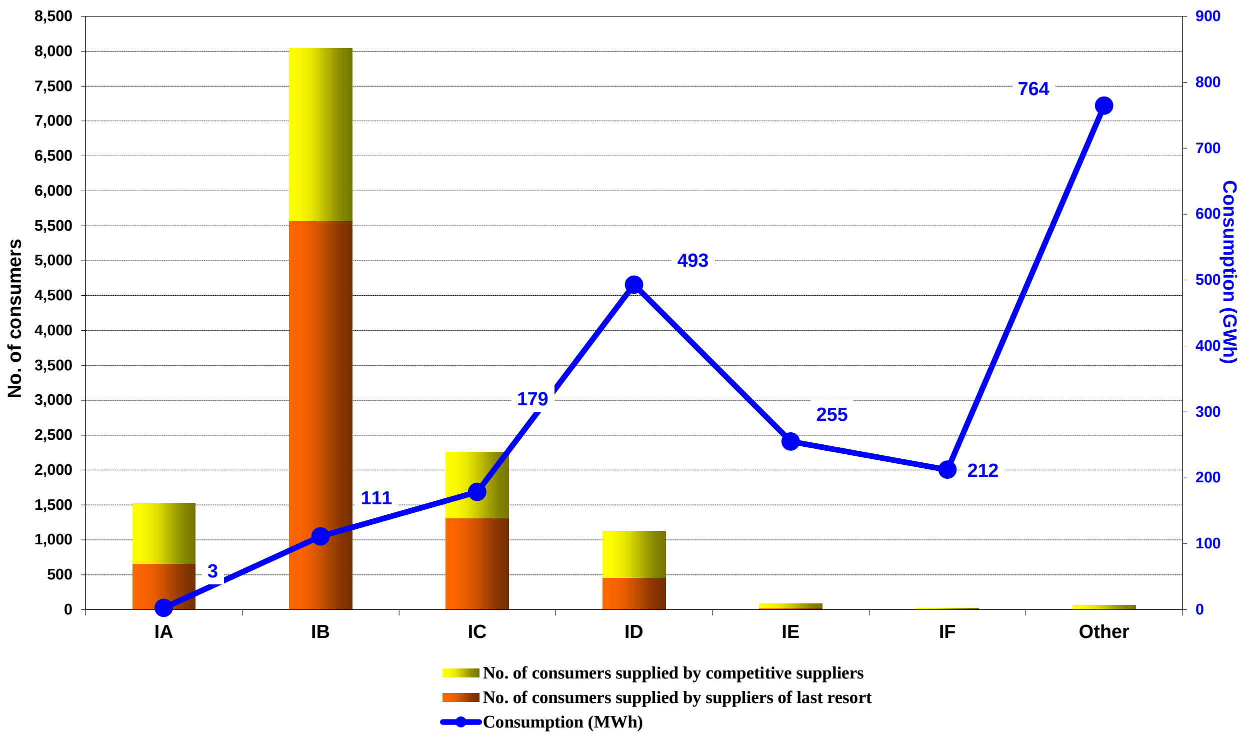
Number of customers supplied on the competitive market is presented as total value from the beginning of the market opening process; for May 2013 this number is split into categories, according to the provisions of Directive 2008/92/EC of the European Parliament and of the Council. The table below presents the bands of consumption of each category of customers:

Non-household customers	Annual electricity consumption (MWh) between:	
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
- MAY 2013-

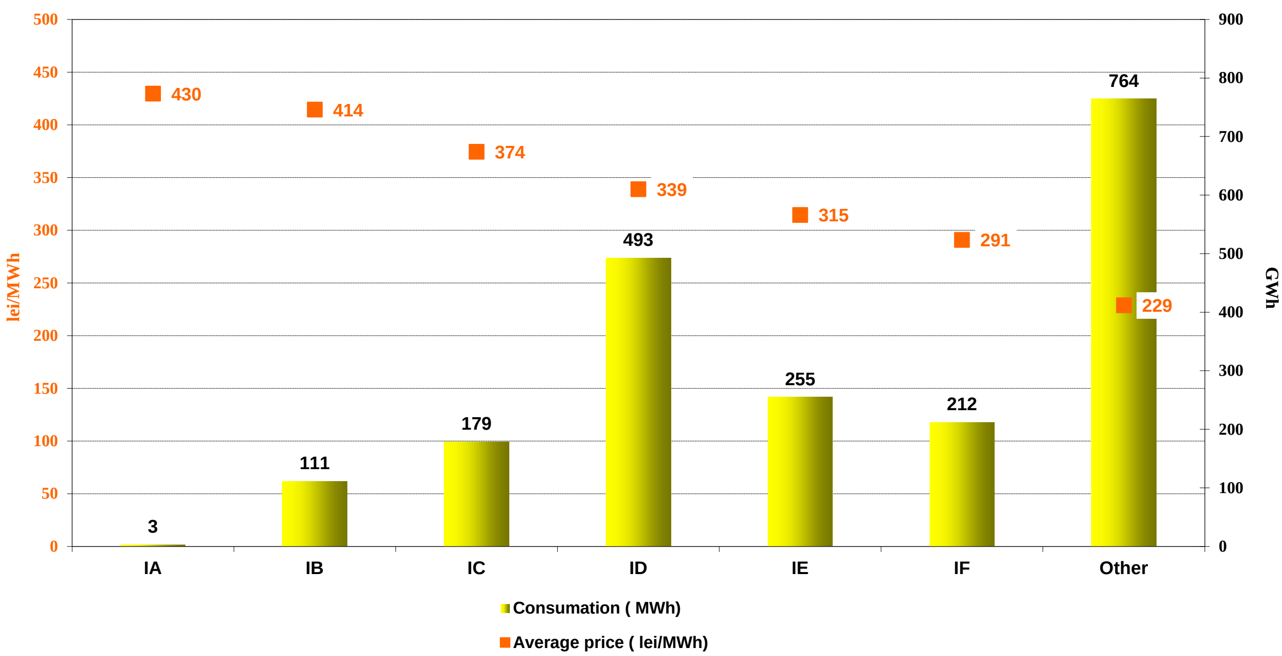


Source: Monthly reports of the suppliers – processed by MG

6. Average selling prices of customers supplied on the competitive market

The following graph presents the average selling prices of customers supplied on the competitive market, based on the structure defined according to the Directive 2008/92/EC of the European Parliament and of the Council.

Average price and energy consumption on types of consumers applied on compatitive market
-MAY 2013 -



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 taxe, metering). Splitting customers into categories was based on their annual consumption forecast, according to the provisions of above mentioned Directive.

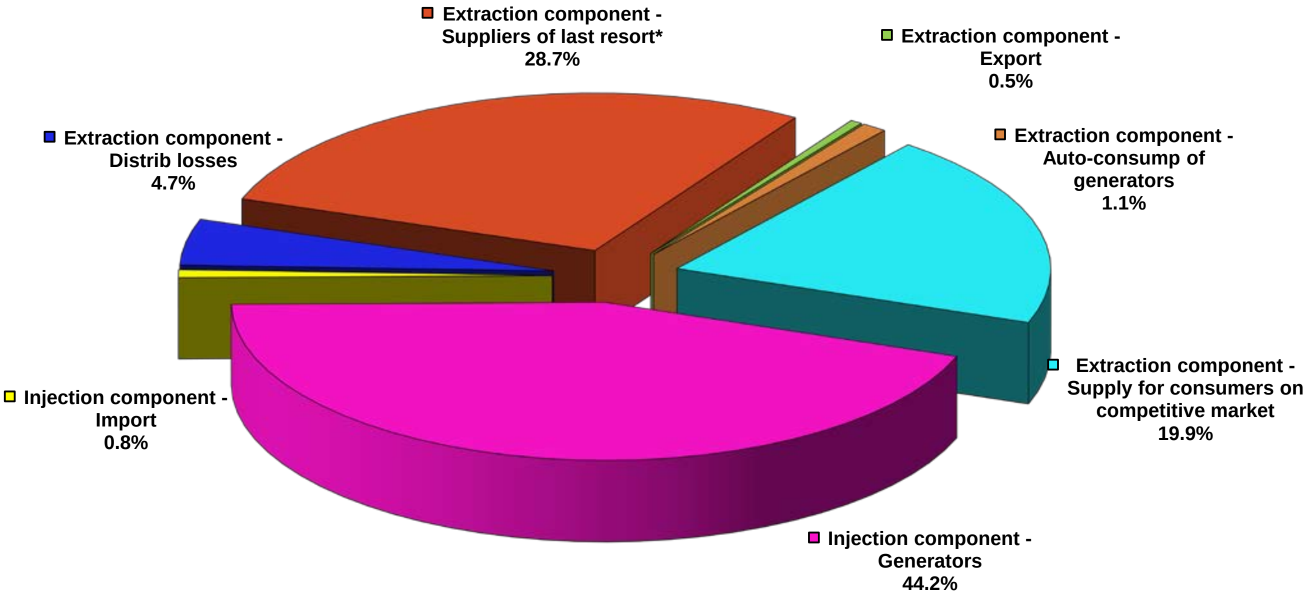
IV. TRANSMISSION AND SYSTEM OPERATOR C.N. TRANSELECTRICA S.A.

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 teritorry of the customers.

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 May 2013.

Structure of Transelectrica's revenues received for transmission services
- May 2013 -

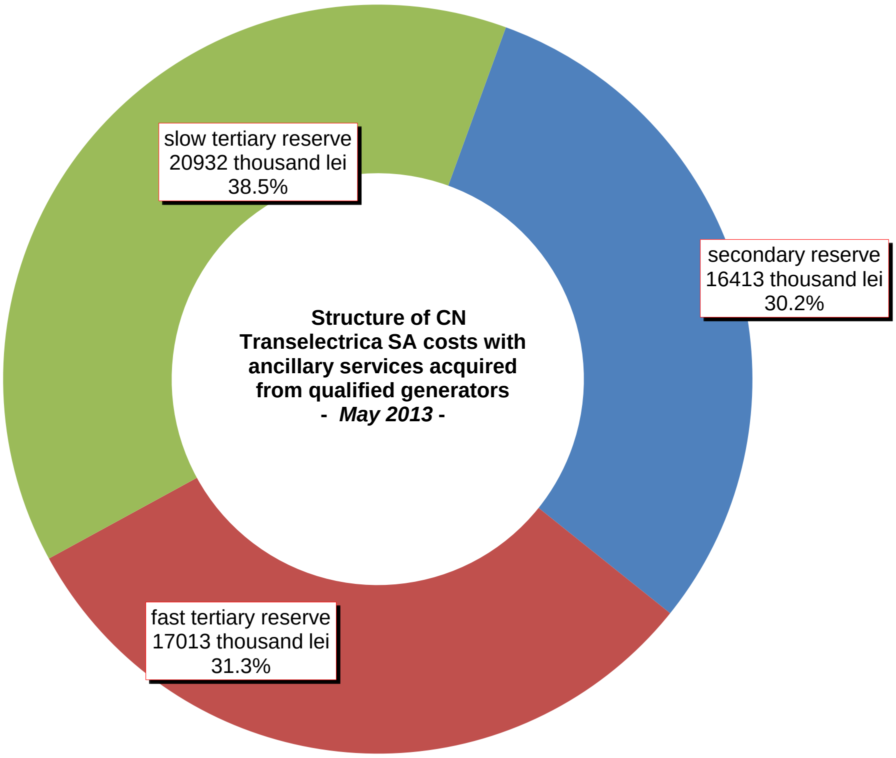


* for electricity extracted from their own licence areas as well as from other areas

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.

The following graph presents the costs of ancillary services that CN Transelectrica SA had to pay in May 2013. In order to cover these costs and it own operating costs. TSO applies a regulated tariff for system services.



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

V. EVOLUTION OF MARKET RULES IN MAY 2013

In May 2013, ANRE issued the following regulations with impact on the wholesale electricity markets:

- Order no. 32/2013 for approval of Regulation on scheduling the generation units and dispatching customers, as part of the technical code of transmission network; the present Regulation was necessary due to the implementing process of intraday market and intraday capacity allocation on interconections;
- Order no. 33/2013 regarding the modification of Order no. 117/2008 which approved the Methodology for reporting data reffering to the electricity industrial customers;
- Decision no. 1342/2013 for approving the quantities produced in high efficiency cogeneration which benefit of bonus scheme in April 2013.

VI. 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 final customers on regulated market* represents the consumption of customers supplied at regulated tariffs and CMC by suppliers of last resort.
- *Consumption of final customers on competitive market* represents the consumption of customers supplied at negociated 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 the supplier which is active on the competitive retail market.

2. Abbreviation

- MG – Monitoring Group
- EEX – European Energy Exchange – Leipzig. Germany. www.eex.de
- EXAA – Energy Exchange Austria. 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 stardardised Bilateral Contracts with Continuous Negociation
- NES – National Energy System
- WEM – Wholesale Electricity Market
- REM – Retail Electricity Market
- RCE – Romanian Commodities Exchange