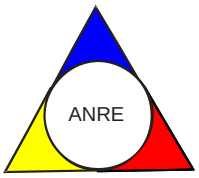
ROMANIAN ENERGY REGULATORY AUTHORITY



NATIONAL REPORT 2015

31 August 2016

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Content

1 Foreword

This document constitutes the national report issued by the Romanian Energy Regulatory Authority - ANRE for similar institutions in the Member States, Agency for the Cooperation of Energy Regulators - ACER and the European Commission in order to fulfil the reporting obligations included in the provisions of Article 37 paragraph (1) letter e) of Directive 2009/72/CE and Article 41 paragraph (1) letter e) of Directive 2009/73/CE. The report also responds to the reporting requirements required by Article 9 paragraph (1) letter ș), paragraphs (4), (5), (6) and (7) of Law no. 160/2012 approving Government Emergency Ordinance no. 33/2007 on the organization and functioning of ANRE. The report contains information on developments in the electricity and natural gas markets for the period 1 January 2015 - 31 December 2015, in accordance with the requirements of ACER - CEER.

To create a modern energy sector, corresponding to the major principles and objectives of the European Union energy policy of electricity and natural gas market liberalization and capable of meeting consumer demand, ANRE has developed and issued in 2015 approx. 986 orders, decisions and opinions in accordance with the obligations deriving from the primary and the European legislation.

Significant developments in the **electricity market** in the aforementioned period were: finalizing the certification of C.N. Transelectrica S.A. as transmission and system operator according to the ownership unbundling model, completing the regulatory framework for the process of connecting users to public electricity networks, measures for the deployment of electricity smart metering, increasing transparency the number of transactions on the electricity markets, harmonization of secondary legislation with the provisions of the primary legislation and the European codes, continuation of the process of phasing out regulated prices correlated with optimal management of energy consumption, finalizing the implementation of universal service for electricity and reviewing the regulatory framework for the supply of last resort, updating the regulatory framework of support schemes for the promotion of electricity produced from renewable energy sources and of high efficiency cogeneration.

In the application of the Regulation (EU) 2015/1222 of the European Commission, the activity regarding Romania's participation in the CEE FB MC project (Flow-based Market Coupling in Central and Eastern Europe) has continued.

By ANRE Decision no. 2515/2015, the company Electricity and Natural Gas Market Operator "OPCOM" S.A. was appointed as „nominated electricity market operator" (NEMO) of the day-ahead and intra-day markets from the Romanian bidding zone, within the meaning of Regulation (EU) 2015/1222 of the European Commission of 24 July 2015 laying down guidelines on capacity allocation and congestion management.

Until 31 December 2015, ANRE approved renewable energy generation capacities with a total installed power of 4662 MW.

On the **natural gas sector** we mention: completing the regulatory process of phasing out the prices for the non-household customers starting with 1 January 2015, adjusting the regulatory framework for the retail natural gas market to the legislative amendments on the gas market

structure in Romania due to the implementation of the roadmap for phasing out regulated prices, increase the integrity and the transparency of the wholesale natural gas market. Compared to 2014, the degree of the market opening increased by approx. 10% to about 66% of the total consumption in 2015.

For the gas household customers, Government and ANRE have elaborated a new timetable for phasing out the regulated prices for the period 1 July 2015 – 30 June 2021 taking into account the downward trend of the evolution of the international prices for the hydrocarbons.

Regarding the **energy efficiency sector**, ANRE has conducted specific activities such as law enforcement to promote energy efficiency and the development of secondary legislation, activities of energy auditor's authorization and certification of energy managers, project activities financed within the Intelligent Energy Europe Programme, participating at the internal and international working groups, monitoring the evolution of the implementation of the National Energy Efficiency Action Plan and of the related programs to improve the energy efficiency at the national level.

In order to apply the provisions of Regulation (EU) no. 1227/2011 (REMIT) and the provisions of ACER Decision no. 01/2012 regarding the registration of the market participants, ANRE issued Order no. 1/2015 establishing the National Register of the wholesale energy market participants and approving the Registration Procedure for the participants to the energy wholesale market.

ANRE will continue to pursue the increase of the efficiency of the energy markets and their integration on the European market, the harmonization process of the secondary legislation to the provisions of the primary legislation and to the European codes, the development of the trading platforms, the implementation of the provisions of the European regulations regarding the integrity and the transparency of the markets, the integration of the renewable energy sources in a secure and reliable manner, promotion of the investments in the smart grids, the information and protection of the customer.

NICULAE HAVRILEȚ

PRESIDENT

Abbreviations

ATC – Available Transmission Capacity

AS - Ancillary Services

BM - Balancing Market

BRM - Romanian Commodities Exchange

CMBC – Centralized Market of Bilateral Contracts

CMBC-EA - Centralized Market of Bilateral Contracts by Extended Public Auction

CMBC-CN - Centralized Market of Bilateral Contracts by Public Auction with Continuous Negotiation

CMBC-OTC - Centralised Market of Bilateral Contracts with Double Continuous Trading

CMBC-PC - Centralised Market of Bilateral Contracts for Processing Contracts

CMC – Competitive Market Component

CMUS - Centralized Market for Universal Service

DAM – Day-Ahead Market

DSO – Distribution System Operator

ENTSO - E –European Network of Transmission System Operators for Electricity

ENTSO-G - European Network of Transmission System Operators for Natural Gas

E-RES – Electricity produced from Renewable Energy Sources

GD – Government Decision

HHI – Herfindahl-Hirschman Index

IDM - Intra-day market

NPS –National Power System

NTS - Natural Gas Transmission System

PCR – Price Coupling of Regions solution

SO – storage operator

SoLR – Supplier of Last Resort

TSO – Transmission System Operator

2 Main developments in the electricity and natural gas market

2.1 Electricity market

The main developments on the electricity market in 2015 were:

- ANRE authorized since the beginning of the application of the support scheme until 31 December 2015, generation capacities of renewable energy with a total installed power of 4662 de MW. Of the total, 2931 MW are wind turbines, 1296 — photovoltaic panels and 106.5 MW — biomass, biogas and landfill gas units. At the same time, 327.8 MW represents small hydropower plants below 10 MW of which 228.8 MW in new units, 85.5 MW in refurbished units and 13.5 MW in old units;

- In 2015, **the electricity production was** 65.6 TWh, approximately 1.1% higher than in 2014. **Internal consumption** was about 58.9 TWh, about 2% higher than in 2014. Romania was a net exporter of electricity in 2015, the export-import balance being negative (- 6.73 TWh);

- Regarding the **mix of resources**, there are no significant differences to 2014. The nuclear and hydroelectric production registered decreases of 0.26% respectively 3.88%. Increases were recorded in electricity production from coal and biomass (0.02%), renewable photovoltaic (0.53%), wind (1.21%) and hydrocarbons (2.37%);

- ANRE approved the **final certification** of the National Company for Power Grid "Transelectrica" - S.A., according to the model of **ownership unbundling,** as transmission system operator of the national electricity system, by ANRE Order no. 164/2015. On 10/12/2015, ANRE notified the European Commission regarding the approval of the National Company for Power Grid "Transelectrica" - S.A. as transmission system operator in Romania in accordance with Art. 10 of EC Directive 72/2009;

- Decrease with 6.8 % of the **average transmission tariff** from 1 July 2015, compared the approved tariff for the period 1 July 2014 – 30 June 2015, was due to the increase of the electricity consumption and the export, as well as to correction applied by ANRE related to the ending of the first semester of 2014 and also to the estimation of the achievements of the first year of the regulatory period;

- **The tariffs for the electricity distribution service** decreased: for high voltage (- 11.35 %), for medium voltage (- 11.90 %) and for low voltage (- 12.84 %);

- ANRE approved the values of **annual investment programs for the concessionaires distribution operators** for the regulatory period 2014-2018, accepting inclusion in the RAB of fixed assets resulting from prudent investments, respectively those investments that prove to be necessary, appropriate and efficient;

- Regarding the **state of the distribution networks,** comparing the evolution of the main indicators of continuity from the period 2008-2015 it is obviously a general progress. Thus, planned SAIFI, as average value on country decreased from 1.6 interruptions/year in 2008, to 0.77 interruptions/year in 2015, and unplanned SAIFI, as average value on country decreased from 6.7 interruptions/year in 2008, to 4.19 interruptions/year in 2015. Planned SAIDI, as average value on country decreased from 386 min/year in 2008, to 211

min/year in 2015, and unplanned SAIDI decreased from 639 min/year (10 hours and 39 minutes) in 2008 to 308 min/year (5 hours and 8 minutes) in 2015, recording a decrease of 331 min/year (5 hours and 31 minutes);

- **The average time for the network connection process** amounted to 109 days across the country (from the complete documentation submission, without the solution study, to the powering on installation), the average cost is 3003 RON;

- **The cross-border commercial activity** intensified in 2015, the amount of energy exported on contractual basis was about 10.50 TWh, 28% higher than the previous year, while the imported energy had exceed by 2.5 times the amount in 2014, reaching to 3.78 TWh. We mention that the electricity export activity was achieved mainly by suppliers (approx. 98% of the traded volume on this type of contracts), respectively Transelectrica SA as transfer agent for the coupled DAM for the import activity (approx. 78% of the traded volume);

- As a result of **the allocation of interconnection capacity**, over 95% of Transelectrica S.A. revenues came from long term auctions (annual and monthly), the highest values being recorded in particular from the auctions for export capacity allocation on the borders with Hungary, Serbia and Bulgaria. The revenues from the daily auctions were reduced as value, most of them being made of the income determined by the congestions on Romania-Hungary border, after the default daily allocations; mentioning that the income from the intra-day auctions are close to zero;

- **The harmonised rules for long-term allocation of interconnection capacities** were approved by ANRE to be applied on Romania-Hungary border, the derogations to the common version are presented in annexes, namely in Annex 15;

- **Electricity transactions volume** achieved on the wholesale competitive market in 2015 increased by 34.5% compared to that achieved in 2014:

Wholesale market components	Volumes traded in 2015 -GWh-	Evolution compared to 2014 - % -	Percentage of internal consumption 2015 - % -
Regulated contracts market	6413	▼ 29.2	12.6
Directly negotiated contracts	1509	▼67.3	3.0
Centralized market of bilateral contracts, from which:	56717	▲52.1	109.5
- CMBC-EA	31407	▼8.5	61.9
- CMBC-CN	7915	▲388.3	15.6
- CM-OTC	17394	▲1194.6	34.3
Centralized market for universal service	4592	-	9.1
Day ahead market	22496	▲5,3	44.3
Intra-day market	76	▲18,8	1.5
Balancing market	4861	▲16,6	9.4
Export*	10504	▲28,0	20.0

- In 2015, trading was predominant on the centralized markets of bilateral electricity contracts organized by OPCOM (CMBC-EA, CMBC-CN and CM-OTC), ensuring especially the medium and long-term contracts, followed by DAM and IDM for the short-term transactions;

- Transactions on brokerage platforms were actually ceased in 2014, the participants straightening the interest to the centralized market with double continuous negotiation on OPCOM S.A.;
- It is also noted the increase by approx. 16% of the electricity volume traded on the balancing market comparing to that in 2014;
- Comparing to 2014, it is noted a further **reduction of the electricity amount sold on the regulated contracts**, this is a consequence of the Memorandum of Understanding approved by the Government in March 2012 concerning the assumed obligations with IMF, World Bank and European Commission regarding the approval of the timetable for phasing out regulated electricity tariffs to the final consumers;

- **A comparative analysis of the annual average prices resulting from transactions on the wholesale market components** in 2015 over the previous year indicates the following:
  - Decrease of the average annual prices for all the components of the wholesale market, except the one registered on DAM and the average one for deficit on the Balancing Market; the most significant decrease was registered on the IDM, and the smallest decrease was for the price on CMBC-CN;
  - The average annual prices on negotiated bilateral contracts registered smaller values than on other competitive contracts,
  - The average selling price for Centralized Market for universal service was the highest average price registered on the centralized platforms managed by market operator; this fact reflects the offering policy of the participants on this segment of the market and the novelty introduced by the regulatory framework implemented, and is probably influenced by the type/number of the traded products;

- In order to apply **the provisions of Regulation (EU) no. 1227/2011** and the provisions of ACER Decision no. 01/2012 regarding the register format in accordance with Art. 9, paragraph (3) of REMIT and to the necessity to adapt the national regulatory framework to international developments concerning the REMIT implementation, ANRE issued Order no. 1/2015 establishing the National Register of the wholesale energy market participants, published in the Official Gazette of Romania no. 80/30.01.2015. Thus, as of 18 March 2015, the participants on the energy wholesale market in Romania were required to register on the National Register of wholesale energy market participants, set out and managed by ANRE according to the procedure set out in the Annex to the Order. Presently, a number of 609 wholesale energy participants is registered in the national registry and their data are sent to CEREMP-ACER;

- In 2015, the number of electricity suppliers operating **on the electricity retail market** was 96, of which 21 are also electricity generation license holders and 5 suppliers of last resort (SoLR);

- The electricity supplied by SoLR amounted approx. 14128 GWh, with a decrease of 7.1% compared to 2014, given the increase of the total final consumption by approx. 3.9%;

- Also in 2015 it was recorded:
  - The increase by 3.3% of the household consumption compared to 2014, while maintaining its share in the consumption structure;
  - The increase by 9.7% of the consumption of the non-households customers who

have switched the supplier compared to 2014 and the increase of its share in the final consumption;
- The consumption decrease of the non-household customers supplied on universal service and on the last resort by approx. 40.8% compared to 2014 and also the decrease of its share in the final consumption;

- In December 2015, on the competitive market were present 112018 non-household customers, the energy supplied to them in 2015 represented 32076 GWh. The real degree of market opening at the end of 2015 was 69%;

- **The value of supply switching rate for the retail market** in terms of number of consumption places recorded large increases compared to the last year values which indicates that the customers migration from one supplier to another has restarted; it is noted significant increases registered by the indicator for the small non-households and households due to the deregulatory process undertaken by Romania;

- According to the timetable for phasing out the regulated tariffs, stated by the Memorandum of Understanding signed by the Government with the IMF, WB and European Commission on 13 March 2012, in 2015, steps 8 and 9 for phasing out the regulated tariffs were taken, the percentage of buying electricity on the competitive market for the final customers that have not used the eligibility rights are:
  - 100 % of non-household customers consumption and 40 % of household customers consumption, for the step 8 on phasing out regulated tariffs (period 01.01.2015 - 30.06.2015);
  - 100 % of non-household customers consumption and 50 % of household customers consumption, for the step 9 on phasing out regulated tariffs (period 01.07.2015 - 31.12.2015);

- ANRE has analysed the proposals of the concessionaires distribution operators and approved in March 2015 **the pilot projects on smart metering systems** that have met the required criteria. 14 pilot projects were approved for 6 concessionaires' distribution operators.

2.2. Natural gas market

The main developments on the natural gas market in 2015 were:

- **Annual consumption of natural gas** has continued to decline, reaching around 11.6 billion cubic meters, with a decrease of about 5% in 2015 compared to 2014, due to a slight decrease in the consumption of the end customers;

- In 2015, the total consumption of natural gas was 121,726,748.658 MWh. The total number of final customers was 3480661, of which 182265 non-household customers (5.24%) and 3298396 household customers (94.76%);

- In this year, the final customers consumption was 111,244,195.163 MWh, of which 80,992,734.448 MWh represented the non-household consumption (72.80%) and 30,251,460.715 MWh represented household consumption (27.20%);

- Natural gas consumption is covered from internal production and imports. Internal production was 118,816,674.270 MWh, and the import was 2,910,074.388 MWh;

- The number of participants on the gas market in Romania has increased steadily as the market was liberalized, especially in the natural gas supply sector;

- **Natural gas internal production** in 2015, current production and extracted from underground storage, meant to consumption, represented 97.61% of the total sources. The first two producers (Romgaz și OMV Petrom) jointly covered 94.85% from this source;

- **The import** entering into consumption in 2015, current import and extracted from underground storage, was 2.39%. The top three importers – internal suppliers – jointly conducted 94.89%;

- In 2015, the natural gas production in Romania was provided by a number of 6 producers: SNGN Romgaz SA, S.C. OMV Petrom SA, S.C. Amromco Energy SRL, S.C. Raffles Energy SRL, S.C. Foraj Sonde SA, S.C. Stratum Energy LLC;

- Given the structure of the natural gas market in Romania, where over 95% of the gas consumed is coming from the internal production, these quantities are traded on the wholesale gas market, the exported quantities have a very low level in 2015, approx. 11,694.640 MWh representing 0.01% of the total production;

- In 2015, 30 suppliers traded on the centralized markets, the volume of these contracts was 1,720,544 MWh;

- Following the analyse of the final version of the Report of S.N.T.G.N. TRANSGAZ S.A., ANRE addopted Decision no. 2296/2015, under which **the interim measures on balancing the national transmission system** for the gas year 2015-2016 were approved;

- The launching of the approval process of **the second list of projects of common interest** and the approval of the cost's allocation methodology for these projects represented the main actions undertaken at European level under the provisions of Regulation (EU) no. 347/2013 on the guidelines for trans–European energy infrastructure. ANRE evaluated the proposed projects by the investments promoters for their inclusion on the second list of projects of European interest. In 2015, there were numerous meetings to identify the needs of the transmission infrastructure in the region Central-South-Eastern Europe. In this respect, some initiatives were launched such as CESEC and the gas pipeline that shall link Bulgaria and Austria via Romania and Hungary (interconnecting project Bulgaria - Romania - Hungary – Austria) abbreviated BRUA;

- The European Commission had endorsed on 19 January 2016 the financing amount of 179 million euros for the works to be carried by the transmission and system operator to develop BRUA – Phase 1. Thus, Transgaz will have some of the necessary financing to execute the works on the Romanian territory;

- After analysing **the request for cross-border costs allocation** of National Gas Transmission Company Transgaz S.A. from Romania and Földgázszállító Zártkörűen Működő Részvénytársaság (FGSZ) from Hungary, ANRE adopted by Decision no. 2080/07.10.2015 the method of cross-border costs allocation for the projects of common interest on the first list of European Union, numbers 6.13, 6.14 and 7.1.5, as follows:
  - National Gas Transmission Company Transgaz S.A carries the costs for achieving on the Romanian territory the project of common interest no. 7.1.5;

- Földgázszállító Zártkörűen Működő Részvénytársaság carries the costs for achieving, on the Hungarian territory, the projects of common interest no. 6.14 and 6.15.

- **The adjusted percentage of the final regulated prices** calculated as an average based on the market share of each licensed operator performing the natural gas supply on the regulated market were for April-May 2015 period about (-4%) and starting to July 1, 2015 about (11%). As a result, in 2015, **regulated prices for the natural gas supply** recorded an average growth of about 7% for the household's customers, mainly reflecting the amendment of the price for the internal gas production according to the timetable for phasing out regulated prices. Since 1 January 2015 there are no longer regulated prices for non-households customers;

- **On the regulated marke**t, in 2015, the regulated final customers were supplied by 39 suppliers; the total number of the regulated final customers was 3292505, representing only the regulated household customers (5891 household customers switching the suppliers), and the gas amount supplied to them was 30,026.953 GWh (31% less than in 2014);

- **On the competitive market**, **74** suppliers have activated. The total consumption was 81,217.261 GWh (up from 2014 by approx.11%);

- At the end of 2015, there were 188156 final customers who have switched the suppliers on the competitive market, compared to 10558 in 2014, representing an increase of approx. 10 percentage points to the real degree of gas market opening compared to 2014, which reached in 2015 about 66% of the total consumption;

- Starting with 1 October 2015, there were approved the regulated revenue, the total revenue and the transmission tariffs for the gas transmission through NTS, valid from 30 September 2016. The monopoly tax and the tax on special constructions represent a significant share in the structure of the transmission tariffs.

2.3. Consumer protection and dispute settlement in electricity and gas

Compared to the situation presented in 2014, in 2015 the review of the regulatory framework for the supply of the last resort in electricity was completed. Among others new models for bill and consumption convention were introduced.

In the same time, the *Framework - Procedure on the obligation of the suppliers to solve the electricity and natural gas consumer's complaints* (ANRE Order no. 16/2015) was approved, setting out the steps on recording, analysing, measures and handling the customer's complaints by electricity and natural gas suppliers. *The procedure* is applied for the following activities: contracting, billing the consumption of the energy, price and tariffs offers, continuity of supply, ensuring the quality of the supplied energy, operation of the metering unit, switching the supplier, end-customer information in accordance with the legislation requirements, handling the complaints against the supplier made by the customers regarding the non-compliance with the legislation, solving other complaints of the final customers.

ANRE amended the *Regulation on information for the electricity and natural gas final customers* (ANRE Order no. 96/2015) that aimed a greater accountability of suppliers to inform correctly, completely and specifically their final customers. It was also established a

unique system of electricity and gas suppliers reporting on the informing activity of the final customers, specifying the content of the report and the mode of sending the data and the documents to ANRE.

ANRE amended the *Performance Standard for electricity supply* (ANRE Order no. 118/2015). The main changes are related to:
a) monthly sending of the statistical indicators by the electricity suppliers, revision of the guaranteed levels of the performance indicators and increase the compensations for the final customers in case of non-compliance of these levels, thus discouraging the suppliers not to meet their obligations;
b) the compensations in case of non-guarantees levels is paid by the supplier of the last resort to the household customers and small non-household customers, on the supplier initiative. To the high non-household customers the compensation is paid at the written request to the supplier within 30 calendar days from the fulfilment of the conditions for granting the compensation. Compensations for failure of performance indicators shall be paid by suppliers of the last resort only in case of consumers supplied under universal service because it is a guaranteed supply service.

ANRE also amended the *Procedure on granting customers compensations for damaged receiver appliances due to an accidental over voltage on the network operator fault* (Order no. 177/16.12.2015).

Considering the phasing out process of the gas regulated prices (for the non-household customers starting with 1 January 2015, respectively 1 July 2021 for the household customers) and the competition development in the market, it was necessary a set of legislative measures to ensure the access of the final customers to the information regarding gas commercial supply conditions in the pre-contractual stage and in the contractual stage. Compared to 2014, the legislativ framework was completed with the amendments of the ANRE Order no. 107/2015 to facilitate the process of swiching the supplier for the non-househols customers.

As a result of the inspections, 828 official reports for finding and sanctioning were drawn, for 11 individuals and 817 companies with the fines amounting to 40.151 million RON. During 2015, a number of 3625 complaints were registered to ANRE and solved.

3. Electricity market

3.1. Network regulation

3.1.1. Unbundling

ANRE Decision no. 1788/12.08.2015 approved the preliminary certification of C.N. Transelectrica S.A. as national transmission and system operator according to the ownership unbundling model.

The certification decision and the documents issued for approval have been notified to the European Commission. According to the Article 3 paragraph (1) of Regulation (EC) No. 714/2009, the European Commission reviewed the notified decision and issued the final Opinion C (2015) 7053 of 10/12/2015.

Within two months from the receipt of the opinion of the European Commission, the term provided for under this regulation, ANRE has expanded the supervision on C.N. Transelectrica S.A. in order to take into account mainly the observations stated in the Opinion for taking the final decision regarding the certification of the transmission system operator according to the model of ownership unbundling. Following the findings of the analysis, ANRE approved the final certification of C.N. Transelectrica SA, according to the model of ownership unbundling, as national transmission and system operator, by issuing Order no. 164/2015. On 10/12/2015, ANRE notified the European Commission on the approval of C.N. Transelectrica S.A. as transmission and system operator in Romania in accordance with Article 10 of the Electricity Directive.

ANRE is monitoring, according to the law, the activity of distribution system operators, part of an economic operator vertically integrated, on the implementation of the measures to ensure excluding discriminatory practices and to establish specific obligations of the employees of such economic operators in order to achieve the independence objective. In this regard it was issued ANRE Order no. 5/2015 approving the *Regulation on monitoring by ANRE compliance programs established by the electricity distribution operators*. The Regulation contains a set of measures which the distribution system operator must establish, without limitation, on the compliance program. By law, the distribution operator shall appoint a person or a body called/designated as compliance officer to ensure proper monitoring of the compliance program. The Regulation contains the compliance duties and the minimum criteria on this nomination. The Regulation contains rules on the content and rules for format of the compliance program, respectively, of the compliance report, so as to facilitate to ANRE the monitoring process of the compliance programs. By applying the regulation, in 2015, ANRE managed the acceptance processes for the compliance officers appointed by the distribution operators.

At the end of 2015, ANRE received the reports of the compliance officers related to the year 2015 from the 8 distribution operators concessionaires.

CN Transelectrica SA administrates and operates the transmission power system and ensures electricity exchanges among the countries in the Central and Eastern Europe as ENTSO-E member (European Network of Transmission System Operators for Electricity). The length of overhead electricity networks operated by CN Transelectrica SA is of approx. 8775 km.

The ownership structure of CN Transelectrica SA in June 30, 2016 is as follows: 58.688 % – the Romanian state, 30.101% - other corporate shareholders, 6.75% - other shareholders, physical persons and 5.134% - S.I.F Oltenia. The company has been listed on the Bucharest Stock Exchange since August 2006.

In 2015, in the Romanian electricity market have operated a total of 49 electricity distribution operators, from which 8 are serving over 100,000 customers. All 8 companies have completed the legal separation of the distribution activities of electricity supply. Electricity distribution operators with less than 100,000 customers do not have the obligation to legally unbundle the distribution activity from other company activities in accordance with Directive 72/2009/EC on common rules for the internal electricity market.

The ownership structure of the 8 distribution operators with more than 100,000 consumers is as follows:

1. **SC CEZ Distribuţie SA**.: CEZ A.S. – holding 99.9999986019 % share capital, CEZ POLAND DISTRIBUTION B.V. - holding 0.0000013981 % share capital;
2. **SC Enel Distribuţie Banat SA**: Enel Investment Holding B.V. - holding 51.0036 % of shares, S.C. Electrica S.A. - holding 24.8683 % of shares, Fondul Proprietatea S.A. - holding 24.1281 % of shares;
3. **SC Enel Distribuţie Dobrogea SA**: Enel Investment Holding B.V.- holding 51.003 % of shares, Societatea de administrare a participaţiilor în energie (SAPE) S.A. - holding 24.903 % of shares, Fondul Proprietatea S.A. - holding 24.094 % of shares;
4. **SC Enel Distributie Muntenia SA**: Enel Investment Holding B.V – holding 64.4251 % of shares, Societatea de administrare a participaţiilor în energie (SAPE) S.A. - holding 23.5749 % of shares, S.C. Fondul Proprietatea S.A. – holding 12 % of shares;
5. **SC E.ON Moldova Distribuţie SA**: E.ON Romania S.R.L. – holding 61.7905% of shares; Energy Ministry – holding 13.5147% of shares, Fondul Proprietatea S.A. – holding 18.3474% of shares, Societatea de administrare a participaţiilor în energie (SAPE) S.A. - holding 6.3474% of shares;
6. **SC FDEE Electrica Distribuţie Transilvania Sud SA, SC FDEE Electrica Distribuţie Transilvania Nord SA** and **SC FDEE Electrica Distribuţie Muntenia Nord SA**, with the following ownership structure: S.C. Electrica S.A. – holding 78 % of shares and Fondul Proprietatea S.A. - holding 22 % of shares.

The transmission and distribution operators have their own offices, logos and webpages.

The general conditions associated with the distribution service licenses for electricity distribution operators granted by ANRE for the concessionaires were approved by Annex 1 to ANRE Order no. 73/2014, published in the Official Gazette of Romania, Part I, no. 599/08.12.2014, the 8 concessionaire obligations to respect them are required by individual administrative decisions issued by ANRE. Art. 49 ÷ 51 of Annex 1 sets the distribution operators duties on ensuring independence, in accordance with the legal requirements for unbundling of the distribution activity in relation to the supply of electricity, including obligations on keeping separate identity for the economic actors affiliates (art. 51: "in performing the service of electricity distribution, including communication and publicity, the licensee is bound not to create confusion about the different identity of the operators affiliated.").

Financial statements of the TSO and distribution operators are published separately.

The regulatory authority establishes detailed rules on costs separation. These rules are included in the conditions of the licenses granted for transmission and distribution activities and in the specific methodologies for calculating network tariffs. The normative acts in force provide for sanctions in case of breach of requirements on unbundling.

3.1.2. Technical functioning

Balancing Market

The balance between electricity demand and production is established on a commercial basis, in real time, on the **Balancing Market** (BM). Operating rules for the balancing market were established by **ANRE Order no. 25/2004** on the approval of the wholesale market Commercial Code, as amended and supplemented.

To ensure availability of enough electricity to balance the system, the TSO contracts reserves (ancillary services) for periods of one year maximum (regulated contracts or concluded on the ancillary services market). Each contract for reserves establishes the obligation of the seller to hourly provide the TSO a certain amount of reserves, of a particular type, the energy corresponding to the power reserved must be available on BM.

BM begins the day before, after physical notifications were accepted by TSO and ends on the end of the day of delivery. BM is a compulsory market, which means that participants who operate dispatchable units are obliged to offer all available electricity on this market. The balancing energy corresponding to secondary, fast tertiary and slow tertiary regulation is traded on BM.

The balancing energy is ensured by:

a) power increase, respectively by increasing production of a dispatchable unit or by reducing consumption of a dispatchable consumer or a pumped storage power plant that is registered as dispatchable consumption;
b) power decrease, respectively by reducing production of a dispatchable unit or by increasing consumption of a pumped storage power plant registered as dispatchable consumption.

BM participants must submit daily offers for the amount of balancing energy they can make available in each dispatching interval (60 minutes) to increase and reduce power.

All valid offers on the balancing market establish the obligation of a BM participant to deliver the amount tendered on BM when it receives order from the TSO.

Only actually delivered quantities of balancing energy are paid on the BM. Payment for balancing energy corresponding to secondary regulation is based on the marginal price of the selected offers, and for the tertiary regulation, payment is made at the price of the selected offer.

Each license holder must assume financial responsibilities towards the TSO for ensuring the physical balance between the measured production, the scheduled purchases and *imports* of electricity, on the one hand and measured consumption, scheduled sales and electricity *exports*, on the other hand, for one or more *points of connection* and/or one or more *transactions*. Balancing responsibility is assumed by the Balancing Responsible Party (BRP), established by the TSO at the license holders' requests. A license holder can register as a BRP or can transfer the balancing responsibility to an existing BRP.

If a BRP is in negative imbalance, it will pay the amount of electricity bought from the TSO for balancing, with the hourly price for energy deficit, and if a BRP is in positive imbalance, it will sell the excess energy to the TSO at the hourly price for power surplus.

Surplus energy price is determined for each dispatching interval as the ratio of incomes resulting from the balancing of the system and the amount of balancing energy supplied to provide reduction of power during the respectively dispatching period. Energy deficit price is determined for each dispatching interval as the ratio of payments to balance the system and the amount of balancing energy supplied to provide power increase in the respectively dispatching interval.

Imbalance settlement is made after determining the measured values for all measurement points of the participants, settling disputes/ approval by the participants of the values and their aggregation on BRPs, according to the aggregation formulas announced to the measurement operator; under these conditions, imbalance settlement is done within about 2 months after the end of the month of delivery. The market model leads to net incomes/costs for the TSO after the system balancing, and their calculation and redistribution to suppliers are made at the same time, proportionally to the consumption of the consumers supplied by each of them.

A single balancing area is defined in Romania, operated by a single licensed system operator/balancing market operator, CN Transelectrica SA. Interaction with other control areas is made through exchanges of mutual aid between TSOs, and not through the acceptance of offers that are to be integrated into a common merit order.

Performance standards and network connection issues

The performance standard for the transmission service was revised in 2007, being approved by ANRE Order no. 17/2007.

Starting 2016, the analysis of performance indicators regarding the quality of service will be made in accordance with the *Performance Standard for electricity transmission service and system service, approved by ANRE Order no. 12/2016.*

The main performance indicator concerning the continuity of electricity transmission service is the **average interruption time** - AIT, which represents the equivalent average period of time, expressed in minutes, in which the power supply was interrupted. This indicator's evolution is presented below:

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Average interruption time (AIT), min/year	4.43	1.19	0.86	1.79	0.82	3.10	1.06	1.53	0.35	0.82	0.36

From 1 January 2008 the **Performance standard for the electricity distribution service** is applied, approved by ANRE Order no. 28/2007. The standard requires distribution operators to monitor continuity of electricity supply, which requires registration of all long outages (any interruption lasting more than 3 minutes).

Starting 2016, the analysis of performance indicators regarding the quality of service will be made in accordance with the *Performance standard for the electricity distribution service, approved by ANRE Order no. 11/2016.*

Monitoring the continuity of electricity supply is realized by calculating the SAIFI and SAIDI indicators for each voltage level separately for urban and rural areas.

SAIFI – System Average Interruption Frequency Index is the average interruption number borne by consumers supplied by the DSO. It is calculated by dividing the total number of consumers interrupted for over 3 minutes, to the total number of consumers supplied.

SAIDI – System Average Interruption Duration Index is the average interruption time of consumers at DSO level (weighted average). The indicator is calculated by dividing the cumulative long interruptions to the total number of consumers supplied (served) by DSO.

Depending on the type of interruption, SAIFI and SAIDI indicators are classified as follows:
a) planned outages,
b) unplanned outages caused by force majeure,
c) unplanned outages caused by users,
d) unplanned outages, excluding those caused by force majeure and by users (due to DSO).

The most important are the values of the indicators for planned interruptions (a) and for unplanned interruptions (d), due to distribution operators. In fact, regularly, the values of the indicators for cases (b) and (c), which are not due to DSO, are very low.

The average values of SAIFI and SAIDI indicators in 2015 for Romania are shown below.

Activity area	SAIFI Planned outages [outages/year]	SAIFI Unplanned outages due to distribution operator [outages/year]	SAIFI Total outages [outages/year]
Urban	0.32	2.98	3.3
Rural	1.3	5.7	7
National Average	0.77	4.19	4.96

Activity area	SAIDI Planned outages [min/year]	SAIDI Unplanned outages due to distribution operator [min/year]	SAIDI Total outages [min/year]
Urban	70.5	165.7	236.2
Rural	388	485	873
National Average	211	308	519

It notes that the planned SAIFI decreased, as national average value, from 0.8 interruptions/year in 2014 to 0.77 interruptions/year in 2015. Also, unplanned SAIFI decreased, as national average value, from 4.35 interruptions/year in 2014 to 4.19 interruptions/year in 2015. The planned SAIDI fell as national average value, from 230 min/year in 2014 to 211 min/year in 2015. Planned interruptions, announced in advance, affects less users who can take appropriate measures. The national average for unplanned SAIDI decreased from 361 min/year (6 hours and 1 minute) in 2014 to 308 min/year (5 hours and 8 minutes) in 2015, a drop of 53 minutes/year.

Comparing the evolution of the main indicators of supply continuity in the period 2008 – 2015, a total progress is visible. Thus, planned SAIFI, as national average value, fell from 1.6

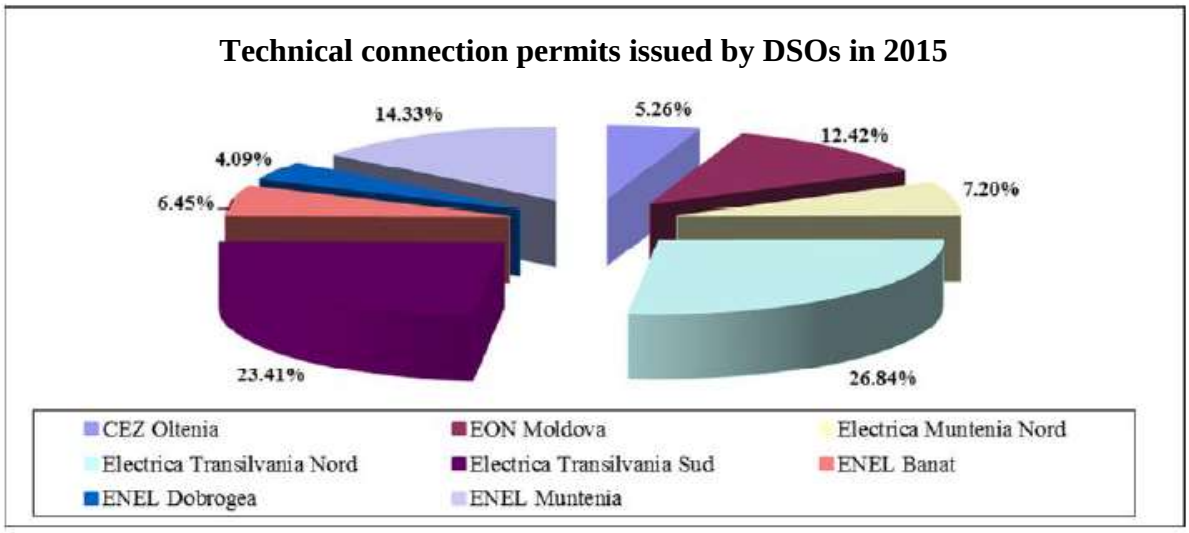
interruptions/year in 2008 to 0.77 interruptions/year in 2015 and unplanned SAIFI, as national average value, was reduced to 6.7 interruptions/year in 2008 to 4.19 interruptions/year in 2015. The planned SAIDI, as national average value, was reduced from 386 min/year in 2008 to 211 min/year in 2015 and unplanned SAIDI decreased of 639 min/year (10 hours and 39 minutes) in 2008 to 308 min/year (5 hours and 8 minutes) in 2015, recording a decrease of 331 min/year (5 hours and 31 minutes).

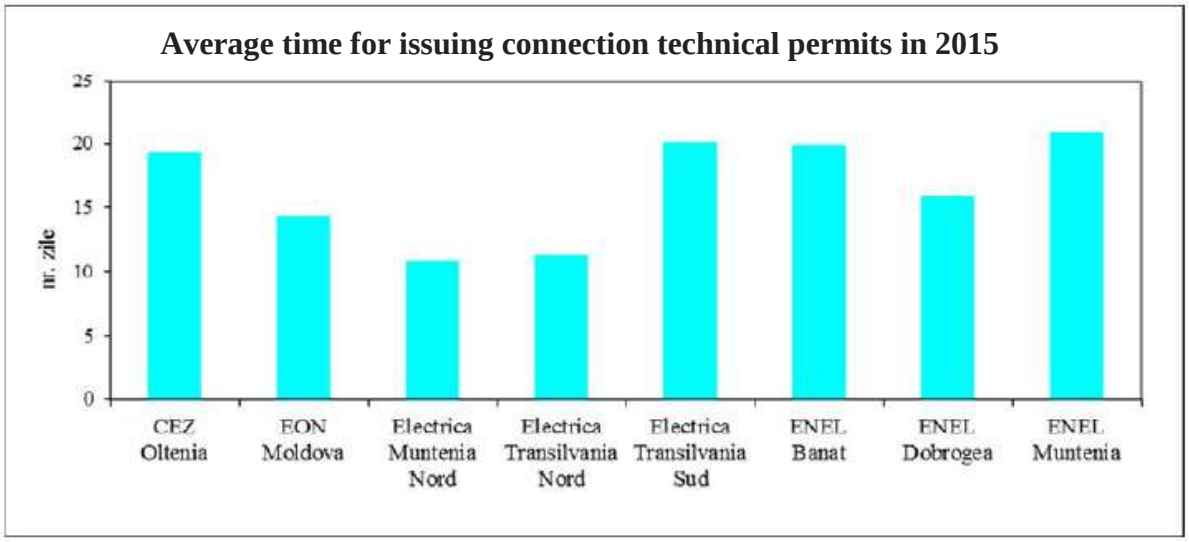
The procedures and steps for connection to the network and the way of establishing connection tariff are regulated by *Regulation on connecting users to public electricity networks, approved by ANRE Order no. 59/2013*, with subsequent amendments, by *Regulation on establishing the solutions for connecting users to public electricity networks*, approved by ANRE Order no. 102/01.07.2015, by *Framework contracts for users' connection to public electricity network*, approved by ANRE Order no. 9/2006 and amended by ANRE Order no. 11/2015 and by the *Methodology for setting tariffs for connecting users to public electricity network*, approved by ANRE Order no. 11/2014, as amended and supplemented.

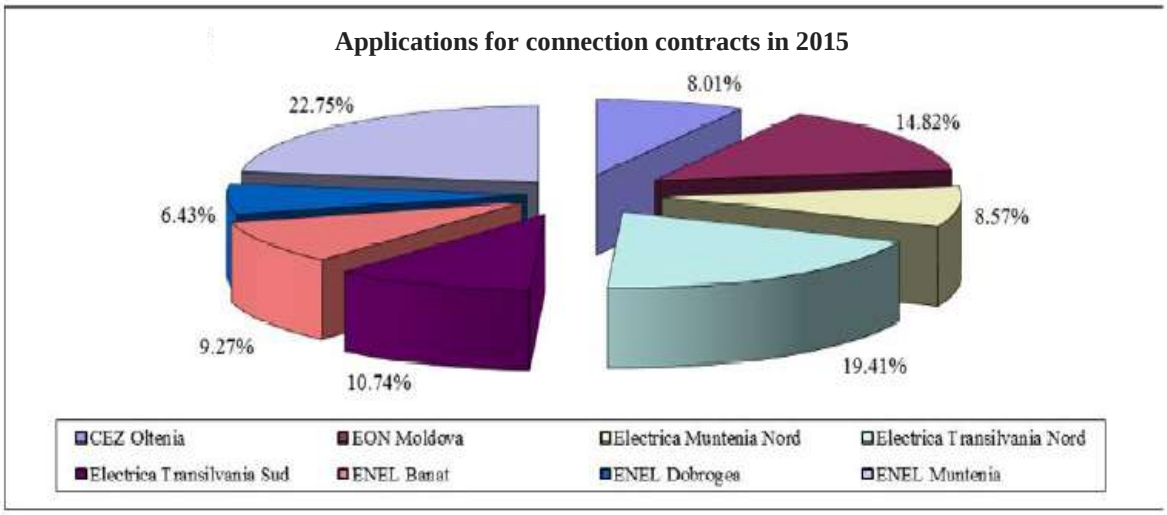
The distribution service indicators such as **average time of issuing connection technical permits or issuing connection contracts** are monitored based on the performance standard requirements.

The total number of requests for **technical connection permits** (ATR) to the public electricity network in 2015 was 208,670 (compared to 360,578 in 2014). **The** was 16.17 days. Mention should be made that all DSOs have complied with the maximum period of 30 days.

The total number of requests for **connection contracts** in 2015 was 112,789. Total connection contracts signed was 111,466 (from 112,789 , uncompleted applications representing approx. 1.18%). **The average time for issuing connection contracts** was 3.17 days. It is noted that the standard term for sending an offer for connection contract is 10 calendar days after filing and recording the application (and the complete documentation). All DSOs have complied with this request.







The average time for the connection process had a value of 109 days (from the submission of the complete documentation without the solution study up to powering the installation), the average cost for the connection being 3003 RON.

Monitoring safeguard measures

The provisions of Article 37(1) (t) of Directive 2009/72/EC have been transposed in national legislation by Article 9(4) (k) of Law no. 160/2012 on the organization and functioning of ANRE.

In 2015, ANRE issued the Opinion no. 32/16.09.2015 approving the *Operational Procedure on framing and applying the regulation on limiting the electricity consumption on installments in crisis operational situations arising in NPS.*

In 2015 there was no unexpected crisis in the electricity market that would threaten physical safety or security of people, appliances or installations or the integrity of the power system.

Report on connection, access and dispatching regimes for E-RES. Balancing responsibility for E-RES

During 2015, the gross installed capacity in the power plants recorded a minor growth of 0.2%, compared to 2014. The gross installed capacity in the renewable plants increased in January-December 2015 compared to the similar period of the last year by approx. 3% (145 MW).

The transmission system operator and/or distribution operators ensure the transmission, distribution, as well as priority dispatching of the electricity generated from renewable sources for all renewable energy sources generators, regardless of capacity, on the basis of transparent and non-discriminatory criteria, with the possibility of amending the notifications within the business day, according to the ANRE approved methodology so that the limitation or interruption of electricity production from renewable energy sources shall be applied only in exceptional cases where this is necessary for ensuring the stability and security of the National Power System.

Guaranteed access to the network is ensured for the electricity contracted and sold on the electricity market that is benefiting from the support system for renewable energy sources. **Priority access to the network** is ensured for electricity contracted and sold at regulated price (generated in power plants with an installed capacity of less or equal 1 MW per plant or in the case of high efficiency cogeneration from biomass, of 2 MW per plant).

Electricity produced from renewable sources is priority dispatched.

Production units using dispatchable renewable sources are responsible for payment of the induced imbalances.

3.1.3. Network and connection tariffs

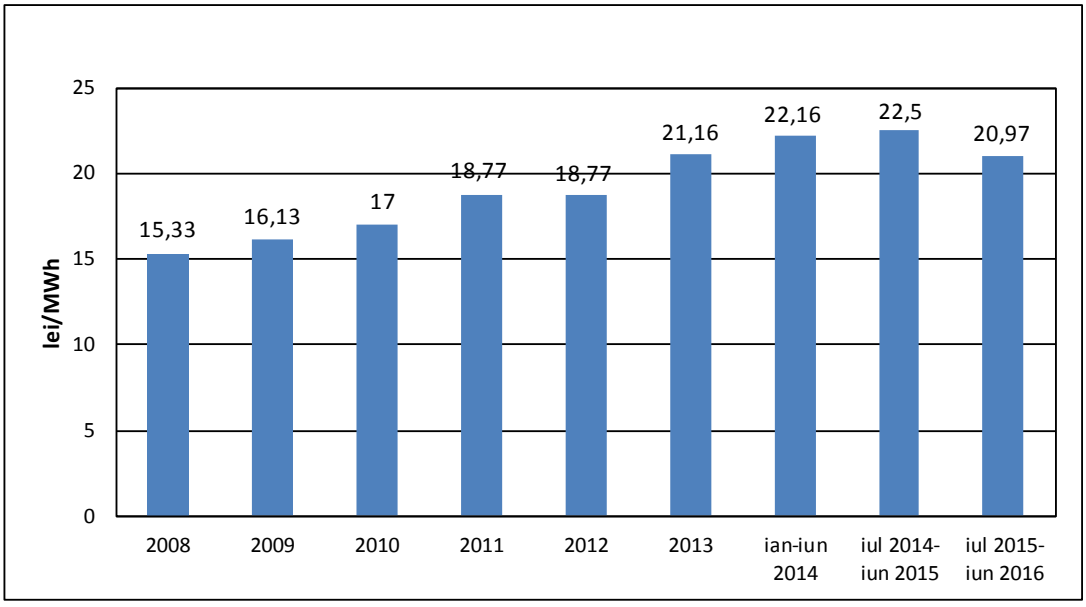
Tariffs for electricity transmission applied in 2015 by C.N. Transelectrica S.A., as transmission and system operator were approved by ANRE Order no. 51/2014 (for the period 1 July 2014-30 June 2015), ANRE Order no. 89/2015 and ANRE Order no. 93/2015 (for the period 1 July 2015-30 July 2016). These tariffs were determined based on the *Methodology for setting tariffs for electricity transmission service, approved by ANRE Order no. 53/2013*, as amended and supplemented.

For the period 1 July 2015-30 June 2016 the tariffs for the electricity transmission service are the followings:

- average transmission tariff – 20.97 RON/MWh, representing a decrease by 6.8 % compared to the previous tariff period, respectively 1 July 2014 – 30 June 2015,
- average tariff for the injection of electricity in the networks (T_G) - 2.57 RON/MWh, with a variation between 0 and 4.57 RON/MWh for the 7 injection zones; thus, transmission tariff - the component for the injection of electricity in the networks (T_G) decreased by a percentage between 58% for Dobrogea Renewables zone and 100% for the zones Transilvania Nord, Central Transilvania and Moldova; T_G tariffs maintained significant values in Dobrogea renewables, Dobrogea and Oltenia zones, surplus areas in terms of balance production/consumption;

- average tariff for the extraction of electricity from the networks (TL) – 18.14 RON/MWh, with a variation between 15.26 and 19.57 RON/MWh for the 8 extraction zones; thus, the component for the extraction of electricity from the networks (TL) increased up to 58 % for all extraction zones; the largest growth was recorded in Oltenia, but the tariff remained to the lowest value for this zone.

Evolution of the average transmission tariff in the period 2008-2016 is presented in the following figure:



The decrease by 6.8 % of the average transmission tariff starting with 1 July 2015 compared to tariff approved for the period 1 July 2014 – 30 June 2015 was caused by the increase of electricity consumption and export as well as ANRE's corrections related to the end of the 1st semester of 2014 and estimations of the achievements on the first year of the regulatory period.

Tariffs for ancillary services and regulated prices for producers supplying ancillary services

Ancillary services tariffs charged during 2015 by C.N. Transelectrica S.A. as system operator were determined based on the *Methodology for setting tariffs for ancillary system approved by ANRE Order no. 87/2013* and approved by *ANRE Order no. 51/2014* for the period 1 January – 30 June 2015 and by *ANRE Order no. 93/2015* for the period 1 July 2015-30 June 2016.

Starting with 1 July 2015, the following tariffs were approved:
- tariff for system service – 13.75 RON/MWh, with two components:
- ancillary service tariff – 12.58 RON/MWh and
- functional system services tariff - 1.17 RON/MWh.

During 2014-2016, the tariff for functional system services has had a downward trend mainly due to cost reduction depreciation and return on capital compared to the forecast made for the tariff in force in the previous period, due to the failure of the forecasted investments for system service.

Also, the tariff for ancillary services recorded a decrease of 0.74 RON/MWh for the period 1 July 2014 – 30 June 2015 compared to the tariff approved for the 1st semester of 2014. The

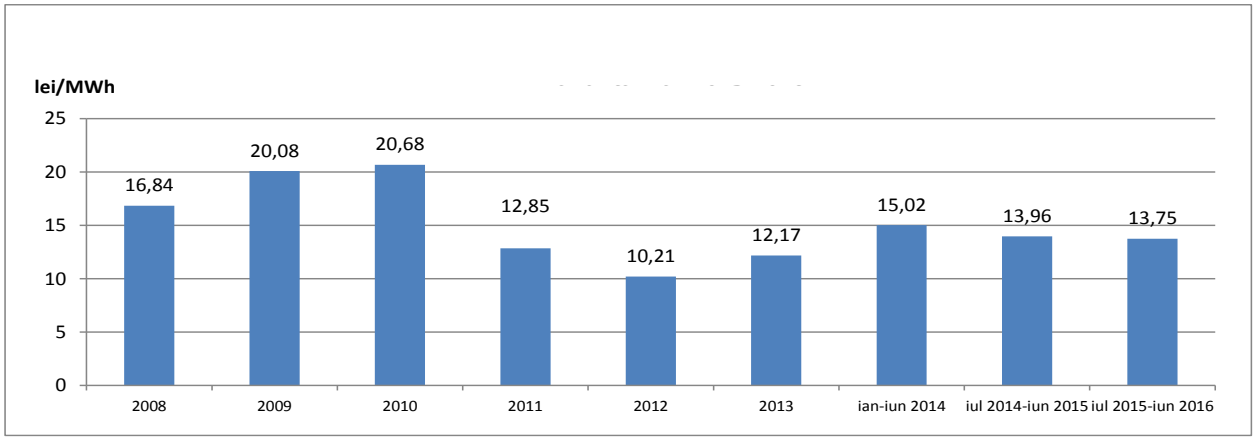
reduction of the tariff for ancillary services was due to the transfer, in circumstances mentioned by the *Methodology*, for efficiency gain estimated to be registered by C.N. Transelectrica S.A. through effective management for ancillary services in the period 1 January – 30 June 2014 for the system services customers.

For the period 1 July – 30 June 2016, the tariff for the ancillary services recorded a slight increase (0.04 RON/MWh) compared to the previous tariff period due to the ANRE approval of the transmission system operator's request to increase the system reserves to ensure the safe operation of the power system (higher by 4% for BRS, by 2% for RTR and lower for RTL by 7% compared to the previous period) and to the increase of consumption forecast.
According to the provision of the *Methodology for setting the tariff for the system services* approved by *ANRE Order no. 87/2013*, ancillary services are purchased on competitive basis, excepting those provided under the provisions set by specific legislation and by the producers selected by the TSO so as to avoid the dominant position on the electricity competitive market. Thus, to settle the tariff for the ancillary services there were implemented the provisions of *Government Decision no. 138/03.04.2013 on measures for security of electricity supply and Government Decision no. 941/2014* for the amendment of art. 4 of Government Decision no. *138/03.04.2013* regarding the obligation of supply ancillary service by S.C. Complexul Energetic Hunedoara S.A., at a power value of at least 400 MW (GD no. 138/2013), respectively 500 MW (GD no. 941/2014) and by S.C. Complexul Energetic Oltenia S.A. (GD no. 138/2013), at a power value of at least 600 MW (until 1 July 2015), under regulations issued by ANRE.

It should be noted that the *GD no. 1178/2014 regarding the measures of safety and security for the operation of the Power System during the period 1 January - 28 February 2015* and *GD no. 1019/2015 approving the measures for achieving the safety stocks of the NPS regarding the fuels for the cold season and the water volume in reservoirs, called Winter Energy Program to ensure the safe and secure functioning of the NPS during the period 1 January-31 March 2016 and other measures regarding the safe and secure functioning of the NPS* settle that the transmission system operator shall acquire additional power reserves amounts to the amounts determined in accordance with regulations.

By these GDs it was set that the additional reserves for the secondary and rapid tertiary reserve shall be acquired on the competitive market, and the slow tertiary reserve supplied by groups operating on alternative fuel - fuel oil shall be acquired under ANRE regulated prices in accordance with the provisions of the methodologies.

Given the specified modifications of the system service tariff's components, the following figure presents the evolution of the average annual tariff for the system services during 2008-2016:



Regulated transit tariff charged by the transmission system operator for the electricity transit service to/from the perimetrical countries through the national power system

The regulated transit tariff charged by the transmission system operator for the electricity transit service to/from the perimetrical countries through the national power system was approved by ANRE Order no. 83/02.06.2015 and its value was 0.6 EUR/MWh, VAT exclusive.

Transmission system operators charge the regulated transit tariff for the electricity transit service to/from the perimetrical countries through the national power system according to the compensation mechanism established in accordance with the provisions of art. 13 of *Regulation (EC) no.714/2009 of the European Parliament and of the Council of 13 July 2009 regarding the conditions for network access for electricity cross-border exchanges and repealing Regulation (EC) no. 1228/2003* and *Regulation (EC) no. 838/2010 of the Commission from 23 September 2010 on the establishment of the guidelines concerning the compensation mechanism among the transmission system operators and the common regulatory approach for the transmission charges*.

The transit tariff is calculated yearly and is approved by ENTSO-E according to the tasks set by *ITC multiannual Contract for settlement and clearing* signed on 3 March 2011 by transmission system operators part of the mechanism and by ENTSO-E.

The transit tariff is calculated ex-ante, based on a compensating fund for the electricity transits effects, respectively the infrastructure costs and costs of electricity losses due the transits.

Romania applies the transit tariff for the import/export energy from/to Ukraine and Moldova (only when operating in synchronism with NPS with a part of the Moldavian energy system). The transmission system operators charge the regulated transit tariff from the companies that conclude contracts for the electricity transit service to/from the perimetrical countries.

Tariffs for electricity distribution

Distribution tariffs are monomial (RON/MWh) and differentiated by three voltage levels: high voltage (110 kV), medium voltage, low voltage and by distribution operators. The regulator approves the distribution tariffs for each distribution operator. Distribution tariffs are calculated according to a "tariff cap basket" methodology. Based on this regulation method, the regulation periods are set for 5 years, except the first period which was of only 3 years (2005-2007).

Specific electricity distribution tariffs charged by the distribution operators concessionaires in 2015, representing the second year of the third regulatory period 2014-2018, were approved by **ANRE Orders no. 149 up to no. 156 in 2014**.

At the end of 2015, ANRE approved through **Orders no. 168 to 175/2015** the specific tariffs for **electricity distribution service which applies to the distribution operators concessionaires in 2016**. To determine these tariffs there were applied the provisions of the *Methodology for setting tariffs for electricity distribution service*, approved by ANRE Order no. 72/2013, as amended and supplemented. There were determined and applied closing corrections to the last four months of 2014 and those resulting from the estimated data expected to be completed in 2015.

The corrections applied to determine the regulated tariffs for the electricity distribution service approved at the end of 2015 are shown in the following table:

LEI - termeni nominali ai anului 2015

Operator	Corectie 2014	Corectie 2015	Corectie 2016*	Total corectii
Enel Distributie Muntenia	-26.640.806	-50.314.767	-17.026.260	**-93.981.834**
Enel Dobrogea Banat	-13.244.285	-31.577.478	-10.442.324	**-55.264.087**
Enel Distributie Dobrogea	-6.260.916	-24.851.592	-8.721.329	**-39.833.837**
CEZ Distributie	-7.412.872	-55.117.241	-19.639.168	**-82.169.281**
E.ON Distributie Romania	-7.637.785	-41.912.553	-13.045.992	**-62.596.329**
Electrica Distributie Muntenia Nord	-4.413.198	-63.262.758	-13.615.108	**-81.291.063**
Electrica Distributie Transilvania Nord	-571.239	-40.204.198	-12.322.818	**-53.098.255**
Electrica Distributie Transilvania Sud	-1.416.825	-58.458.420	-12.293.684	**-72.168.930**

*Corectie aferenta modificarii RRR pentru anul 2016, conform Ord.ANRE 146/2014

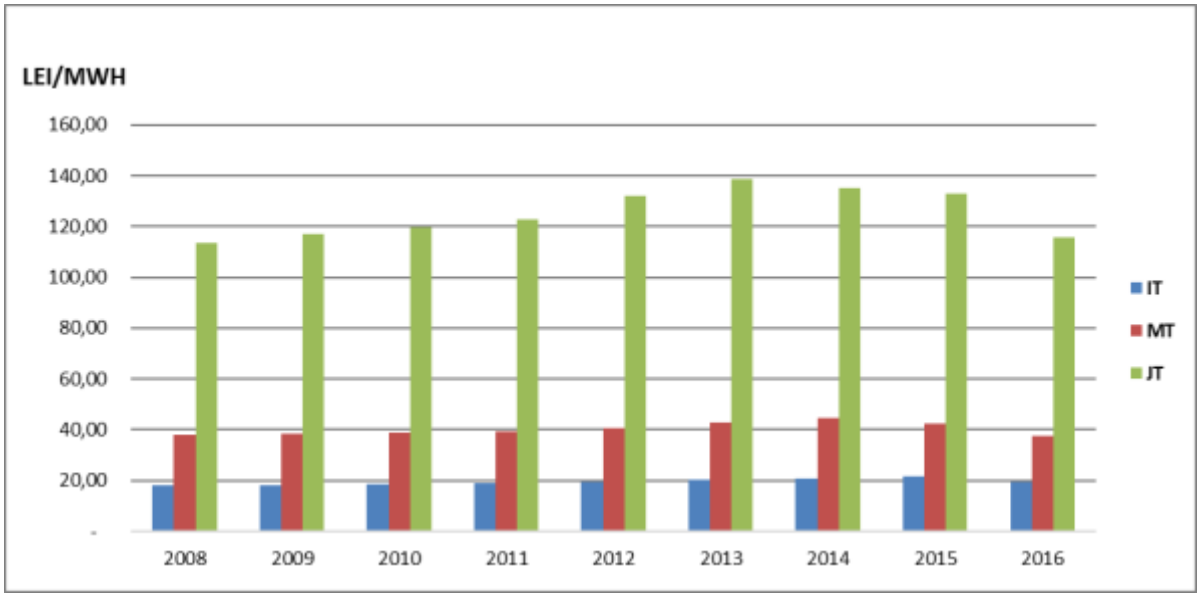
Thus, specific average national tariff, on the voltage levels, approved for the concessionaire electricity distribution operators, for 2016, are:

- specific average tariff for high voltage –19.24 RON/MWh,
- specific average tariff for medium voltage –37.53 RON/MWh,
- specific average tariff for low voltage –115.80 RON/MWh.

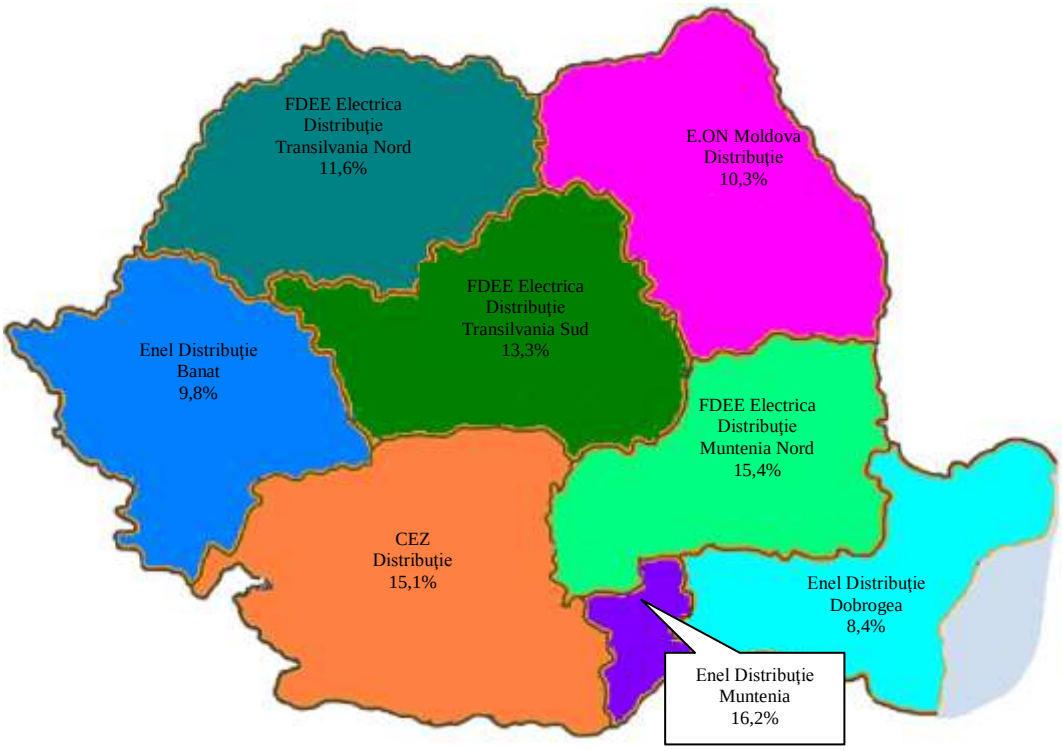
It is found that average tariffs decreased (-11.35 % variation of high voltage, - 11.90 % medium voltage, - 12.84 % low voltage, relevant to households).

The national average tariff for 2016 of 108.03 RON/MWh decreased by approx. 12.07% compared to the average national tariff in 2015 of 122.86 RON/MWh.

The following figure shows the evolution of the specific average tariffs for electricity distribution for the period 2008-2016:



Share of electricity distributed nationwide in 2015 (approx. 42.4 TWh) by the eight concessionaire distribution operators is shown in the following figure:



Tariffs for the distribution service provided by operators other than concessionaire distribution operators

Tariffs for the distribution service provided by operators other than concessionaire distribution operators are approved by ANRE at the request of distribution system operators that own, operate, maintain and develop distribution networks and platforms in industrial parks or designated heritage areas and have connected users - beneficiaries of the distribution service.

During 2015, the distribution tariffs were determined based on the *Methodology for determining the tariff for electricity distribution service done by operators other than concessionaire distribution operators, approved* by **ANRE Order no. 21/2013.**

The *Methodology* provides tariff setting by the "cost +" method, i.e. based on justified costs and a regulated rate of return of up to 5%.

During 2015, ANRE approved 3 decisions concerning the tariff for electricity distribution service provided by distribution operators, others than concessionaire distribution operators.

Tariffs for connection to the public networks

The tariffs payed by the consumers to the network operators for the connection to the electricity networks are set by the networks operators according to the provisions of the *Methodology for setting connection tariffs for the users of the electricity public networks*, approved by **ANRE Order no**. **11/2014**, amended and supplemented. The connection tariff includes the following components:

T_R - component for achieving adequate connection installation;

T_U - component for the verification of the installation file and commissioning the facility, for which they were set specific rates determined on the basis of general estimate for the average case, representative for the type of installation.

T_I – participation component to the finance of the works for strengthening the grid needed to evacuate the approved power (for connecting a generation place or consumption and generation place), for which were set specific tariffs „i", corresponding to the components of a public electricity network.

In case of the connection of a consumption place to the distribution network of low and medium voltage or connection of a place of production to the distribution network of low voltage, size component T_R of the connection tariff is determined based on the specific indexes for achieving energy capacities on types of network elements, possible components of an installation connection, according to scheme and standard conditions of achievement.

In case of connecting a consumer site to the distribution network of low and medium voltage, the component value T_U of the connection tariff is calculated based on specific rates.

Both specific tariffs and specific indices used to determine the tariffs for connecting users to public electricity networks remained unchanged in 2015, being those approved by ANRE **Order no. 141/2014.**

Tariffs of issuing/updating of the technical approvals for network connection, certificates for network connection and location permits

In order to avoid undue charging of fees for activities related to the process of connection to public electricity networks, ANRE approved by **ANRE Order no. 114/2014**, the regulated tariffs for issuing/updating technical approvals for network connection, connection certificates and location permits, which were determined according to the *Methodology* of calculating these rates, approved by **ANRE Order no. 61/2014**.

3.1.4. Cross-border issues

Allocation of the NPS interconnection capacities with neighbouring systems is performed for electricity import/export transactions and transit activities. On the borders with Hungary, Bulgaria and Serbia, the allocation of interconnection capacities is performed based on a market mechanism, bilaterally coordinated on both directions, for 100% of the allocation capacity, through explicit or implicit auctions on long term (annual and monthly) and short-term (daily and intra-day), depending on border and term.

On the Romania-Ukraine border, the allocation of interconnection capacity is organized through explicit auctions on long term, the use of capacity obtained through bids being subject to the written approval of Ukrenergo, the TSO in Ukraine. In the case of Romania-Moldova border, the use of the interconnection capacity depends on the agreement of the distribution operator on the area where the consumption island is located.

On the Romania-Hungary border, the auctions for long term allocation are explicit and are organized by MAVIR (Hungarian TSO). For intra-day auctions, the allocation is also explicit and is organized by CN Transelectrica SA, while in case of daily auctions the interconnection capacity allocation is achieved implicitly, through RO DAM market coupling with spot markets from Czech Republic, Slovakia and Hungary (4M Market Coupling Project); in the event of the 4 markets decoupling for the day ahead, the capacity allocation is achieved by explicit daily auctions organized by MAVIR (the so-called shadow auctions).

On the Romania-Bulgaria border, the capacity allocation is explicit for all the time horizons; the auction organizer for long term allocation is CN Transelectrica SA, and for the daily auctions is ESO-EAD (Bulgarian TSO). Starting with November 2014, as a result of the

amendment of the market rules in Bulgaria that do not allow intra-day cross-border exchanges, this kind of auctions was not held anymore.

On the Romania-Serbia border, the capacity allocation is explicit, the auctions for long term are organized by EMS (TSO in Serbia), and those for short term (daily and intra-day) are organized by CN Transelectrica SA.

Setting the ATC (available transmission capacity) for daily and intra-day auctions uses the principle of "netting" and participants are obliged to respect the principle of exclusive partnership (1:1). Currency trading is the EUR.

The data published on the website www.transelectrica.ro and communicated by C.N. Transelectrica S.A. in the monthly monitoring reports on the electricity markets show that at the auction organized for the **annual allocation of interconnection capacity**, the biggest prices registered were on export direction, on the borders with Hungary (4.66 EUR/h*MW), with Serbia (4.60 EUR/h*MW) and with Bulgaria (2.88 EUR/h*MW).

The prices set from organizing **monthly auctions** varied depending on the direction. Thus, if for import, the values were most of the time under 1 EUR/h*MW (on the border with Hungary were zero every month), it was not the case for the export. The monthly variation of the price on export direction was scored in the range 2.33-5.67 EUR/h*MW on the border with Hungary, in the range 1.87-5.51 EUR/h*MW on the border with Serbia, the largest range was registered on the border with Bulgaria, where the price for the monthly auctions varied between 0.57-6.66 EUR/h*MW.

The prices set on **daily explicit auctions** on the borders with Bulgaria and Serbia varied depending on the border, direction and auctioned time slot. The hourly prices registered on import were, in general, lower than those for export, however, for 3 months in 2015, the maximum hourly price on import direction from Bulgaria overcame 15 EUR/h*MW, while on import from Serbia, the maximum monthly values were close to zero.

Instead, participants preference for exports to Bulgaria materialized in hourly prices of high values obtained every month from organizing daily auctions. Maximum hourly prices varied between 15-35 EUR/h*MW on the border with Bulgaria, the frequency of price above 20 EUR/h*MW being high (9 of 12 months). On the border with Serbia, although the prices were generally lower, monthly maximum values were recorded at 15 month EUR/h*MW.

In 2015, the highest annual average values of the use of the total capacity allocated in the auctions (calculated as the ratio of energy related to notified exchanges and corresponding energy of the total capacity allocated to all participants) were registered for export on borders with Hungary (98.12%), Serbia (96.05%) and Bulgaria (72.40%). In the case of import, the use was reduced regardless of the border; the highest average value was recorded on the border with Hungary (38.53%).

As a result of the allocation of interconnection capacity, over 95% of revenues from CN Transelectrica SA came from long-term auctions (annual and monthly), the highest values being recorded in particular in the auctions for capacity allocation on export direction on the borders with Hungary, Serbia and Bulgaria. The value of the revenues from daily auctions was reduced, most of them being made of income caused by congestion on Romania-Hungary border, after the implicit daily allocations; it worth mentioning that the income from intra-day auctions are close to zero.

The frequency of congestions

Annual allocation of ATC

The frequency of congestions on annual allocation in 2015 on each border and exchange direction was 100 % except the border with Ukraine on export direction, where the frequency of congestions on annual NTC allocation was 0 %.

Licitațiile anuale 2015	Ungaria		Bulgaria		Serbia		Ucraina	
	export RO	import RO	export RO	import RO	export RO	import RO	export RO	import RO
Număr zile congestie	365	365	365	365	348	348	347	347
Număr zile retrageri linii de interconexiune (pe granițele cu o singură linie de interconexiune)	-	-	-	-	17	17	18	18
Frecvența de apariție a congestiei la alocarea anuală (%)	100	100	100	100	100	100	0	100
Indice de severitate	5	5	5	5	5	5	0	5

ATC monthly allocation

Licitațiile lunare 2015	Ungaria		Bulgaria		Serbia		Ucraina	
	export RO	import RO	export RO	import RO	export RO	import RO	export RO	import RO
Număr zile congestie	365	0	365	365	346	29	206	267
Număr zile retrageri linii de interconexiune (pe granițele cu o singură linie de interconexiune)	-	-	-	-	17	17	18	18
Frecvența de apariție a congestiei la alocarea lunară (%)	100	0.0	100.0	100.0	99.4	8.3	59.3	76.9
Indice de severitate	5	0	5	5	5	1	3	4

ATC daily allocation

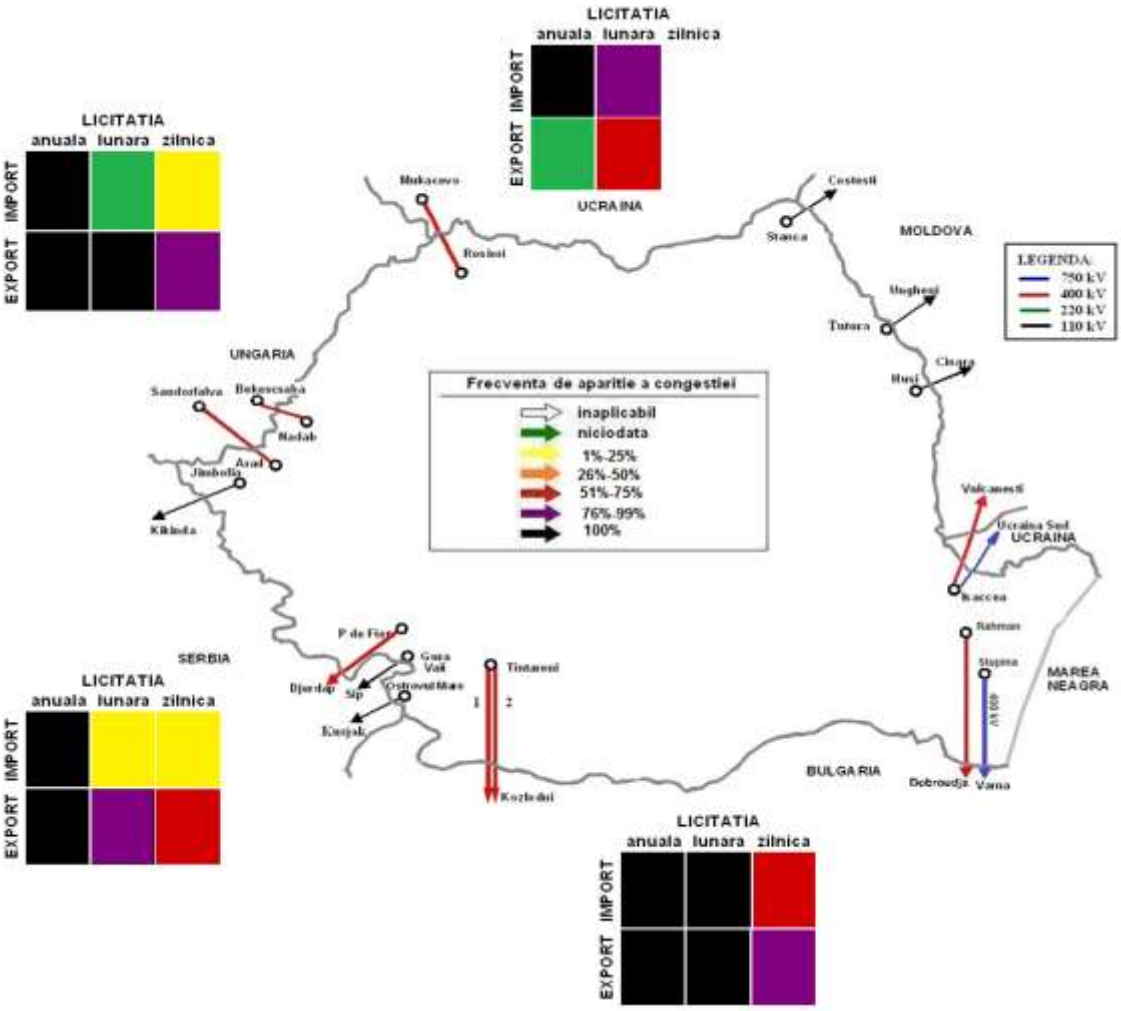
On the border with Ukraine, there is no common daily allocations.

Licitațiile zilnice 2015	Ungaria		Bulgaria		Serbia		Ucraina	
	export RO	import RO	export RO	import RO	export RO	import RO	export RO	import RO
Număr ore congestie	2011	166	6416	5081	3872	1087	-	-
Număr ore licitație	2111	6105	7591	8760	5162	8329	-	-
Număr ore retrageri linii de interconexiune (pe granițele cu o singură linie de interconexiune)	-	-	-	-	408	408	432	432
Frecvența de apariție a congestiei la alocarea zilnică (%)	95.3	2.7	84.5	58.0	75.0	13.1	-	-
Indice de severitate	4	1	4	3	3	1	-	-

ATC intra-day allocation

In 2015, on the borders with Hungary and Serbia, there were no congestions on the bilateral coordinated intra-day allocations, except for four time slots on the border with Hungary, on direction export and a single time slot on the border with Serbia, on export direction.

The **congestion severity index** of the annual, monthly and daily allocation on each border and exchange direction for 2015 is presented below:



Remarks regarding export:
- the most congested borders were the borders with Bulgaria, Serbia and Hungary;
- the less congested border was the border with Ukraine.

Remarks regarding import:
- the most congested border was the border with Bulgaria;
- the less congested border was the border with Ukraine.

The highest values of congestion frequency on NTC monthly allocation in 2015 were reached on export direction to Hungary (100%, similar to 2014) and Bulgaria (100% compared to 97.5% in 2014).

Reporting revenues from congestions in the period 1 July 2015-30 June 2016 of the TSO is done in accordance with paragraph 6.5 of *Appendix 1 - Guidelines on the management and allocation of available transfer capacity of interconnections between national systems,* from the *Regulation (EC) no. 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border electricity exchanges and repealing Regulation (EC) No. 1228/2003*.

In accordance to Article 16(6) of Regulation, the incomes arising from the allocation of interconnection capacities are used by the TSO for the following purposes:
a) to guarantee the actual availability of the allocated capacity; and/or

b) to maintain or increase interconnection capacities through network investments, especially investments in new interconnections; or
c) as income to be taken into account in calculating the transmission tariff, up to a maximum amount determined by ANRE, where it cannot be used effectively for the purposes mentioned above.

Every year, C.N. Transelectrica S.A. submits to ANRE the monitoring results for the value of revenues from auctioning for allocation interconnection capacities on the borders. The revenues referred to, made between July 1, 2015 - 30th of June 2016 are presented in the following table.

Interconexiunea	iul.15	aug.15	sep.15	oct.15	nov.15	dec.15	ian.16	feb.16	mar.16	apr.16	mai.16	iun.16	Total
Romania - Serbia*	2.063.244	3.272.026	2.772.816	3.024.860	3.240.737	3.119.988	2.404.493	2.431.200	1.539.855	1.365.427	1.363.077,14	1.402.764,70	28.000.488
Serbia - Romania*	7.201	4.267	2.133	3.043	2.330	2.422	8.439	140.255	204.140	188.982	400.097,22	75.665,79	1.038.975
Romania - Bulgaria*	821.936	706.296	942.243	747.952	1.249.613	756.909	1.310.668	1.399.252	1.936.601	1.257.053	1.765.611,69	1.133.755,16	14.027.890
Bulgaria - Romania*	641.813	403.621	225.559	410.165	244.672	246.699	131.252	124.372	143.757	144.537	138.470,99	183.191,58	3.038.108
Romania - Ungaria*	3.786.988	4.761.993	4.560.220	4.096.976	4.541.898	4.042.362	3.385.513	2.571.480	2.354.177	2.193.437	2.310.873,76	2.849.613,32	41.455.533
Ungaria - Romania*	132.582	34.052	371.599	108.654	39.634	192.086	182.329	397.698	583.953	173.664	506.633,56	97.843,59	2.820.726
Romania - Ucraina	7.982	1.916	0	3.620	5.405	6.942	58.073	55.102	51.065	50.476	58.158,48	56.599,20	355.339
Ucraina - Romania	81.541	94.293	51.859	104.030	76.018	64.473	74.813	56.885	61.990	38.974	144.889,20	91.032,84	940.798
Romania - Moldova	0	0	0	0	0	0	0	0	0	0	0	0	0
Moldova - Romania	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	**7.543.287**	**9.278.463**	**8.926.429**	**8.499.300**	**9.400.306**	**8.431.882**	**7.555.579**	**7.176.244**	**6.875.538**	**5.412.550**	**6.687.812**	**5.890.466**	**91.677.857**

* Income derived from NPS interconnection capacitie's allocation with neighbouring power systems includes the income from daily and intra-daily auctions on the border with Hungary, Bulgaria and Serbia, as well as revenues from congestions resulting from price coupling of DAM in Romania, Czech Republic, Slovakia and Hungary (project 4M MC)

Analysis of the collected amounts indicates that 91% of revenues come from auctions for export capacity and only 9% for import. Analysis on border indicates that 48% of revenues come from allocated capacity between Romania and Hungary, 32% from auctions for capacity allocation between Romania and Serbia and 19% from auctions for capacity allocation between Romania and Bulgaria. Only 1% of revenues come from auctions for the allocation of capacity between Romania and Ukraine.

In the period between 1 July 2015 and 30 June 2016, C.N. Transelectrica S.A. recorded revenues from congestions in a total amount of 91.68 million RON, which represents, on an average exchange rate RON/EUR of 4.5148 RON/EUR, (1 July 2016), the amount of 20.31 million EUR.

Considering the provisions of national legislation, such amounts are included in the annual gross profit achieved by the company and were reduced by allocating profits on destinations, according to *Government Ordinance no. 64/2001 regarding profit distribution to national societies, national companies and state companies or companies with majority state ownership, and Autonomous Regies*, as amended and supplemented. Thus, after application of a profit tax of 16% and legal reserve of 5%, the remaining amount deposited between 1 July 2015 - 30 June 2016 in the special account was 72,425,507 RON. The total amount deposited in the account between 2013-2016 June 30, was of 180,116,615 RON (after applying the income tax and the legal reserve).

These revenues were used mainly to maintain or increase the availability of the interconnection capacities by investments in networks, the total amount used being of 91,254,579 RON (value available on 31.03.2016). The investments done in this period could be found in the RO version of this report.

In accordance with Article 16 (6), the second paragraph of *Regulation (EC) no. 714/2009*, in setting out the transmission tariff from 1 July 2015, ANRE established that the costs associated with cross-border trade of electricity export during the period 1 July 2015 – 30 June 2016, amounting to 18.6 million RON, be covered by the TSO's incomes obtained in the same period from the management of congestions. The difference remained available to C.N. Transelectrica S.A in the dedicated account and shall be used in accordance with the provisions of Article 16(6) of the *Regulation*.

Monitoring technical co-operation between TSO and third-country operators

Regional cooperation on infrastructure projects represents a significant dimension of the CN Transelectrica SA activity in terms of the collaboration with power systems of neighbouring countries. In this regard, the TSO's attention has been focused on continuing infrastructure projects meant to increase interconnection capacity in order to improve mutual exchanges of energy between neighbouring systems and eliminate potential congestions. Thus, the projects with Serbia, Republic of Moldova and Turkey were continued.

Interconnection between Romania and Moldova

*Feasibility study for the **synchronous interconnection** of power systems of Ukraine and Moldova to ENTSO-E*

The request regarding the synchronous interconnection of the power systems of Moldova and Ukraine with European system was approved by UCTE in November 2006. The interconnection request was done considering that the power systems of Ukraine and Moldova shall form a „control bloc". CN Transelectrica S.A. was the supporting party of the synchronous interconnection process. The feasibility study started in November 2014 and the closing time is March 2016.

***Asynchronous Interconnection** of Romania with Moldova*

The study on the analysis of the operating modes in asynchronous interconnection scheme with Moldova aims to analyse the operating modes through stations "back to back" in Moldova which insures the interconnections in the situation when Moldova and Ukraine remain interconnected using IPS/UPS system.

Until the conditions for contracting a joint study to analyse the operating modes on power systems of Romania and Moldova are met, based on assumptions agreed by the parties concerning the level of export and the way of reservation in case of unavailability of the network, Transelectrica had initiated a preliminary study, which was developed by Tractebel Engineering SA in 2014.

The following interconnection projects through back-to-back substations on the territory of the Republic of Moldova were analysed: overhead line of 400 kV Isaccea (RO) - Vulcăneşti (RM); overhead line of 400 kV Suceava (RO) -Bălţi (RM) - for which a Memorandum of Understanding is signed and preliminary analysis are completed - and overhead line of 400 kV Iaşi (RO) - Ungheni (RM).

We present below the significant aspects required on projects in Romania:

- The interconnection by back-to-back substation Vulcăneşti does not require investment costs

in Romania to ensure the export of 600 (500) MW to Moldova and from this point of view, may be implemented in the fastest way;

- The interconnection project by overhead line of 400 kV Suceava-Balti is relatively advanced in Romania, with the feasibility study completed, being at the second stage of the design. The estimated value of the investment is about 54 million EUR, of which 24 million EUR in Romania and 30 million EUR for investment in Moldova (an overhead line of 400 kV and substation 400/330 kV Balti, plus the costs for back-to-back substation Balti). Until now, due to lack of funding, Moldelectrica did not enter in the second stage of design for overhead line Suceava - Balti, the part on the territory of Moldova, similar to Transelectrica; on these conditions, Transelectrica, even if shall complete the second stage of design, will not initiate the procurement procedure for the execution of overhead line 400kV Suceava – Balti;

- For overhead line of 400 kV Iasi - Ungheni - Straseni, it is necessary to build an additional substation of 400 kV to Iasi and an overhead line of 400 kV up to it, since in the region there is only a network of 220 kV, whose capacity is occupied by the electricity consumption in the area. The estimated value of the investment is approximately 200 million EUR in Romania.

In 2015, the Ministry of Economy in Moldova benefited from a study funded by the World Bank that refers to interconnections with Romania. The study analysed the energy market and the technologies used to build back-to-back substations. The study recommended asynchronous interconnection with Romania and a market structure to facilitate the import of energy in competitive conditions (both from West and from East).

It is estimated that synchronous interconnection solution may not be feasible until 2030, while the version proposed; asynchronous interconnection is achievable by 2020. The recommended scheme was the scheme of interconnection on the overhead lines of 400 kV Suceava - Balti and Iasi-Straseni, with back to back substations in Balti and Straseni. The cost was estimated at 450 million USD (a linearized price of 15.5 cents / kWh for 20 years).

The study did not consider the necessary costs and time periods to achieve the required reinforcements of networks in Romania.

Interconnection Romania - Serbia

The project of the overhead line of 400 kV double circuits Resita (Romania) - Pancevo (Serbia)

The project is considered a project of regional relevance and targets the increase of electricity exchanges between Romania and Serbia by increasing the interconnection capacity between the two countries. The total length of the line is 171 km, of which 63 km in Romania and 68 km in Serbia. In March 2013, the Joint Position Paper 4 was signed on which the parties settled the technical conditions and the steps to be done for continuing the works to the overhead line of 400 kV double circuits Resita - Pancevo. On 04.06.2014, CN „Transelectrica" SA has signed with S.C. Electromontaj S.A. the working contract no. C212 for the investments on the Romanian territory, with the deadline on 29.12.2015. Due to the fact that *GD for definitive removal from the forestry surface of 0.2873 ha and temporary occupation of the land area of 51.6499 hectares necessary to achieve the investment* entered into force in October 2015, the implementation period of the project was postponed, the new term being estimated to the first quarter of 2017. In June 2015, the Joint Position Paper 6 was signed based on which the parties settled the technical conditions and the further steps to be done for continuing the works to the overhead line Reşita-Pancevo.

Interconnection Romania-Turkey

The project was proposed as an alternative in connecting the two electricity markets, considering that the synchronous interconnection between Turkey and ENTSO-E presents technical problems that lead to limitation of cross-border electricity capacity.

The main benefits of the project are:
- creating additional opportunities to evacuate the electricity generated in Dobrogea area (due to increase of installed power in renewables);
- increasing the potential of trading electricity on the Turkish market and on the adjacent markets, by coupling the markets from Romania and Turkey.

In this context, CN "Transelectrica" SA have done a feasibility study on asynchronous interconnection of both NPSs by building an undersea DC cable between Romania and Turkey. The technical and economical feasible solution proposed by the study was construction of a cable with a capacity of 800 MW. The Romanian TSO reaffirms its willingness to make every effort to encourage the development of this project, analysing the alternatives that can ensure an increased flow of electricity between the two countries.

Monitoring the investment plans of TSO and DSOs

In accordance to the provisions of Article 9(4) (c) and (5) (d) of the *Government Emergency Ordinance no. 33/2007 on the organization and functioning of ANRE, approved with subsequent amendments and complements by Law no. 160/2012*, regulatory authority monitors the development plan of the grid and investment plans of TSO, the technical condition and maintenance of electricity networks. In this respect, development and investment plans of TSO and DSOs are assessed.

For the TSO, the settlement of the investments and their values, accepted by ANRE and introduced in RAB (Regulatory Asset Base) for the electricity transmission service, is achieved at the end of the regulatory period in order to determine the corrections of the capital costs, according to the provisions of the *Methodology to setting up tariffs for electricity transmission service* approved by *ANRE Order no. 53/2014, amended and supplemented.*

Considering that the third regulatory period began on 1 July 2014, ANRE monitors achievements the commissioning of the investment objectives of the TSO for each tariff period.

The forecasted and achieved values of investments, in the tariff period 2014 – 2015, in the transmission service and the system service are presented in following table:

Transmission service	**Value (RON)**
Forecasted investments	137,556,188
Achieved investments (fixed assets established without contributions)	107,885,407
System service	**Value (RON)**
Forecasted investments	6997
Achieved investments	6997

The planning of the development of the transmission network are based on the provisions of the *Technical Code of Transmission Network*, which in addition to detailing the tasks, competences and responsibilities of the TSO, establishes the principles, criteria and obligations relating to the planning activity.

Transmission network development planning seeks to achieve the following objectives:

- the safe operation of the NPS and the transmission of electricity at quality levels compliant with the requirements of the *Technical Code of Transmission Network* and of the *Performance Standard for electricity transmission and ancillary services*;
- the appropriate sizing of the transmission network for the transmission of the electricity expected to be generated, consumed, imported, exported and transited;
- providing transmission infrastructure necessary for the proper functioning of the electricity market;
- providing applicants access to the public network, as provided by the rules in force;
- minimizing investment costs in choosing solutions to transmission network development.

In accordance to Article 35 of *Law no. 123/2012 on electricity and natural gas*, the TSO is required to develop **10 year investment and development plans for the transmission network**, consistent with the current state and future evolution of energy consumption and sources, including energy imports and exports.

Development plans include the financing and realization of investments on transmission networks, taking into account the development and systematization plans for the territory crossed by them, in compliance with environmental regulations.

Unlike the previous legislative framework when these plans were endorsed by the regulatory authority and approved by the line Ministry, currently development plans shall only be approved by the regulatory authority.

The electricity grid is sized in compliance with the requirements of the N-1 criterion. Inspection of the N-1 criterion is performed for the maximum forecasted power transfer through the network. For the transmission network (400, 220 kV), the N-1 criterion is applied to the sizing of specific sections of the system in terms of its stability, for certain levels of the load curve, corresponding to the most difficult operating situations based on: the unplanned outage of the largest generator in an area with power deficit and the maximum power generated in an excess area. The N-2 criterion is used in sizing of the evacuation from the system of the nuclear power plants energy.

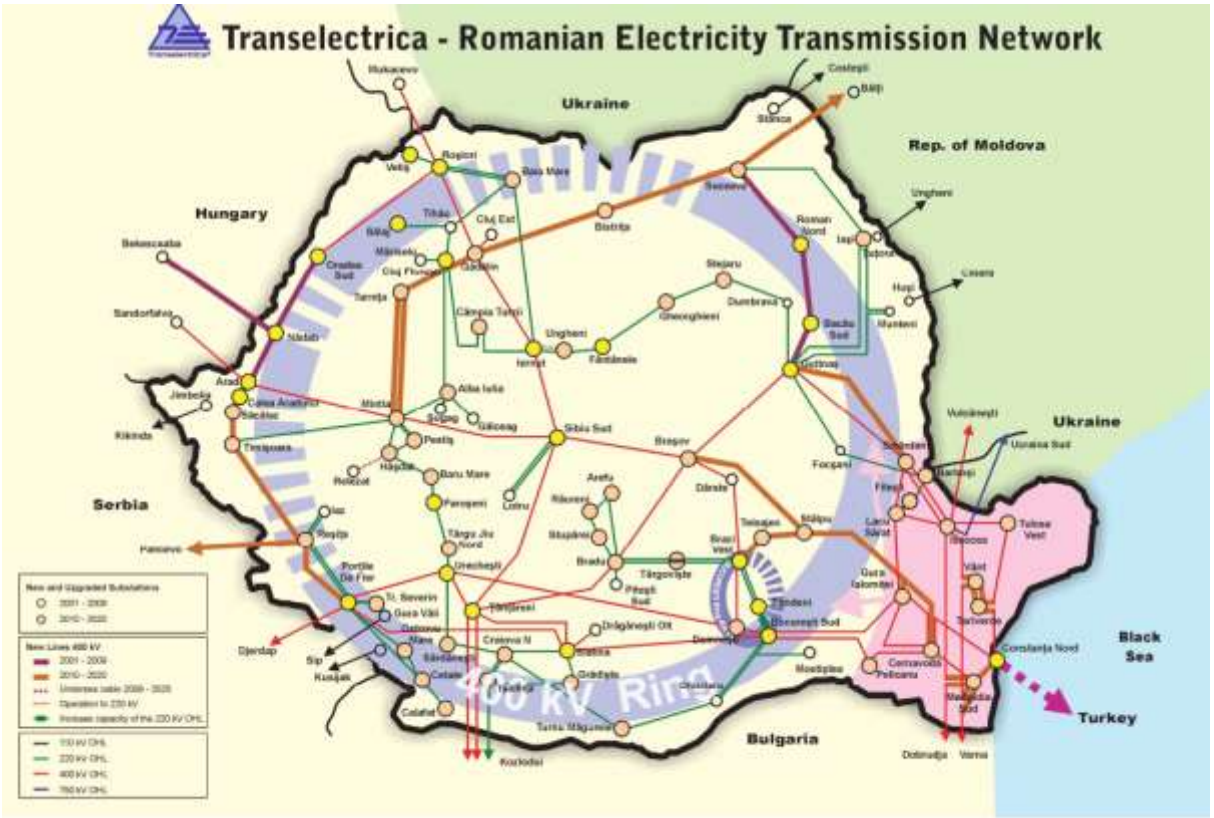
Other sizing criteria are the technical criterion for the verification of the size of the network in terms of NPS stability and the verification and determination of the short-circuit limit and nominal current of equipment.

The *Ten Years Network Development Plan for the transmission network* for the period 2014-2023 was issued by C.N. Transelectrica S.A. and approved by ANRE in the first quarter of 2014.

The plan includes projects necessary to maintain network adequacy, so that it is properly sized for the transmission of electricity expected to be produced, imported, exported and transited, in compliance with technical regulations. Proposed investments seek to:

- increase interconnection capacity by continuing interconnection projects with neighbouring systems already in various stages of implementation (with Hungary, Serbia and Bulgaria) and accelerating / introducing new projects (Moldova);
- strengthen and develop the transmission network (new lines/ substations) to increase the discharge capacities for the electricity produced in new facilities developed in recent years in certain geographical areas (for example nuclear energy and that electricity produced from renewable energy sources in the Dobrogea region) to consumption areas in the North and West of the country, and completion of the 400 kV ring around the country to increase security of supply in all the country's regions and increase the transit capacity of the transmission network;
- upgrade equipment in order for a complete replacement of the 60s - 70s installations to increase network reliability, reduce operating costs and ensure an appropriate degree of operational safety.

The following map shows the main projects included in the transmission network development plan for 2014 - 2023.



Source: CN Transelectrica SA

Applying the provisions of methodologies for establishing tariffs for electricity distribution, ANRE has approved the yearly investment plans of the concessionaires distribution operators for the regulatory period 2014 – 2018, supporting the inclusion in RAB of the fixed assets resulting from prudent investments, respectively those investment proving to be necessary, appropriate and effective.

The investments of the electricity distribution operators, according to investment programs 2014 - 2015, presented in RON and in nominal terms of each year are as follows:

	2014		2015	
	Forecasted investments	Total achieved investments*	Forecasted investments	Achieved investments*
ENEL Distributie Muntenia	180,184,461	166,995,964	161,596,866	137,996,397
ENEL Distributie Banat	72,313,365	66,793,275	92,984,767	77,794,436
ENEL Distributie Dobrogea	65,539,109	61,816,565	76,609,455	64,489,997
CEZ Distributie	155,055,396	155,055,639	161,843,711	161,853,684
E.ON Distributie Romania	173,382,141	155,691,001	183,513,064	169,632,197
FDEE Electrica Muntenia Nord	117,221,622	120,511,911	180,350,659	144,903,430
FDEE Electrica Transilvania Nord	129,780,000	120,387,761	193,689,440	194,431,718
FDEE Electrica Transilvania Sud	120,510,000	122,216,042	189,478,800	183,915,779

* The value includes: the forecasted and achieved investments for the current year, additional achieved investments over the forecasted investment in the previous year and due to the force majeure, and also additional achieved investments: maintenance upgrades and due to exceptional circumstances

Detailed information on the technical condition and the maintenance of electricity networks are presented in the *Report on the achievement of performance indicators for transmission services, system services and electricity distribution services and technical situations of the electricity transmission and distribution networks - 2015* published on ANRE's website at http://www.anre.ro/ro/energie-electrica/rapoarte/rapoarte-indicatori-performanta.

Other relevant aspects regarding cross-border cooperation

At the beginning of 2014, a *Memorandum on the implementation of a congestion management* was signed in the CEE region and CEE market coupling project by allocating flow-based capacity (CEE FB MC) has started. Given these developments, the 4M MC Project Board of Directors recommended Romanian party requesting access in the CEE FB MC project. At the end of 2014, Romania received an observer status in this project, meaning that Romanian parties (TSO, PX and NRA) will have the right to participate to the meetings and to access the project information. At the end of 2015, the Framework Project Agreement was signed by all parties, excepting EPEX Spot. Completing the signing of this document implies resuming the implementation of the project and solving participation of the Romanian as a full member of the project. Romania's Accession Agreement clauses in this project were negotiated during 2015 and the signing shall be done in 2016.

ENTSO-E elaborated the harmonized rules at EU level for the long term allocation (yearly and monthly) of the interconnection capacities as a preliminary step to implement the provisions of the European Network Code on Forward Capacity Allocation -NC FCA, which is in the process of review and approval by the European Commission, on the understanding that one of its objectives is the use of common EU rules for allocating long-term rights to use interconnection capacities. As a result, although their adoption by TSOs and approval by regulatory authorities is not yet mandatory, Transelectrica and ANRE have found useful to

adopt and respectively to approve them since 2015 applying from 2016, for the borders where both TSOs agreed.

The harmonized rules for long-term allocation of interconnection capacities (HAR) were approved by ANRE for applying on the border Romania-Hungary, the derogations to the common version being presented in the annexes, namely in Annex 15.

Compared to the allocation rules applicable until 2015 on the Hungarian border, HAR provides the same principles for the allocation of the interconnection capacity (ATC). The rights to use the ATC are allocated based on the explicit auctions for yearly and monthly timeframes. Following the submission of participants offers, the auction price is set, namely the marginal price (price of the last winning bids, integral or partially, ordering them in descending order), which is paid by all participants for each MW and for every hour they obtained the rights to use the ATC.

However, HAR makes new provisions to the rules for allocating the ATC, applicable by 2015, namely:

- the possibility of allocating physical transmission rights (the holder's right to transfer physical volume of electricity at a certain time in a specific direction) or financial rights (the holder's right to receive a financial reward for making available on the market the own rights, remuneration based on price resulting from the allocation of ATC for the next day). According to provisions stipulated in Annex I to HAR, on the Romania-Hungary border it has been decided to implement on this step only the allocation of physical transmission rights;

- implementing a mechanism to ensure payment of interconnection capacity awarded by submitting a letter of credit/money in an opened account in the favour of the operator of the allocation platform, which should cover the amount of the rights which the participant wishes to acquire. Compared to the previous rules for allocation, the payment of ATC is achieved only in advance, HAR provides post pay for ATC (at the next billing period), for the situations in which the due date for payment and the deadline for starting to use ATC are very close or overlap;

- implementing the paying mechanism Use It Or Sell (UIOSI) for the market participants for the purchased capacity on long-term auctions, but which has not been notified as being used by them; the previous rules stipulated the principle Use It Or Lose It (UIOLI);

- changes of the rules for compensating participants in case of curtailment of the rights to use owned ATC by stipulating that in some situations (threat to system security or emergency situations), the compensation shall be done by the difference between prices of the markets for the next relevant day - limited by the revenues resulted from ATC allocation - and not just by returning the price of the auction, as stated in the rules previously applicable.

At the request of certain producers, forwarded during the public consultation carried out by Transelectrica, ANRE insisted on Transelectrica and Mavir to provide also in Annex 15 a share from ATC for implicit allocation on DAM. Finally, Mavir and the regulatory authority of Hungary agreed to reserve for implicit allocation on DAM a difference between available ATC after the annual allocation for each sub-period of one month and 80% of the lowest value on sub-periods of ATC available after the annual allocation. Given the results of the simulations done with 2014 figures, it is noticed that through this method, approx. 30% of

capacity would be available for DAM, which would allow export by DAM on more hourly intervals.

3.1.5. Compliance with the provisions of the European legislation

Compliance with decisions of ACER and European Commission

In accordance to the provisions of *Law no. 160/2012 on the organization and functioning of ANRE*, respectively Article 9(1)(w), ANRE complies with and implements all relevant and legally binding decisions of the Agency for the Cooperation of Energy Regulators – ACER - and the European Commission; the decisions of the European Commission issued under Article 39(8) of *Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC* shall be implemented within 60 days after entry into force.

In order to apply the provisions of *Regulation (EU) no. 1227/2011* and the provisions of *ACER Decision no. 01/2012* regarding the register format in accordance with Art. 9, paragraph (3) of REMIT and to the necessity to adapt the national regulatory framework to international developments concerning the REMIT implementation, ANRE issued *Order no. 1/2015 establishing the National Register of the wholesale energy market participants*, published in the Official Gazette of Romania no. 80/30.01.2015.

Thus, as of 18 March 2015, the participants on the energy wholesale market in Romania were required to register on the National Register of wholesale energy market participants, set out and managed by ANRE according to the procedure set out in the Annex to the Order. Presently, a number of 609 wholesale energy participants are registered in the national registry and their data are sent to CEREMP-ACER. As of October 7, 2015, they were required to submit data on transactions on wholesale energy market to ACER, including orders to trade and transactions executed on organized markets and fundamental data to European Networks of Transmission System Operators for electricity and natural gas.

The second reporting stage begins with 7 April 2016 and concerns the reporting of contracts undertaken outside the organized markets and transmission contracts.

In 2015 there were no other mandatory ACER decisions.

Compliance of transmission and distribution companies, system owners and electricity undertakings with relevant Community legislation, including cross-border issues

ANRE approved the final certification of the C.N. "Transelectrica" - S.A., according to the model of ownership unbundling, as TSO of the NPS, by *ANRE Order no. 164/2015*. On 10/12/2015, ANRE notified the European Commission regarding the approval of the C.N. "Transelectrica" - S.A. as TSO in Romania according to Article 10 of EC Directive 72/2009.

ANRE monitors according to the law, distribution operator activity that is part of an economic undertaking vertically integrated on the implementation of measures to ensure excluding discriminatory practices and establish specific obligations for the employees of such undertakings in achieving the objective of independence. In this regard, ANRE issued the Order no. 5/2015 approving the *Regulation on the monitoring by the National Energy Regulatory Authority of compliance programs established by the electricity distribution operators.*

Transparency of interconnection transactions is ensured by C.N. Transelectrica S.A. through the information published on the company's website www.transelectrica.ro, as per the *Regulation (EU) No. 714/2009*.

3.2. Promoting Competition

3.2.1. Electricity wholesale market

Structure of the Romanian wholesale electricity market

The wholesale market is defined as all transactions carried out by the market participants, holders of a license issued by ANRE, which includes and resells among participants, performed in order to adjust the contractual position and obtain financial benefits. Volumes traded exceed the physical quantity delivered from production to consumption.

Presently, the electricity generation sector is organized mainly from the type of primary resource used in the production (hydro, nuclear, thermal, wind, photovoltaic and biomass). Undertakings in the production sector, including those belonging to the state sector and private ones, operate under the license of production issued by the regulatory authority, participating in the electricity market. Of these, under the provisions of the *Monitoring Methodology*, producers owning dispatchable groups are monitored in terms of energy produced and delivered in NPS and activity on the electricity market in Romania, according to *Law*.

In 2015, were monitored the producers whose production units were declared dispatchable according to *Regulation for scheduling production units and dispatchable customers*, approved by *ANRE Order no. 32/2013*, classified by power levels as following:

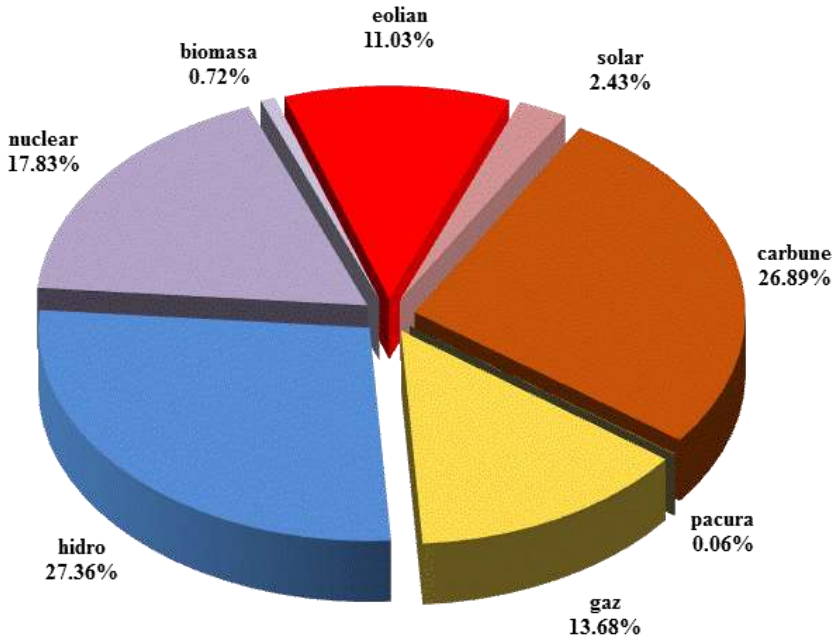
- hydropower group with installed power greater than 10 MW;
- turbo generator group (including biomass, nuclear) with installed power exceeding 20 MW;
- wind power plant, photovoltaic plant or plant with internal combustion engines with installed power greater than 5 MW.

According to the results obtained in the process of achieving national electricity label for 2015, the total electricity supplied in the electricity network by the producers (with or without dispatchable units) was 59.97 TWh, with only 0.5% more than the energy delivered by the same producers in 2014.

Following the monthly monitoring process of the activity of producers, holders of dispatchable units, it was noticed that in 2015 an amount of 58.53 TWh of electricity was delivered in the network (this includes own consumption of some producers and the electricity sold directly from the bus bars of power plants).

Quantitative comparison with previous periods of 2014 is affected by the increasing number of producers subject to monthly monitoring process, mainly determined by commissioning of wind and photovoltaic dispatchable groups. Thus, the number of renewable dispatchable producers increased also in 2015, even if not as much as in 2014.

We present in the following chart, the , holders of dispatchable units and undispatchable ones, calculated on types of conventional and unconventional resources, reported according to *Regulation for electricity labelling - Revision 1*, approved by ANRE Order no. 69/2009.



Source: Monthly reports of the e electricity producers according to ANRE order no. 69/2009

A comparison with the values of electricity delivered in 2014 shows an increase of approx. 1% of electricity delivered to the NPS justified by the increase by approx. 3.9% of the final consumption linked to increased export-import transactions. It notes in particular, changing the structure of production as a result of the functioning of hydroelectric plants in slightly unfavourable hydrological conditions and the increase of the dispatchable power plants based on renewable sources.

According to data reported by producers, whether in case of nuclear energy, the amount delivered in the network remained approximately the same as in the previous year (10.69 TWh in 2015 to 10.87 TWh in 2014), in case of the electricity from hydroelectric sources there was a decrease by approx. 13% compared to the previous year (from 18.92 TWh to 16.40 TWh).

Policy for development and integration of power plants based on renewable sources continued in 2015, however mention should be made that the share in power production based on conventional sources suffered only a slight drop from 88.02% in 2014 to 86.82% in 2015. The electricity produced from natural gas increased by 18% and the electricity from coal exceeded the previous year by only 2%.

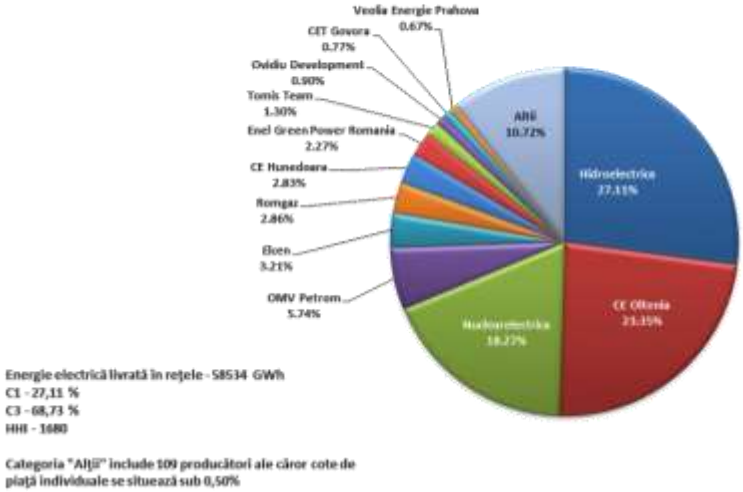
To the values of the previous year, the largest percentage of growth was recorded by the energy from photovoltaics (56%), followed by wind power plants (approx. 14%) and power plants using biomass (approx. 12%).

The following table presents the yearly quantities of electricity produced by the producers owning dispatchable units, in a downward list. In comparison with the individual data in the previous year, it appears that over 68% of production was carried out by the 3 classic producers, Hidroelectrica (hydropower), CE Oltenia (thermoelectric) and Nuclearelectrica (nuclear power), the rankings order of the top 3 producers remained the same as in 2014. It also notes that the first 8 generators have produced over 1 TWh in 2015 and represented a cumulative rate of over 85% of the yearly output of producers registered as holders of dispatchable units, according to the monthly reported data.

Dispachable producer	Electricity produced	
	TJ	GWh
Hidroelectrica SA	4481	16132
Complexul Energetic Oltenia SA	4155	14957
SN Nuclearelectrica SA	3233	11640
OMV Petrom SA	962	3463
Electrocentrale Bucureşti SA	611	2199
Complexul Energetic Hunedoara SA	512	1842
Romgaz SA	499	1798
Enel Green Power Romania SRL	369	1330
Tomis Team SRL	216	777
CET Govora SA	171	614
Ovidiu Development SRL	149	535
Veolia Energie Prahova SRL	126	454
Other (with market shares under 0.5%)	1912	6883
TOTAL	**17396**	**62624**

Source: Monthly reports of the dispatchable electricity producers

The market shares of producers holders of dispatchable units in 2015, according to the electricity delivered in networks are presented below.



Source: Monthly reports of the dispatchable electricity producers

In 2015, the market share of the producer Hidroelectrica has decreased, but it has remained the leading producer in terms of quantity of electricity generated and delivered to the network, keeping the order of the top 3 producers from last year, with market shares slightly modified.

The following table presents the average yearly values of structural indicators in the period 2010-2015, calculated based on electricity delivered to the network by producers, holders of dispatchable units. The values presented take into account the existing structure at companies with legally separated personality, disregarding the shares held by certain operators.

An	C1	HHI
2010	36%	1947
2011	26%	1469
2012	30%	1914
2013	28%	1759
2014	31%	1826
2015	27%	1826

Source: Monthly reports of the dispatchable electricity producers

As it can be noted, also in 2015 the values of such indicators are within the boundaries that separate markets with a moderate degree of concentration of those with a high degree of concentration, as they are established in the specialty literature.

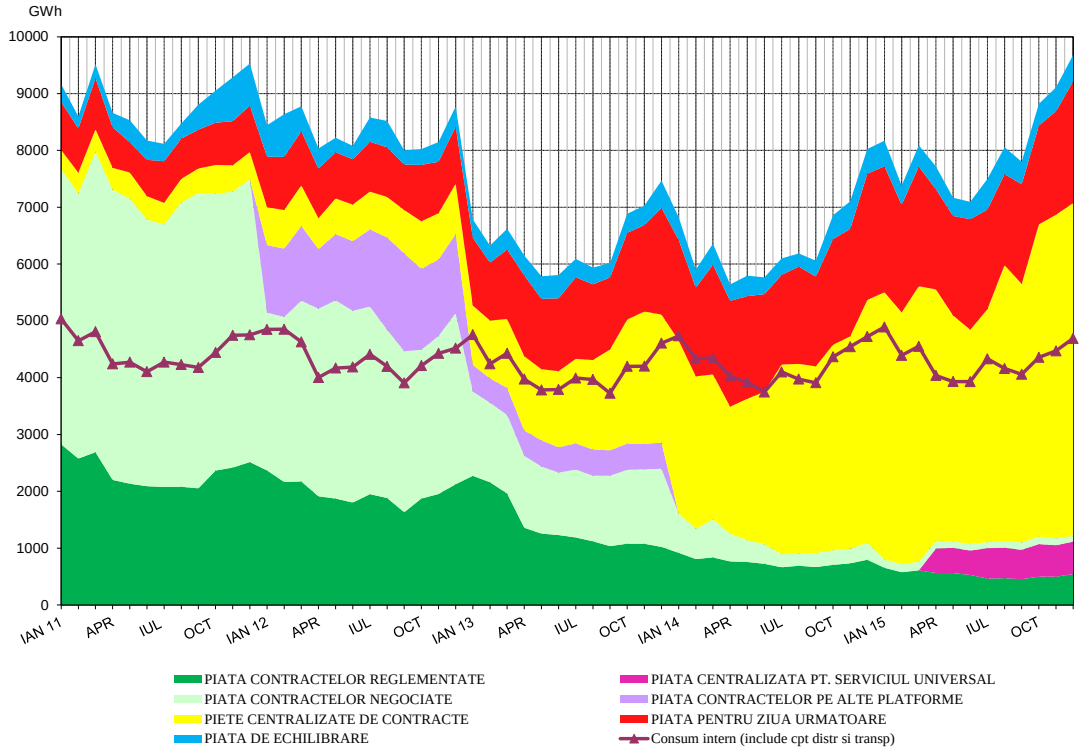
NPS operation in 2015 was characterized by an increase by approx. 2% of domestic consumption of electricity compared to that in 2014, calculated based on delivered energy in the networks and the balance between imports and exports coupled with continued growth in the share of installed capacity in power plants using renewable sources, on slightly unfavourable hydrological conditions of the year.

At the monthly level, the electricity domestic consumption recorded, in most months of the 2015, superior values to those of the previous year, with monthly increases between 0.28% (February 2015) and 5.64% (July 2015).

Electricity wholesale market

The electricity wholesale market is defined as all transactions carried out by the market participants, holders of a license issued by ANRE, which includes and resells among participants, performed in order to adjust the contractual position and obtain financial benefits. Volumes traded exceed the physical quantity delivered from production to consumption.

Changes in the structure of the wholesale market which occurred with the entry into force of the *Law no. 123/2012 on electricity and natural gas* have continued to evolve and consolidate as market participants replaced the negotiated bilateral transactions with the obligation to conclude transactions on the centralised markets organised by Opcom SA in a transparently, publicly, centralized and non-discriminatory manner. The chart below illustrates **the monthly volumes traded on the major components of the wholesale electricity market in the period 2011-2015 compared to the evolution of domestic consumption**.



Source: Monthly reports from wholesale electricity market participants, OPCOM S.A. and C.N. TRANSELECTRICA S.A

In 2015, the trading on the centralized markets of bilateral contracts organized by Opcom SA (CMBC-EA, CMBC-CN and CMBC-OTC) was predominant, ensuring particularly the transactions on medium or long term contracts, followed by DAM and IDM for short-term transactions. Due to law requirements, the transactions on brokerage platforms were virtually ceased in 2014, the participants being more active on centralized market with continuous double negotiation from Opcom SA, with varied trading tools. The volume of the transactions carried out on negotiated bilateral contracts was reduced to a third of the one achieved in 2013. The volume of electricity traded on the BM also increased by approx. 16% compared to 2014 as a result of the need to ensure the balance between production - consumption due to the large differences between the physical notifications and the electricity actually delivered in networks by undertakings that commercially operate wind and photovoltaic units. We mention that the electricity market for large end customers remains inactive until the end of 2015, no initiating offer being submitted.

In order to reduce differences between the buying prices of electricity contracted by the suppliers of last resort for covering the end consumption billed at CMC tariffs (competitive market component), ANRE has developed in July 2014 the regulatory framework for CMUS (Centralized Market for Universal Service) and the electricity market operator, Opcom SA, has implemented the appropriate trading mechanism that became operational in April 2015. Since that date, the purchase of forecasted electricity demand for CMC billing tariffs is centralized on CMUS platform and the difference between billed and forecasted is traded on DAM and IDM. To cover the electricity consumption of the end customers supplied on the last resort, the necessary electricity is purchased on centralized platforms CMBC-EA, CMBC-CN, CMBC-OTC, DAM and IDM.

The following table presents the volumes traded in 2015 on each component of the wholesale market and their evolution compared to those the previous year:

Wholesale market components	Volumes traded in 2015 -GWh-	Evolution compared to 2014 - % -	Percentage of internal consumption 2015 - % -
Market of regulated contracts	6413	▼ 29.2	12.6
Market of directly negotiated contracts	1509	▼67.3	3.0
Centralized market of bilateral contracts of which:	56717	▲52.1	109.5
- CMBC-EA	31407	▼8.5	61.9
- CMBC-CN	7915	▲388.3	15.6
- CMBC-OTC	17394	▲1194.6	34.3
Centralized market for universal service	4592		9.1
Day ahead market	22496	▲5.3	44.3
Intra-day market	76	▲18.8	1.5
Balancing market	4861	▲16.6	9.4
Export*	10504	▲28.0	20.0

* The quantity of the export contracts in 2015 resulted from the reports of market participants to the wholesale market and include the quantities exported by the suppliers, by the only producer achieving this kind of activity (data reported over the monitoring scheme), and the exported quantities by CN Transelectrica SA, as a shipping agent on coupled DAM; the export volumes were verified with the notifications on DAMAS platform, there are small differences in some cases

Source: Monthly reports from wholesale electricity market participants, OPCOM S.A. and C.N. TRANSELECTRICA S.A

The data presented shows that the highest increases were registered on CMBC-CN and CMBC- OTC, the volume of electricity traded on both markets increased about 4 times, respectively about 12 times that of the previous year. At the same time, in 2015, approx. 67% of all transactions were carried out on three of the centralized markets administered by OPCOM SA, predominantly used by market participants - CMBC-EA, DAM and CMBC-OTC.

In comparison with 2014, it stands a further reduction in the quantity of electricity sold on the regulated contracts; it is a consequence of increasing deregulation established by the Memorandum of Understanding approved by the Government in March 2012, in accordance with its obligations in relation to the IMF, World Bank and European Commission approving the roadmap for phasing-out regulated tariffs to the final customers not making use of their eligibility rights. As in the last year, Hidroelectrica and Nuclearelectrica were the only producers who had quantities and prices regulated by ANRE decisions.

The distribution system operators have purchased a quantity of electricity of 6 TWh only on the competitive market.

After processing the data collected from market participants, it was noted that cross-border commercial activity was intensified in 2015, the amount of energy exported on a contractual basis being approx. 10.50 TWh, 28% higher than the previous year, while imported energy has exceeded that of 2014 by 2.5 times, reaching 3.78 TWh.

We mention that the export activity of electricity was achieved mainly by suppliers (approx. 98% of the volume traded on this type of contract), respectively by CN Transelectrica SA, as shipping agent for coupled DAM, for the import (approx.78% of the volume traded).

The table below presents for each component of the wholesale market, annual average prices and the comparison to the previous year values.

Average prices on the wholesale market	2015 -RON/MWh-	2014 -RON/MWh-	Evolution 2015 compared to 2014 - % -
Market of regulated contracts	140.56	142.68	▼1.5
Market of directly negotiated contracts	147.89	163.75	▼9.7
Centralized market of bilateral contracts of which:	163.87	173.90	▼5.8
- CMBC-EA	162.01	174.19	▼6.8
- CMBC-CN	167.68	168.11	▼0.3
- CMBC-OTC	165.50	173.50	▼4.6
Centralized market for universal service	170.52	-	N/A
Day ahead market *	161.83	153.92	▲5.1
Intra-day market **	112.52	162.63	▼30.8
Balancing market ***	254.74	243.35	▲4.7
Export****	168.05	173.47	▼3.1

* The annual average price is that published by OPCOM SA and is calculated as simple arithmetic average
** The annual average price is calculated based on the annual traded volume and value, published by Opcom SA
*** The annual average price is calculated as arithmetic average of the monthly average deficit prices
****The average annual price reflects price information on the quantities exported by suppliers, by the only producer that have taken this type of activity (data reported outside monitoring layout) and those exported by Transelectrica, as shipping agent on coupled DAM

Source: Monthly reports from market participants, OPCOM S.A. and C.N. TRANSELECTRICA S.A.

Regarding average prices on the wholesale electricity market, we make the following comments:

i. average prices do not include VAT, excises or other taxes and were determined by weighting the prices with the quantities corresponding to sales transactions reported monthly by market participants;

ii. all prices include the T_g component of the transmission tariff (for the centralized markets this is embedded in the price by the bidders).

A comparative analysis of the annual average prices resulting from transactions on the wholesale market components in 2015 over the previous year indicates the following:

- Average annual price decline for all components of the wholesale market, with the exception of the one registered on DAM and the average deficit price on BM; the most significant drop was registered on intra-day market, while the smallest decrease was for the price on CMBC-CN;
- the decline in average prices on centralized markets can be explained primarily by increased of electricity production from hydropower plants traded on the competitive market; another influencing factor is the increased share of production from renewable sources on the market and the downward trend of price offer for this, combined with the sale of green certificates (CV) on centralized markets organized by Opcom SA, in their current period of life, with a limitations of number of CVs allowed for trading;
- the annual average prices of negotiated bilateral contracts have been much lower than those of other competitive contracts as a result of directly negotiated transactions concluded before the entry into force of the *Law*, valid in 2015, and of directly negotiated transactions under the exceptions provided by the primary legislative framework;
- the average selling price on the CMUS was the highest average price recorded on centralized platforms operated by market operator; it reflects the offering policy of the participants on this segment of the market and the innovations introduced by the implemented regulatory framework, but it is also probably influenced by the type/number of traded products.

Market of regulated bilateral contracts

The regulated component of the wholesale market also functioned in 2015 in order to supply electricity at regulated tariffs to households.

Prices and quantities of the regulated contracts of electricity have been established in accordance with the *Methodology of pricing for electricity sold by producers on regulated contracts and quantities of electricity from regulated contracts concluded by producers with supplier of the last resort*, approved by ANRE Order no. 83/20.11.2013.

In 2015, from the total of 14586 GWh of electricity purchased by the suppliers of last resort on the wholesale market to cover the energy needs of regulated supplied end customers and for the Universal Service, a rate of approx. 44% was covered by regulated contracts with the producers Hidroelectrica and Nuclearelectrica, the rest being purchased on the CMUS (approx. 31%), DAM (approx. 13%), and centralized markets for bilateral contracts organized at Opcom SA (approx. 12%).

The average purchase price of electricity corresponding to the five suppliers of last resort in 2015 was 158.97 RON/MWh.

The competitive market

The volume of the electricity transactions concluded on the competitive market increased by 34.5% compared to 2014. The competitive market covers transactions concluded on CMBCs, CMBC-NC, CMUS, DAM, IDM and BM, and also the market for bilateral contracts directly negotiated.

The volume of the electricity transactions concluded on import/export contracts is significantly larger than the monthly volumes traded in 2014, excepting November 2015.

It is noted the different monthly evolution of the imported volumes compared to those exported. The significant increase of the volumes in May, June and December, as a result of the coupled functioning of the spot markets in the 4 countries, along with the decrease of the exported volumes in February, May, June and September, led to significant variations of the export-import sold for February, May and December 2015.

From the point of view of dispatchable producers, the competitive market (without taking into account the volumes traded on BM) had the following sales structure:

Total sales of producers on competitive market			**100% (54710 GWh)**
A.	***Transactions made upon bilateral direct contracts or concluded through type-offers***		***7.5%***
	1.	With suppliers	2,4%
	2.	With final customers	5.1%
B.	***Transactions made upon auctions on the centralized markets***		***60.1%***
	1.	With suppliers	55.3%
	2.	With distributors	2.6%
	3.	With other producers	1.5%
	4.	With the transmission operator	0.7%
C.	***Transactions on CMUS***		***5.2%***
D.	***Transactions on DAM and IDM***		***27.2%***

Note: the sales transactions reported over the monitoring scheme are not included

Source: Monthly reporting of wholesale market participants, OPCOM SA and C.N. TRANSELECTRICA S.A.

Overall, the sales of the dispatchable producers in the competitive market represented in 2015 an amount of nearly 55 TWh, at an average price of 164.98 RON/MWh (including the T_g component of the transmission tariff); compared to the 2014 values, it is noted an increase of 10% of the sold energy quantities and a decrease of 2% of the average annual price.

The largest part of that quantity was sold on centralized markets for bilateral contracts (approx. 32.9 TWh), and the selling to the electricity suppliers was predominant (30.2 TWh at the average price of 163.04 RON/MWh). Large quantities were sold also on short term markets (DAM and IDM) - approx. 14.8 TWh at the annual average price of 168.39 RON/MWh. Compared to the previous year, the producer's selling structure continued to change significantly in favour of the contractual centralized markets, the selling on DAM recording a decrease by 19%.

The following table presents the competitive market structure in terms of the electricity supplier's sales (without considering the volumes traded on the Balancing Market):

Total sales of suppliers on the competitive market			100% (69773 GWh)
A.	***Transactions made upon bilateral negotiated contracts***		***57.1%***
	1.	With other suppliers	0.3%
	2.	With external partners (export)	14.8%
	3.	With producers	0.0%
	4.	With distribution operators	0.0%
	5.	With final customers	42.0%
B.	***Transactions upon auctions on the centralized markets***		***34.5%***
	1.	With other suppliers	29.3%
	2.	With producers	0.8%
	3.	With transmission and system operator	0.3%
	4	With distribution operators	4.1%
C.	***Transactions on CMUS***		***2.5%***
D.	***Transactions on DAM and IDM***		***5.9%***

Source: Monthly reporting of wholesale market participants, OPCOM SA and C.N. TRANSELECTRICA S.A.

It is noticed that in 2015 the largest part of the direct bilateral contracts were closed with the final customers, while the volume of the directly negotiated contracts on the wholesale market had a small share in the total sales of the electricity suppliers.

The smaller annual average price for selling (including the component for the electricity injection in the transmission network) was recorded on negotiated sales contracts with others suppliers (160.60 RON/MWh), and the biggest one was recorded on the export negotiated contracts (167.95 RON/MWh). The average price for the sales on CMUS was 177.10 RON/MWh.

In the contracts for the supply of electricity to end customers, the average annual price was 173.14 RON/MWh. This price does not include network costs (transmission, distribution, system services).

Regarding the activity of distribution operators, they bought 6 TWh only through competitive market, the acquisitions using mostly the products available on CMBC (approx. 61.7% of the annual purchase volume), followed by the acquisition on DAM (approx. 29.3%), and also sales on DAM of about 0.05 TWh. The analysis of transactions undertaken by distribution operators revealed their tendency to conclude bilateral agreements on centralized markets in particular with suppliers of last resort of the same group. Thus:

- one of the distribution operators made buying/selling transactions on DAM through the SoLR from the group they belong to, and approx. 54.4% of his acquisition from CMBC-EA based on contracts with suppliers is from the same SoLR;
- another distribution operator closed buying transactions on CMBC-OTC only from partners of the same group, transactions representing approx. 33% of his total acquisition;
- another distribution operator bought on CMBC-EA, 24.29% of the amount from the partners of the group.

Noteworthy in 2015, is the evolution of CMBC-OTC and CMBC-NC compared to the previous year. These increases have led to changes in the business structure of contracts on centralized markets, as follows: 14% of the volumes traded on CMBC-CN, 31% on CMBC-OTC, and the remaining 55% on CMBC-EA.

The centralized market of electricity bilateral contracts with continuous double negotiation– CMBC- OTC

This market is an organized by Opcom SA for centralized trading on a competitive condition based on pre-established contracts for the buying and selling electricity and eligibility criteria set to each participant. Trading is based on standard tools using framework contracts agreed by the parties before trading; since November 2014, in accordance with the regulations approved by ANRE Order no. 49/2013, the use of EFET type contracts is mandatory.

Starting in May 2014, CMBC-OTC represented in 2015 one of the most important components of the electricity wholesale market, the electricity delivered on this market recorded a market share of 34.3% of the domestic consumption and representing approx. 16% of the total of the sales transactions on the wholesale market..

In 2015, the activity of the participants on this market increased from one month to another. Thus, if at the beginning of 2015 there were 57 participants registered, up to the end of the year their number increased to 90. Starting with 599 transactions in January 2015, in the last month of the year there were registered 1029 transactions for energy supplied base load, on peak and off peak.

A part of the transactions was concluded by mediation procedure (sleeve transactions).

Monthly volumes traded on the standard tools available characterized by transaction time(day, weekend, week, month, quarter, semester, year) and by the delivery profile (base load, on peak and off peak) increased significantly every month.

Weighted average prices, calculated as a weighted average of prices with all electricity quantities of all contracts on delivery during a month, recorded variations of the averaged prices for each delivery profile; thus they were recorded monthly variations between 144.75 RON/MWh and 175.25 RON/MWh for deliveries on base load and between 170.13 RON/MWh and 210.51 RON/MWh for deliveries on peak and between 108.78 Euro/MWh and 150.27 RON/MWh for deliveries off peak.

The annual quantity delivered during the reporting month on buying/selling contracts concluded on CMBC-OTC was 17394 GWh at the annual average price of 165.50 RON/MWh. Monthly delivered quantities evolved from almost 961 GWh (19.6% of domestic consumption) in January 2015 to 2 057 GWh (approx. 43.8% of domestic consumption) in December 2015 with monthly average prices ranging between 145.34 RON/MWh (May 2015) - 178.08 RON/MWh (January 2015).

The sales of suppliers on this market in 2015 accounted for approx. 79% of the traded quantity at an annual average price of 164.10 RON/MWh, while the producers have sold approx. 21% of the total traded quantity at an annual average price of 170.70 RON/MWh. Data on quantities supplied and the related prices were obtained on the basis of monthly monitoring reports of the participants and covers the electricity actually delivered during the reporting month as a result of transactions concluded on the CMBC-OTC.

HHI concentration indicator calculated by OPCOM SA, recorded monthly values between 542-851 for sale and 506-725 for purchase, and the concentration indicator C3 recorded every month values less than 40%.

The information contained in monthly reports transmitted by Opcom SA reflect the large number of transactions between participants - members of groups of companies and in the case of a such group both the supplier of last resort and concessionaire distribution operator have contracts with companies in the group.

The information published on the website www.opcom.ro, chapter CMBC-OTC, are daily information on products and aggregated data, summaries and statistics as well as data/information published under provisions of Article 26 from the *Regulation on the organized trading market framework on the centralized market with continuous double negotiation of the bilateral electricity contracts.*

Opcom SA calculates and publishes daily reference prices for each CMBC-OTC product, calculated as the arithmetic average of participants' proposals to CMBC-OTC, but there are difficulties in gathering the information necessary for the calculation.

Opcom SA has also published in 2015 complete information on 454 transactions of which closing price varied by more than 10% over the reference price fixed for the product (if it is the first transaction of the day) or to the transaction price of the previous day, for products of which the delivery period exceeds one month.

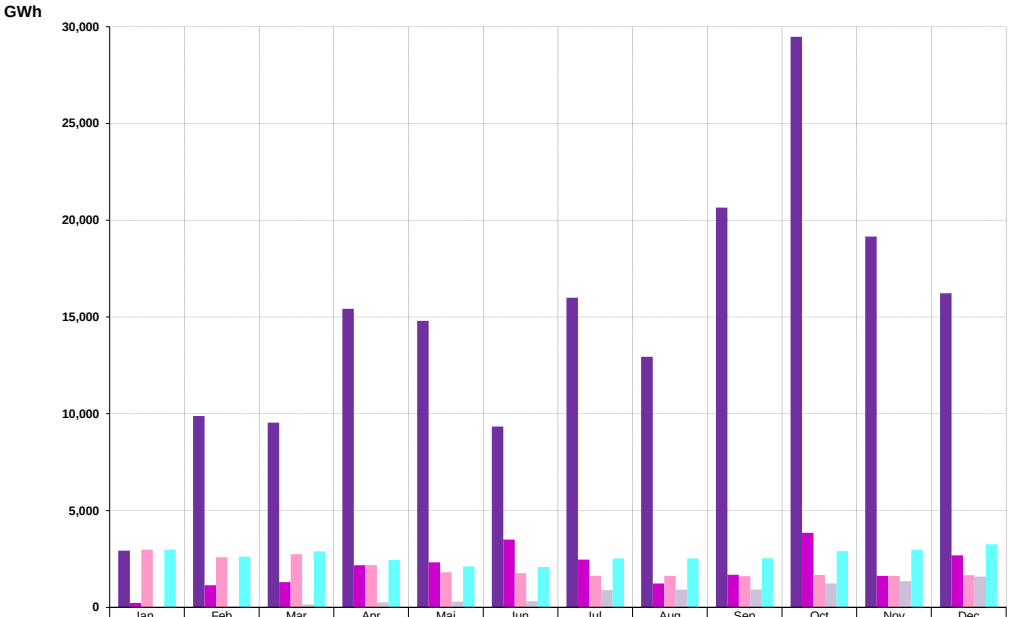
Centralized Market for Bilateral Contracts with three trading arrangements - CMBC-EA, CMBC-CN and CMBC-PC

2015 was characterized by the implementation of the regulatory framework approved by *ANRE Order no. 78/2014*, respectively the organized market regulation framework of the centralized market for bilateral contracts with three ways of trading - by extended public auction (CMBC-EA), by public auction with continuous negotiation (CMBC-CN) and processing contracts.

The changes were initiated in order to better meet the requirements of the *Law* as amended and supplemented, regarding publicity, transparent and non-discriminatory trading on the wholesale market, the specific obligations for the participation of the producers and network operators to the market and to create the transparency and non-discriminatory conditions for fuel processing contracts.

Participants are holders of production, supply, transmission and distribution licenses. If in the first month of operation of CMBC-EA, the number of registered participants was 118, it increased rapidly month by month, reaching 351 participants in December 2015. The participants interested to conclude new bilateral contracts were enrolled on CMBC-EA, this being the market which replaced the old centralized market of bilateral contracts CMBC.

The chart below presents the most important information on **monthly volumes offered respectively traded on CMBC-EA during 2015**.



	Ian	Feb	Mar	Apr	Mai	Iun	Iul	Aug	Sep	Oct	Nov	Dec
volum ofertat pentru vanzare si cumparare	2924	9883	9545	15422	14799	9344	15991	12945	20655	29473	19158	16223
volum tranzactionat lunar	232	1141	1301	2179	2324	3503	2463	1232	1680	3850	1626	2690
volum contractat anterior anului 2015 pt luna in curs	2979	2591	2750	2181	1817	1762	1635	1622	1609	1676	1619	1667
volum contractat in anul 2015 pt luna in curs	0	25	152	262	298	318	893	906	924	1228	1356	1588
volum total contractat pt luna in curs	2979	2616	2902	2442	2116	2080	2527	2528	2534	2904	2975	3255

Source: Monthly reports of Opcom SA

The offers for sale or purchase of electricity on CMBC-EA have firm characteristics on the delivery time, daily delivery profile, total and hourly quantity, minimum requested price and respectively the maximum price offered. After concluding transactions, these characteristics determine the accurate, fixed, constant values of the quantities and price level established for trading, for the whole period of validity of the contract. In the auction, offers are accepted by both sides, for selling and buying, being possible to have multiple bidders on both sides.

The most active participants in terms of sale's offer were the producers Hidroelectrica SA and CE Oltenia that introduced the largest volumes destined to be sold. In two of the 12 months, Hidroelectrica has offered the highest amounts, up to 75% of the total volume offered for sale (February 2015), while CE Oltenia intended to sell in all other months with offers over 50% of the total offered volume.

Regarding the concluded sales transactions, Hidroelectrica SA held the largest share of volumes traded (with decreasing rates which ranged between 80% in February 2015 and 31.7% in June 2015), in first half of the year, while CE Oltenia was the first among sellers in the second half, with sales quotas ranging between 20.7% and 31.7%.

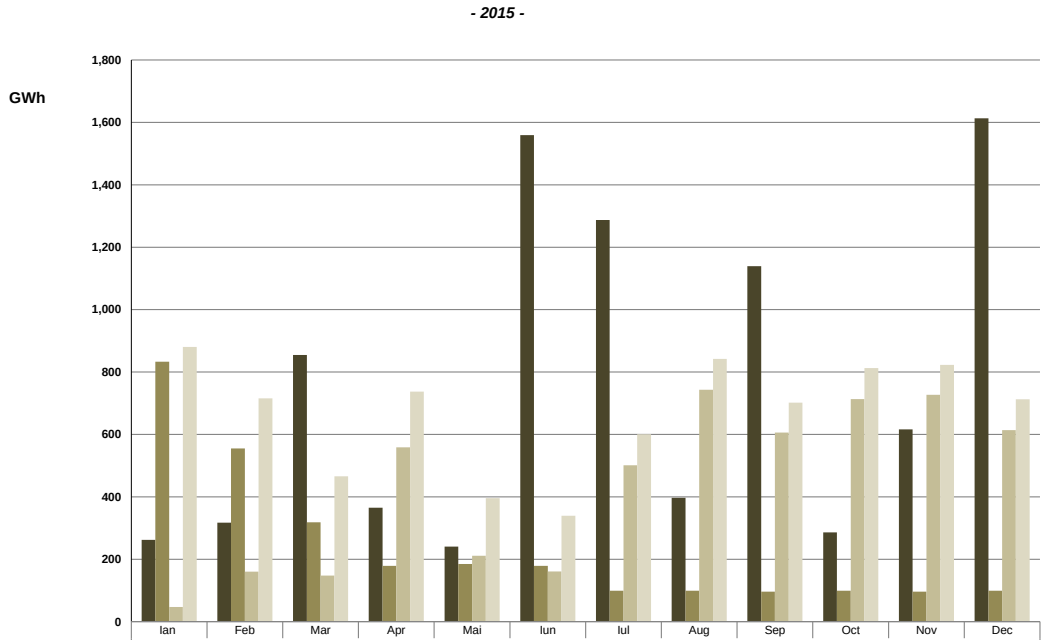
Analysing the buying offers, it appears that from February to June 2015, the most interested in purchasing energy in this market was E.ON Energie Romania, with market shares ranging from 16.7% to 23% whose intentions to buy materialized in all the mentioned months. For the second year, the most interested in buying energy were competing suppliers Tinmar-Ind (July, August and September 2015) and Repower Supply (October, November and December 2015), with amounts monthly offered by up to 20%. For the purchase transactions, GEN-I has recorded the highest monthly market share (excluding December 2015).

Analysing the data obtained from the monitoring process of the market participants, the amounts of electricity delivered in 2015 (the contracts traded on CMBC-EA in 2015 or earlier, on CMBC) decreased by almost 8.5% compared to those delivered in 2014 on CMBC (organized centralized market according to ANRE order no. 6/2011), while the annual average price for the total quantity delivered decreased by approx. 7% over the same period of comparison.

The average annual price recorded on the quantities delivered in 2015 was 162.01 RON/MWh with only 0.18 RON/MWh higher than the annual average price on DAM. Average prices on CMBC-EA, calculated at month decreased from the beginning of the year, when it was recorded the maximum of period under review (168.60 RON/MWh) towards the end of the year, ranging around 160 RON/MWh.

The delivered quantity by the dispatchable producers on these types of contracts represented 70% of the total for the year, at a price 160.22 RON/MWh, while the quantity delivered by suppliers was sold at the price of 166.44 RON/MWh.

On CMBC-CN standard products are traded in terms of power offered, the daily profile of supplies and the delivery periods. The chart below presents **the monthly trading volumes and those contracted for delivery in the months of 2015, including those contracted before 2015.** The data are reported by Opcom SA in the monthly reports for markets monitoring.



	Ian	Feb	Mar	Apr	Mai	Iun	Iul	Aug	Sep	Oct	Nov	Dec
volum tranzactionat lunar	262	317	855	365	241	1,559	1,287	397	1,139	286	616	1,613
volum contractat anterior anului 2015 pt luna in curs	833	555	318	179	185	179	99	99	96	99	96	99
volum contractat in 2015 pt luna in curs	47	160	148	559	211	161	501	743	606	713	727	614
volum total contractat pt luna in curs	880	716	466	737	396	339	601	842	702	813	823	713

Source: Monthly reports of Opcom SA

According to data monthly reported by the monitored operators, the sales of electricity delivered in 2015 (including those previously traded on CMBC-CN) was about 7.9 TWh of

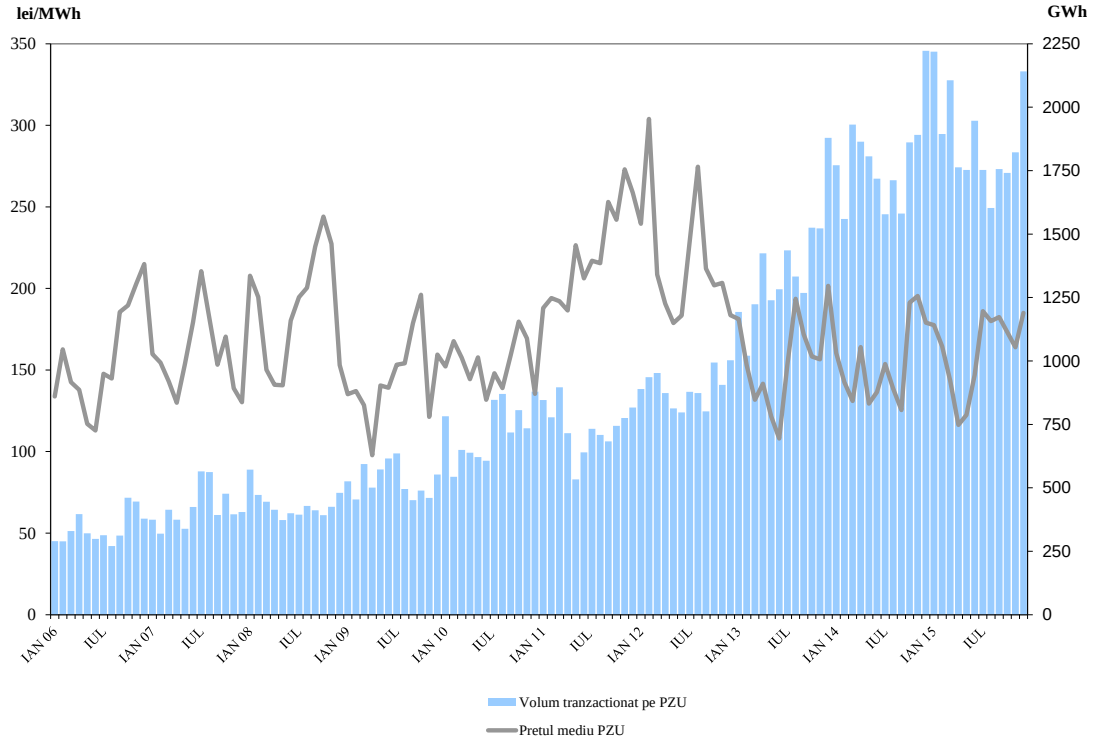
which approx. 84% were sales of the producers at an annual average price of 168.74 RON/MWh, while suppliers have sold 16% at the annual average price of 161.72 RON/MWh.

Day-ahead market – DAM

The volume of electricity traded on DAM in 2015 increased by approx. 4.6% compared to the volume traded in 2014. In 2015, the monthly share volume traded on DAM, as percentage from domestic consumption, ranged from 38.5% (in August 2015) and 46.3% (in March 2015), the annual share was approximately equal to the one in 2014, about 44%.

DAM average closing price (arithmetic average of the monthly closing market prices) increased by approx. 5% compared to 2014.

The chart below illustrates **the monthly average price and the volume traded on DAM** in the period 2006–2015.



Source: Monthly reports of OPCOM SA and CNTEE TRANSELECTRICA SA

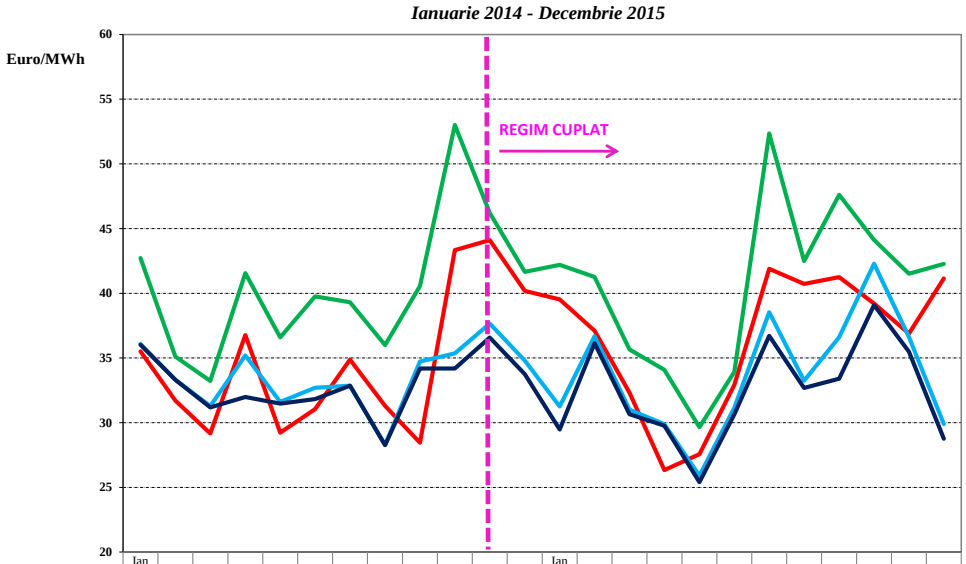
Variations from one month to another of the monthly average price established on DAM existed in both ways. The minimum of the period was reached in April 2015 (116.34 RON/MWh), and the maximum in December 2015 (185.04 RON/MWh). The annual average price - arithmetic average of the monthly average prices - recorded in 2014 was 161.83 RON/MWh.

Starting with 19 November 2014, the DAM in Romania operates coupled with day-ahead markets in Hungary, Slovakia and the Czech Republic, the so-called project 4M MC - the price market coupling for DAM. This correlated and coordinated mechanism uses a method, unique in Europe, the price coupling of the regions (Price Coupling of Regions initiative-PCR) to harmonize European national markets and to create the European internal electricity market. The coupled operation is based on the coupling algorithm recommended by ACER (Euphemia) that aims to maximize the social welfare in the entire area.

The mechanism of coupling is achieved through OTE - the Czech Republic and EPEX Spot (as members of PCR), the last one acting as a service provider for OKTE-Slovakia, HUPX Hungary and Opcom-Romania (not PCR members). Market operators act as coordinators on the basis of monthly rotation.

The coordinated calculation of the allocated cross-border capacity is under the governance of TSOs of the 4 countries in accordance with European legislation. The allocation model used is the implicit allocation on the DAM of the interconnection available capacity.

In the chart below are presented **the monthly average spot prices of the 4 day-ahead markets on the 4M MC coupling mechanism starting with 1 January 2014**, before and after the beginning of operating on the coupled regime.



	Ian 2014	Feb	Mar	Apr	Mai	Iun	Iul	Aug	Sep	Oct	Nov	Dec	Ian 2015	Feb	Mar	Apr	Mai	Iun	Iul	Aug	Sep	Oct	Nov	Dec
OPCOM	35.51	31.7	29.17	36.77	29.23	31.05	34.87	31.3	28.45	43.34	44.11	40.19	39.53	37.1	32.32	26.34	27.56	32.92	41.89	40.72	41.25	39.21	36.89	41.14
HUPX	42.72	35.1	33.23	41.56	36.6	39.76	39.31	35.99	40.56	53	46.21	41.66	42.19	41.26	35.66	34.08	29.65	33.92	52.35	42.49	47.61	44.12	41.51	42.27
OKTE	36.07	33.31	31.28	35.19	31.61	32.7	32.86	28.28	34.72	35.36	37.66	34.8	31.26	36.68	31	29.89	25.9	31.16	38.54	33.24	36.61	42.29	36.63	29.9
OTE	36.03	33.31	31.18	31.98	31.47	31.83	32.86	28.27	34.19	34.19	36.58	33.75	29.48	36.14	30.65	29.76	25.41	30.64	36.71	32.68	33.4	39.09	35.48	28.76

Source: Published information by Opcom SA

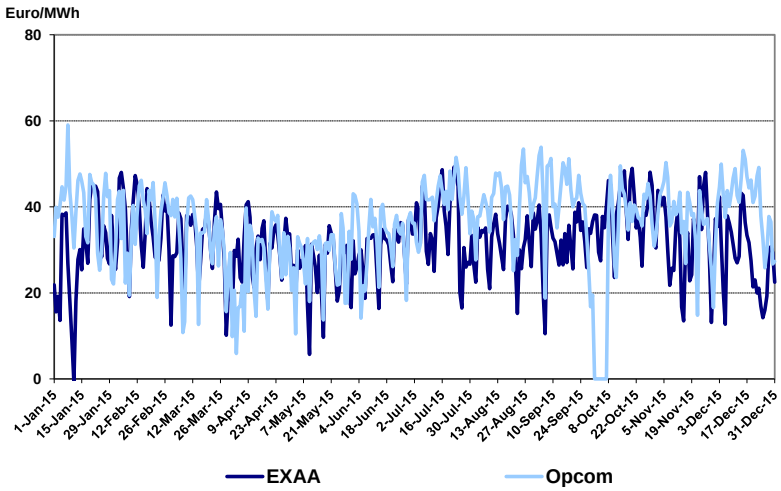
The expected results of DAM market coupling operation were affected by ATC values set on implicit auctions on each direction; thus, the maximum hourly ATC values for the implicit allocation were of 309 MW for direction Romania - Hungary and 1395 MW for direction Hungary - Romania. Usually on export, ATC was occupied after allocations on long-term auctions, which led to low levels for ATC on implicit auctions; as a result, electricity flows exported through the coupling mechanism were insignificant, despite some great opportunities, reflected in large price differences between the two areas, on many hourly intervals. Instead, the availability of significant ATC values on implicit auctions on the import direction, after the application of the netting principle, leads to higher imports of electricity.

Further, it is presented **the hourly difference among the closing prices of coupled DAM on Romania area and respectively Hungary area, coupled with cross-border flows resulted on Romania-Hungary border, in both directions, in 2015.**

Source: Published information by Opcom SA

It is estimated that the price set on DAM in 2015 incorporates accurately the available information on the resource level and electricity demand corresponding to the moment, presenting in the same time, specific high volatility.

The HHI concentration indicator had values that indicate the lack of concentration, on buying (monthly values in the area 338-522); on selling, there is a less concentrated market in eight months of the year, with monthly HHI values between 527-924 and during March-July 2015 there is a moderately concentrated market, except April, when the value of HHI was 527.
By comparing the closing price of DAM with the spot prices for other European power exchanges in 2015, it is noted that the price values recorded by Opcom SA were higher than those on EXAA, except for some hourly intervals in February, April, October and November.



Source: Daily reports of OPCOM SA and published information by EXAA

Intra-Day Market – IDM

The intra-day market, component of the wholesale market, is the centralized electricity trading framework organized by the market operator - OPCOM SA (that is also the counterparty) created for fine-tuning the portfolio of contracts to the production possibilities, demand and cross-border transactions and to reduce potential imbalances. Responding to the principles of non-discrimination, transparency, public and centralized market, IDM is a voluntary market that offers participants standard-tools transaction, for which they may submit offers for sale and/or purchase after the DAM closing time until near the hour of beginning the electricity delivery. On this market, the hourly transactions are secure, independent and are based on anonymous participants.

Although it is still underutilized by market participants, IDM experienced a positive development compared to the previous year as regards the monthly traded volumes, registering at the end of the year a total of 76 GWh, approx. 19% higher than in 2014, the annual value of transactions being approx. 8527 thousands RON.

With a total of 111 holders of license that have signed the IDM participation convention, the monthly participation degree (the number of participants who have placed offers of the total subscribers) ranged this year between 29% (January 2015) to 49% (November 2015).

Balancing Market – BM

In December 2015, 114 producers were acting on this market and 108 Balancing Responsible Parties were registered.

The following table shows **the annual comparative values for the period 2006-2015 for the concentration indicators** determined based on the actual delivered energy by the producers on BM, for each type of regulation and direction.

Concentration indicators on the Balancing market

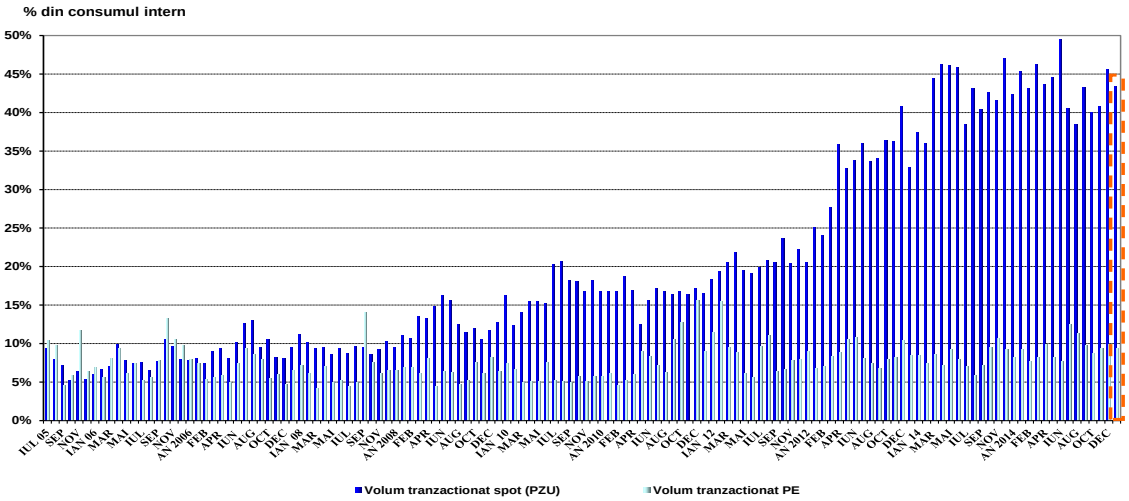
Year	Regulation type	Direction	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
C1	Secondary	Upward	80%	60%	71%	64%	68%	59%	60%	61%	59%	58%
		Downward	80%	56%	71%	64%	67%	56%	57%	58%	58%	57%
	Fast tertiary	Upward	69%	51%	70%	55%	53%	75%	78%	67%	58%	55%
		Downward	53%	30%	38%	47%	62%	46%	53%	47%	70%	74%
	Slow tertiary	Upward	29%	29%	27%	39%	45%	30%	46%	39%	61%	37%
		Downward	31%	19%	27%	32%	34%	42%	46%	37%	63%	36%
HHI	Secondary	Upward	6510	3915	5438	4526	5067	3986	4815	4700	3495	4368
		Downward	6612	3538	5367	4501	4943	3703	4665	4423	3396	4274
	Fast tertiary	Upward	5061	2979	5065	3543	3320	5729	6250	4841	3400	3626
		Downward	3452	1590	2319	2843	4204	2868	3926	3202	4836	5779
	Slow tertiary	Upward	2203	1769	2021	2478	2749	1679	2375	2777	3759	2997
		Downward	2582	1276	1838	2017	2089	2563	3446	2470	3959	2640

Source: Monthly reports of CN TRANSELECTRICA SA

The values of the concentration indicators for 2015 show a dominant participant and an excessive concentration of the balancing market for all types of regulation. Compared to the previous year, the total volume traded on BM increased by 16.6%.

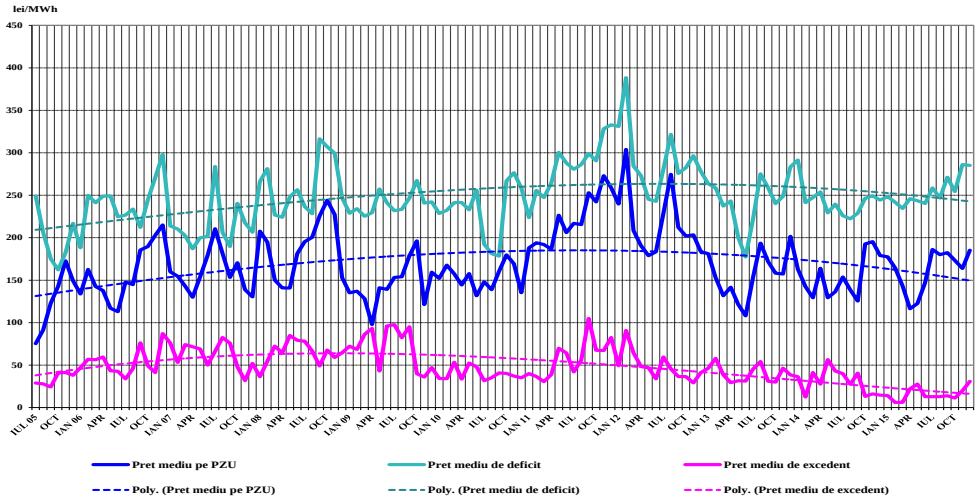
The monthly volumes have consistently been well below under those traded on DAM, as results from the following chart; the linking of the two markets (DAM and BM), was in general correct. Hidroelectrica SA, the largest system services provider, functioned as under a normal hydrologic year and the increased production from renewable sources, characterized

by intermittent operation, as a result of starting the commercial operation of many wind and photovoltaic units, let to the need to balance some significant differences on the production-consumption balance and compliance with the value of the programmed sold by the system operator.



Source: Monthly reports of OPCOM SA and CN TRANSELECTRICA SA

The following chart describes the evolution of the monthly average settlement price of the imbalances recorded by BRPs (surplus price and deficit price) for the period July 2005 - December 2015. The average values of settlement prices for 2015 were 254.74 RON/MWh for the deficit price (by about 4.7% higher than in 2014) and 15.89 Euro/MWh for the surplus price (by about 48.4% lower than in 2014). It is noted that the values indicated are calculated as the arithmetic mean of the hourly recorded prices.



Source: Daily/monthly reports of OPCOM SA

In 2015, the monthly additional value resulting from BM and BRP imbalance settlement had the significance of a cost each month, the aggregate value throughout the period representing a cost of 58.85 mil.RON, approx. 4.5 times higher than the amount recorded in 2014.

The monitoring reports submitted by TSO reveal that in 2015 there were recorded trading periods, for which curtailments of the wind power plants and solar power plants registered as dispatchable units to BM, have been ordered. Every time, the reason was the balancing the generation and the consumption and framing with the value of the scheduled sold, while the other control possibilities had been exhausted. The information on RES curtailments was published on the website at www.transelectrica.ro, link Transparenţă/Echilibrare şi STS, point 21 of the table.

In 2015, Transelectrica SA has identified three participants who accomplished the condition to publish the offers and transactions, as a result of exceeding the 40% of the transaction volume for a certain kind of control and direction. They are Hidroelectrica, Romgaz and CE Oltenia, and the data are published on the website www.transelectrica.ro Transparenţă/Echilibrare şi STS, point 19 of the table.

The Ancillary Services Market

To ensure safe operation of the NPS and the quality of the transmitted electricity on requested parameters by the regulations, the market for ancillary services (AS) was organized through which the TSO contracts reserves for the secondary control and respectively tertiary fast and slow reserves from the qualified producers for this service.

In 2015, following the implementation of the legal framework in force (*Government Decision no. 138/2013 as amended by Government Decision no. 941/2014*) and the related regulatory framework, AS quantities were contracted of both regulated, based on ANRE decisions, and from organizing auctions sessions on different time horizons.

Participants, holding a generation license, can participate on auctions for AS purchase and can make offers on the units portfolio if they have an EIC code, are enrolled in the BM are part of a BRP and own dispatchable units qualified by C.N. Transelectrica S.A. for the service provided. AS producers-providers have a contractual obligation to supply on the BM for each time slot, the control energy corresponding to AS quantities contracted, in which case it is considered that the amounts were made. They shall be paid by C.N. Transelectrica S.A. at the contract price and for those unrealized, AS providers are those who pay to CN Transelectrica S.A. a penalty representing the double price of the contract price.

In 2015, the providers were Hidroelectrica, CE Oltenia, CE Hunedoara, OMV Petrom, Electrocentrale Bucureşti, Romgaz, Electrocentrale Galaţi, Veolia Energie Prahova, Veolia Energie Iaşi, Bepco and Electro Energy Sud. They participated in the AS market both on the regulated component of the market, concluding bilateral agreements based on quantities and the regulated prices established by ANRE decisions, and on the competitive component, having contracts with quantities and prices resulting from the monthly and weekly auctions organized by CN Transelectrica S.A.

In 2015, CN Transelectrica SA purchased quantities for the control reserves (regulated or by auctions) larger than the values for the previous year, by 8% for secondary control, by 6% for fast tertiary control, respectively by 14% for slow tertiary control.

Due to the fact that quantities fixed by decisions did not covered the estimated needs by the TSO, the purchase by auction was predominant for the reserve for the fast tertiary control (92% of the total auctions for this reserve) and for the secondary control reserve (80%). In the case of the slow tertiary reserve, the regulated quantities covered about 86% of the needed control estimated by CN Transelectrica SA.

Monthly, increases of the acquisition for the secondary control reserve were recorded, the values of these increases ranging from 0 to 25%, excepting March 2015, when a decrease by 1%, compared to the value in March 2014, was recorded.

The monthly purchase for the fast tertiary control service recorded large variations compared to those in 2014, pointing out that for March 2015 the purchase was lower by 21% than in the same period of 2014 and that in April 2015 the purchase increased by 115%.

In the first half of 2015, it is noted the increase of the purchased quantities for the slow tertiary reserve with values between 15-82% compared to 2014, while on the second half of the year, CN Transelectrica SA purchased constantly on both components on the AS market (regulated and competitive), values lower than in the same period of 2014.

In the second half of the year 2015, the structure of acquisition of AS services has changed between the two components: regulated and competitive, when was recorded a significant decrease of the share of the regulated market component, for each type of reserve, in favour of competitive market.

In the first half of the year, the purchase of the slow tertiary reserve was covered only based on ANRE decisions. There were registered, every month of 2015, assignments of the regulated contracts among qualified participants for providing the service for slow tertiary control.

If in the first 6 months of 2015, the regulated tariffs for the 3 types of reserves remained at the same level as in 2014, since July 2015, the tariffs were changed. The prices resulting from the auctions varied between 40-63 RON/h*MW for secondary control reserve, in the range of 23.13 to 30.30 RON/h*MW for fast tertiary reserve and within 7.04 to 12.32 RON/h*MW for the slow tertiary reserve.

The following table shows the concentration indicators on the AS market in 2015, based on the information reported by CN Transelectrica SA and respectively the qualified producers for this service.

Year 2015		Secondary reserve	Fast tertiary reserve	Slow tertiary reserve
Regulated component	Contracted quantity (h*MW)	767,310	480,890	6,304,000
	C1 (%)	77.2	63.6	63.9
	C3 (%)	100	100	97.3
Competitive component	Contracted quantity (h*MW)	3,136,625	5,662,030	1,054,320
	C1 (%)	73.5	89.7	74.2
	C3 (%)	94.8	94.0	94.1
	HHI	5728	8070	5756

Source: Monthly reports of C.N. TRANSELECTRICA S.A.

In 2015, it is noted the high degree of concentration on all three reserves purchased by C.N. Transelectrica S.A., both on regulated component as well as on the competitive one.

Therefore, during the first half of the year, the producers CE Oltenia and CE Hunedoara received regulated quantities on all three types of reserves, plus Hidroelectrica for the a secondary reserve and the fast tertiary reserve, respectively Electrocentrale Bucureşti, Electrocentrale Galaţi şi Veolia Energie Prahova for the slow tertiary reserve.

It is noted that the larger share of purchased quantities for the secondary and fast tertiary control, on the competitive component, was offered by the hydro producer; the difference was covered by 5 producers with market shares ranging between 0.7%-17.3% for the secondary reserve and 10 producers with market shares ranging between 0.1-2.3% of the total annual purchased quantity through market mechanism for every type of reserve. For the slow tertiary reserve, the larger quantity was covered by the producer Romgaz, and the difference by 3 producers with market share ranging between 5.9-13.3%.

3.2.2. Electricity retail market

3.2.2.1 Monitoring the level of prices, the level of transparency, the level and effectiveness of market opening and competition

In 2015, the number of electricity suppliers operating on the retail market was 96, of which 21 holders of a generation license and 5 suppliers of last resort.

Electricity supplied by SoLR was approx. 14128 GWh, with a decrease of 7.1% compared to 2014, given the increase of the final consumption with approx. 3.9%.

Regarding the evolution of the structure of electricity consumption to final consumers, based on data processed by ANRE, the data presented in the table below emphasize the followings:

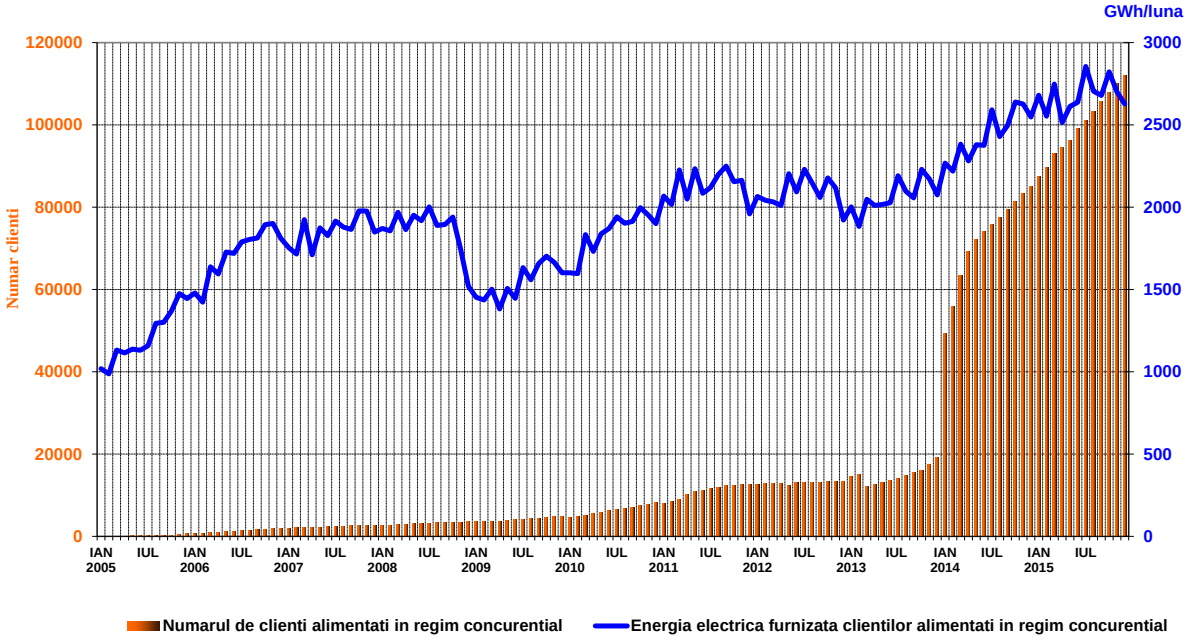
	2008		2009		2010		2011		2012		2013		2014		2015	
	GWh	%	GWh	%	GWh	%	GWh	%	GWh	%	GWh	%	GWh	%	GWh	%
Consumatori alimentati in regim reglementat	23416	51%	23046	55%	21365	49%	20289	44%	20779	45%	18966	43%	15213	34%	14128	31%
Casnici	10376	23%	10990	26%	11246	26%	11590	25%	11987	26%	11670	27%	11626	26%	12005	26%
Necasnici	13040	28%	12057	29%	10119	23%	8699	19%	8792	19%	7296	17%	3587	8%	2123	5%
Consumatori alimentati in regim concurential	22414	49%	18536	45%	22075	51%	25525	56%	25105	55%	24805	57%	29235	66%	32076	69%
Casnici		0%		0%		0%		0%		0%		0%		0%		0%
Necasnici	22414	49%	18536	45%	22075	51%	25525	56%	25105	55%	24805	57%	29235	66%	32076	69%
Consum final total	45830	100%	41583	100%	43440	100%	45814	100%	45884	100%	43771	100%	44448	100%	46204	100%

Source: Monthly reports of the suppliers

- final electricity consumption recorded in 2015 increased by approx. 3.9% from the level recorded in the previous year;
- increase by 3.3% of the household consumption in 2015 compared to 2014, but maintaining its share in the final consumption structure;
- consumption increase by 9.7% for the non-households who have switched supplier compared to 2014 and increase of its share in the final consumption;
- decrease consumption for the non-households supplied by universal service and by last resort by approx. 40.8% in 2015 compared to 2014 and also the decrease of its share in the final consumption.

In December 2015, on the competitive market were 112018 non-households consumers, the electricity supplied to them in 2015 being 32076 GWh.

The evolution of the number of customers in the supply competitive market is shown graphically from the beginning of the market opening in the following figure. As it can be noted, the number of the customers who has changed the electricity supplier strongly increased in 2015, due to the evolution of the monitoring process of the acomplishing the conditions imposed by the regulated framework for the supply by universal service to the non-household customers. The electricity supplied ranged from one month to another, recording higher or equal values to 2500 GWh/month. Since January 2011, the supplied electricity includes the amount of self-supplied electricity to other consumption sites by the dispatchable producers whose self-provided quantities exceeded 200 GWh in the previous year.



Source: Monthly reports of the suppliers

The values of competitive retail market concentration indicators during 2007-2015, showed in the following table, highlights a positive evolution regarding the descrease of the concentration. The year 2015 is characterized by a non-concentrated market, due to the large number of suppliers who competed on this market and to their separation as market power.

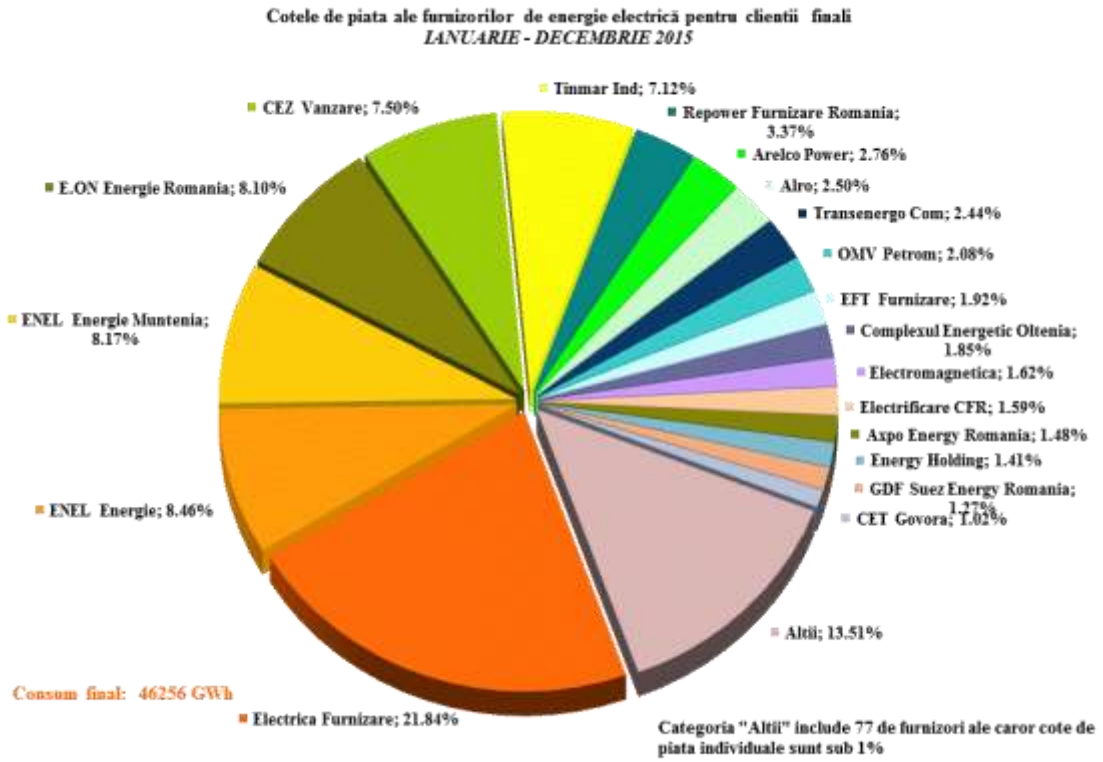
Year	C1	HHI
2007	19%	904
2008	17%	659
2009	16%	669
2010	14%	562
2011	13%	467
2012	12%	530
2013	12%	570
2014	13%	557
2015	15%	548

Although on the overall competitive retail electricity market, indicators show an non-concentrated market, at the level of its consumption categories, it is found that the lack of concentration is maintained only for *IC, ID, IE* and *Others* categories, while at the *IB* and *IF* categories is recorded a moderate level of concentration, and for the *IA* consumption category there is a high level of concentration.

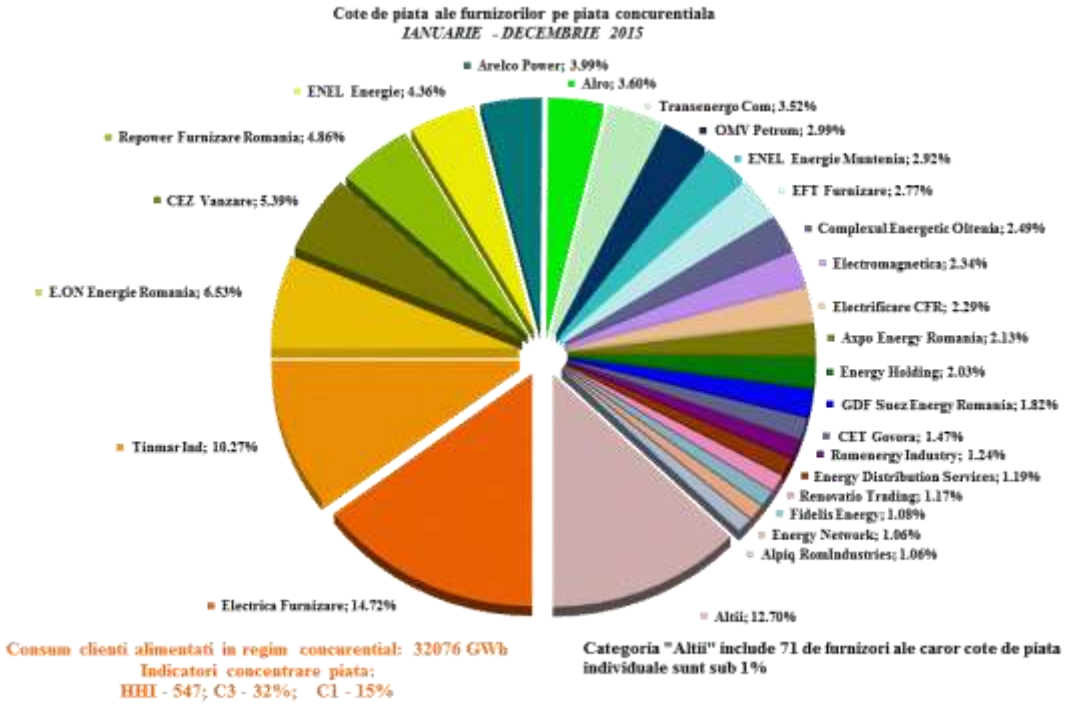
Indicatori - an 2015	Categorie consumator							Total PAM conc
	IA	IB	IC	ID	IE	IF	Altii	
C1 - % -	29	25	23	15	17	25	16	**15**
C3 - % -	74	52	42	33	37	47	36	**32**
HHI	2030	1210	920	610	714	1064	794	**548**
Consum - GWh -	794	3837	3378	8003	4350	2014	9701	**32076**
NR. FURNIZORI	67	81	72	66	37	22	23	**96**
nr. furnizori de ultimă instanţă	5	5	5	5	4	3	3	**5**
nr. furnizori concurentiali	49	62	55	53	29	16	15	**70**
nr. producatori	13	14	12	8	4	3	5	**21**

Source: Monthly reports of suppliers – ANRE processing data

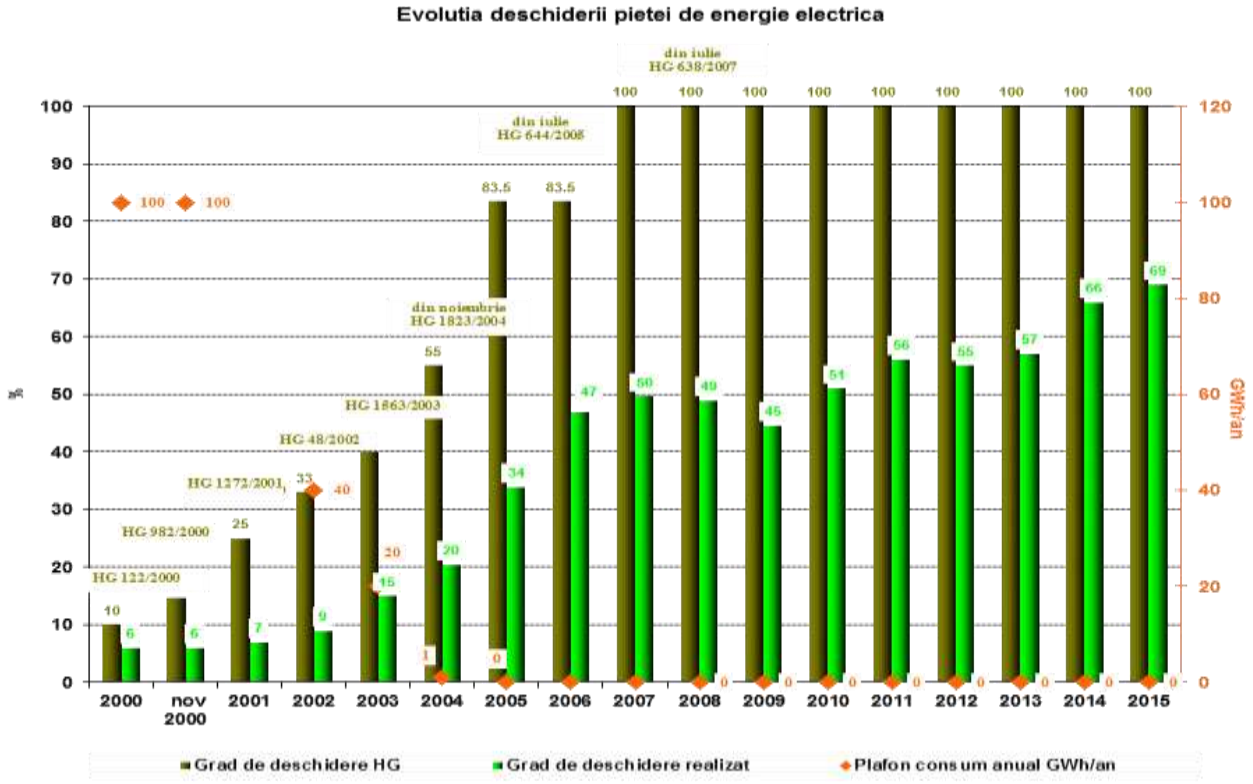
In the following graphs, the market shares for the year 2015 of suppliers of final customers are shown, calculated for the entire retail electricity market (the first graph) and respectively for the competitive component of the retail market (the second graph).



Source: Monthly reports of suppliers



Source: Monthly reports of suppliers



Source: Monthly reports of suppliers

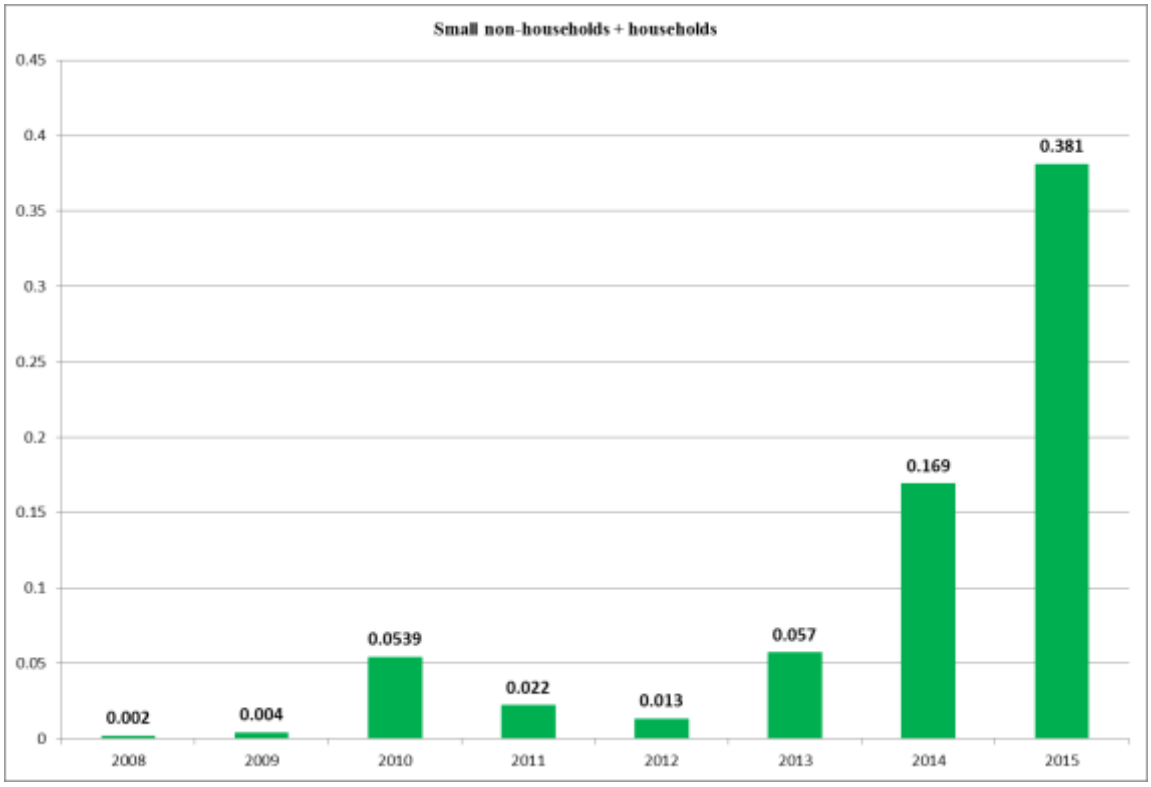
The supplier switching rate for 2015, shown in the following table, is determined for each type of consumer in two ways: by the number of consumption sites that have switched supplier in 2015 and according to the energy supplied to those consumption sites. It is noted that the self-consumption of the largest industrial consumers who also have a supply license and have decided to buy the electricity on the wholesale market, as competitive suppliers, is not included.

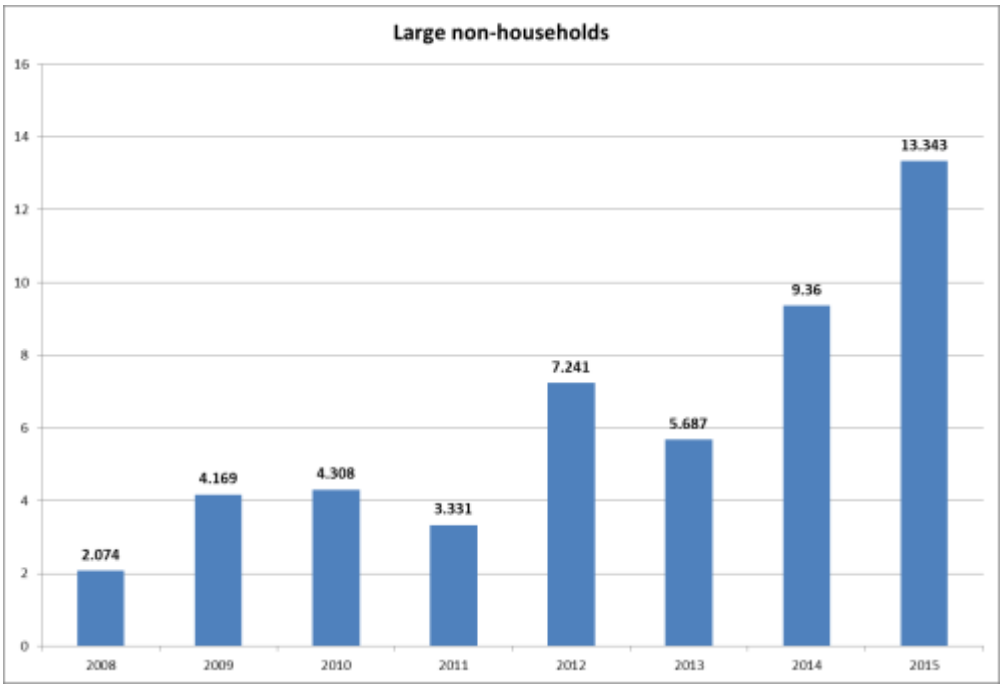
No.	Consumer type	Supplier switching rate (%)	
		No. of consumption sites	Supplied electricity
1.	SMALL non-households + Households (contracted power less than or equal to 100 kW)	0.381	7.141
2.	LARGE non-households (contracted power between 100 kW and 1000 kW)	13.343	26.733
3.	VERY LARGE non-households (contracted power higher or equal to 1000 kW)	41.400	30.248
4.	**TOTAL Retail market**	**0.432**	**18.374**

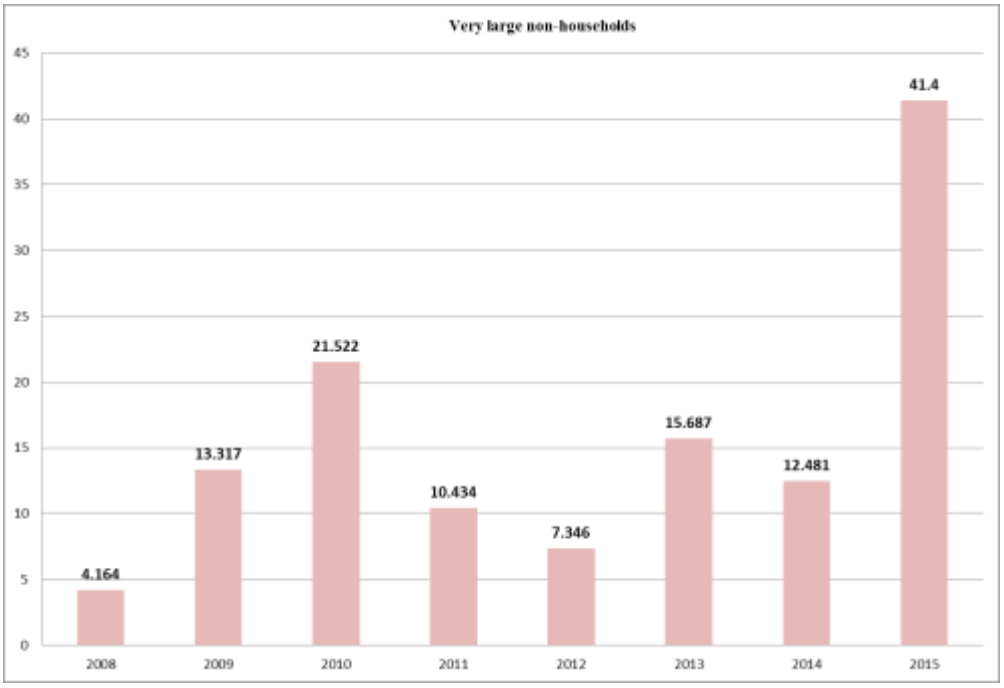
Source: suppliers data, ANRE processing data

The rate value of supplier switching for the retail market determined on the basis of the number of consumption sites has registered high increases compared to last year's values, which indicates that consumer migration from one supplier to the other was resumed; there can be noticed significant increases of the indicator for small non-households and households category, as a result of the deregulation process undertaken in Romania.

The evolution of the supplier switching rate on the number of consumption sites in 2008-2015 is shown below:







The next table shows the number of suppliers with market shares above 5% and the market concentration indicators for each category of final consumers registered in 2015.

We mention that the dominance principle was taken into account in the calculation of the market indicators values and the delivered electricity based on which was established the market share of each supplier does not include self-consumption of industrial consumers who have a supply license and have decided to buy electricity on the wholesale market, as competitive suppliers.

No.	Consumer type	Number of suppliers with market shares above 5%	C1 (%)	C3 (%)	HHI
1.	SMALL non-households + Households (contracted power less than or equal to 100 kW)	5	25	62	1612
2.	LARGE non-households (contracted power between 100 kW and 1000 kW)	5	27	49	1182
3.	VERY LARGE non-households (contracted power higher or equal to 1000 kW)	7	10	28	544
4.	**TOTAL Retail market**	**5**	**19**	**41**	**796**

Source: supplier data, ANRE processing data

Values of market structure indicators calculated for 2015 indicate:

- a non-concentrated market for retail market segment corresponding to very large non-households and to the whole retail market;
- a moderate level of concentration for the retail market segment corresponding to large non-households and small non-households and households;

3.2.2.2 Recommendations on supply prices, investigations and measures to promote competition

The following table shows average electricity selling prices for each category of non-households supplied in the competitive market. It is noticed that the average price decreased compared to 2014, when its value was 287.16 RON/MWh.

Consumer category	Consumption (MWh)	Average price (RON/MWh)
IA	793,567.619	426.67
IB	3,836,647.229	372.25
IC	3,378,025.649	318.64
ID	8,002,935.633	290.25
IE	4,349,921.448	263.15
IF	2,013,780.999	234.78
Others	9,700,907.016	213.53
Total	32,075,785.594	276.06

The average selling price resulted by dividing the total value of supplier revenues from sales to a certain consumer category (including the value of services provided: transmission TG, transmission TL, ancillary services, distribution, settlement, imbalances, BRP aggregation taxes, measurement), to the total amount of electricity sold to that category. Prices do not include VAT, excise or other taxes.

Framing consumers by categories was done on the basis of their annual forecast of consumption in accordance with the provisions of Directive 2008/92/ EC. The following table details the ranges of consumption to each category separately.

Non-households categories	Annual consumption in the range (MWh):	
Base - IA		<20
Base - IB	20	<500
Base - IC	500	<2000
Base - ID	2000	<20000
Base - IE	20000	<70000
Base - IF	70000	<=150000
Others	>150000	

Regulated tariffs for households

Household's regulated tariffs, applicable starting with 01.01.2015, were set and approved at the end of 2014 by ANRE Order no. 157 of 15.12.2014, in accordance with the provisions of the *Methodology for establishing prices and tariffs for final consumers who do not use their eligibility right*, approved by ANRE Order no. 82/2013. After the calculations of the average return price of electricity supplied at regulated tariffs, required in 2015, **the regulated tariffs in force, approved by ANRE Order no. 57/2014 were increased by 2.25%**.

In determining the regulated tariffs approved by ANRE Order no. 157/2014 the following justified costs for 2015 were taken into account:

- Acquisition, transmission and distribution costs, according to the tariffs established by ANRE and quantities/prices of Decisions no. 2718 and 2719 of 15 December 2014;
- Supply cost of 4.5 RON/customer/month, equal to that used in determining tariffs applicable in 2014 (regulated and CMC). This cost was split into the two categories of activities (regulated supply tariff, respectively CMC tariff) by applying the 45% related to the 2015 average degree of deregulation, resulting for the electricity related to regulated tariffs a supply cost of 2.475 RON/customer/month;
- Regulated profit of 4 RON/MWh, equal to that used in determining tariffs applied in 2014;
- The cost of participation in the centralized market taken into consideration at the same level with that considered in setting the tariffs applied in 2014, respectively 0.10 RON/MWh;
- Correction representing sums due to be recovered in 2015, from the activity done in the previous periods (7.20 RON/MWh);
- Additional amounts estimated as necessary in 2015 to compensate for reduced income of SoLR from the reservation/subscription component of regulated tariffs (reduced by 10% compared to the second semester of 2014, corresponding to the degree of deregulation of the first semester of 2015, and by another 10%, corresponding to the degree of deregulation of the second half of 2015).

The average return price of the electricity supplied at regulated tariffs, resulting in 2015 from the application of regulated tariffs approved by ANRE Order no. 157/2014, was estimated at **404.46 RON/MWh**.

Calculations determining the average return price of the electricity supplied at regulated tariffs were resumed at the end of the first semester of 2015 for the second semester of 2015, according to the provisions of the *Methodology for setting tariffs applied by suppliers of last*

resort to final customers, approved by ANRE Order no. 92/2015. Justified costs taken into consideration for the second semester of 2015 were the following:

- Aquisition, transmission and distribution costs, according to tariffs set by ANRE and quantities/prices from the decisions no. 2718 and 2719 of 15 December 2014;
- Regulated profit of 1.5% of justified costs (according to the provisions of the Methodology approved by Order 92/2015);
- Supply activity cost of 4.5 RON/customer/month (standardized at the level of each SoLR, for all categories of customers, in RON/MWh, according to the Methodology approved by Order 92/2015);
- The cost of participation in the centralized market, of 0.05 RON/MWh;
- The balance of regulated tariff corrections from the previous periods (according to the Methodology approved by Order 92/2015);
- Amounts estimated as necessary to compensate for the reduction in the second semester of 2015 of income from the reservation/subscription component (corresponding to the increase of the degree of deregulation in the second semester of 2015 by another 10%)

Following the calculations, the regulated tariffs approved by ANRE Order no. 157/2014 were maintained throughout 2015, not being met the conditions for their adjustment at the end of the first semester of 2015. Under these conditions, the average return price of the electricity supplied at regulated tariffs, determined in the second semester of 2015 from the application of regulated tariffs approved by ANRE Order no. 157/2014 was estimated at **403.98 RON/MWh**.

CMC tariffs

1. According to the roadmap for phasing out regulated tariffs, provided by the Memorandum of Understanding signed by the Romanian Government with the European Commission on 13 March 2012, in 2015 stages 8 and 9 of phasing out regulated tariffs were concluded. The percentages of purchasing electricity from the competitive market for final customers who have not used their eligibility right were:

- 100% of consumption for non-households and 40% of consumption for households for the 8th stage of phasing out regulated tariffs (1 January 2015 – 30 June 2015);
- 100% of consumption for non-households and 50% of consumption for households for the 9th stage of phasing out regulated tariffs (1 July 2015 – 31 December 2015);

Pursuant to the *Methodology of establishing prices and tariffs for final customers who do not use their eligibility right*, approved by ANRE Order no. 82/2013, at the end of 2014, the values of CMC tariffs were endorsed for the 8th stage of phasing out regulated tariffs (1 January 2015 – 30 June 2015), as following:

SoLR	CMC tariffs January – June 2015 [RON/kWh]		
	HV (110 kV)	MV (1-110 kV exclusive)	LV (0.1-1 kV inclusive)
S.C Electrica Furnizare S.A. (Approval no. 58/15 December 2014)			
-Muntenia Nord	0.2704	0.3132	0.4518
-Transilvania Nord	0.2615	0.3088	0.4210
-Transilvania Sud	0.2670	0.3138	0.4362
S.C. CEZ Vânzare S.A. (Approval no. 57/15 December 2014)	0.2634	0.3118	0.4491
S.C. E.ON Energie România S.A. (Approval no. 61/15 December 2014)	0.2504	0.2961	0.4386
S.C. Enel Energie Muntenia S.A. (Approval no. 59/15 December 2014)	0.2463	0.2826	0.4177
S.C. Enel Energie S.A. (Approval no. 60/15 December 2014)			
- Banat area	0.2668	0.3116	0.4453
- Dobrogea area	0.2612	0.3052	0.4505

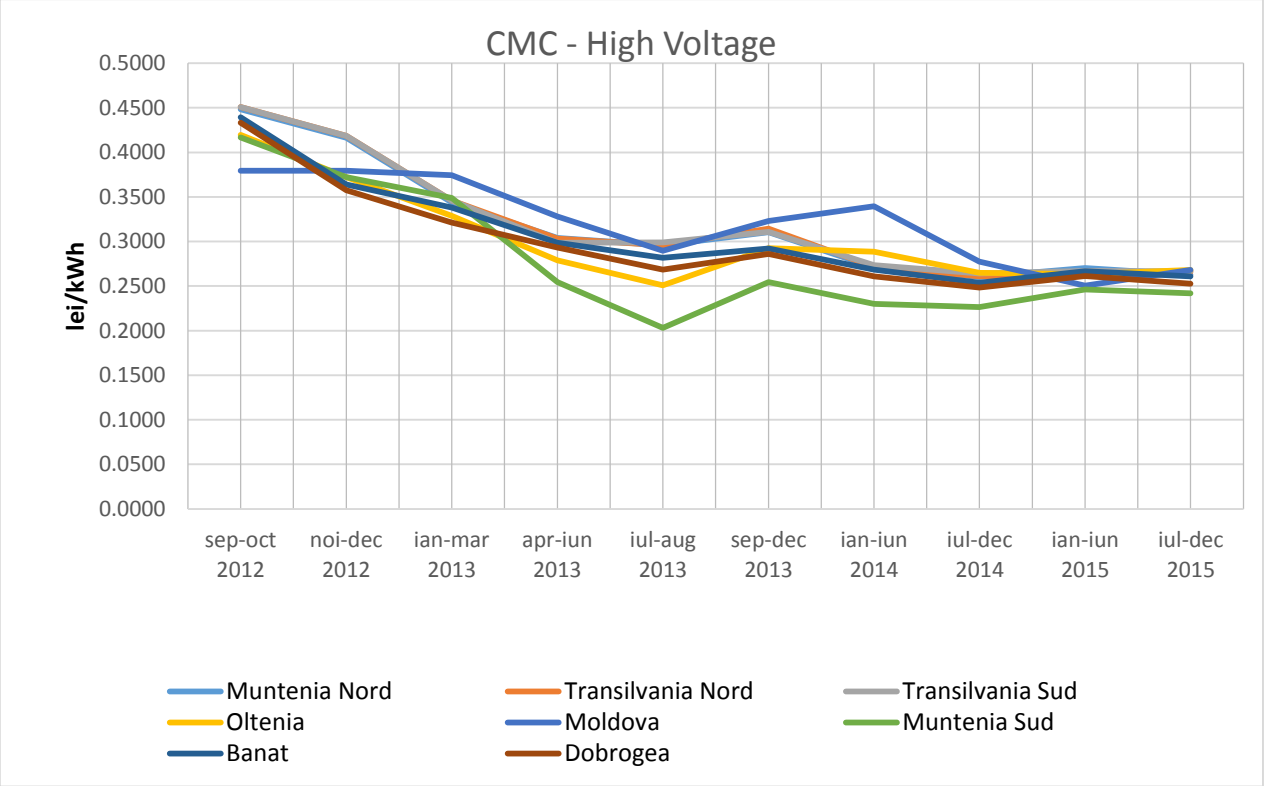
Pursuant to the *Methodology of establishing tariffs applied by suppliers of last resort to final customers*, approved by ANRE Order no. 92/2015, at the end of the first semester of 2015, the values of CMC tariffs were endorsed for the 9th stage of phasing out regulated tariffs (1 July 2015 – 31 December 2015), as following:

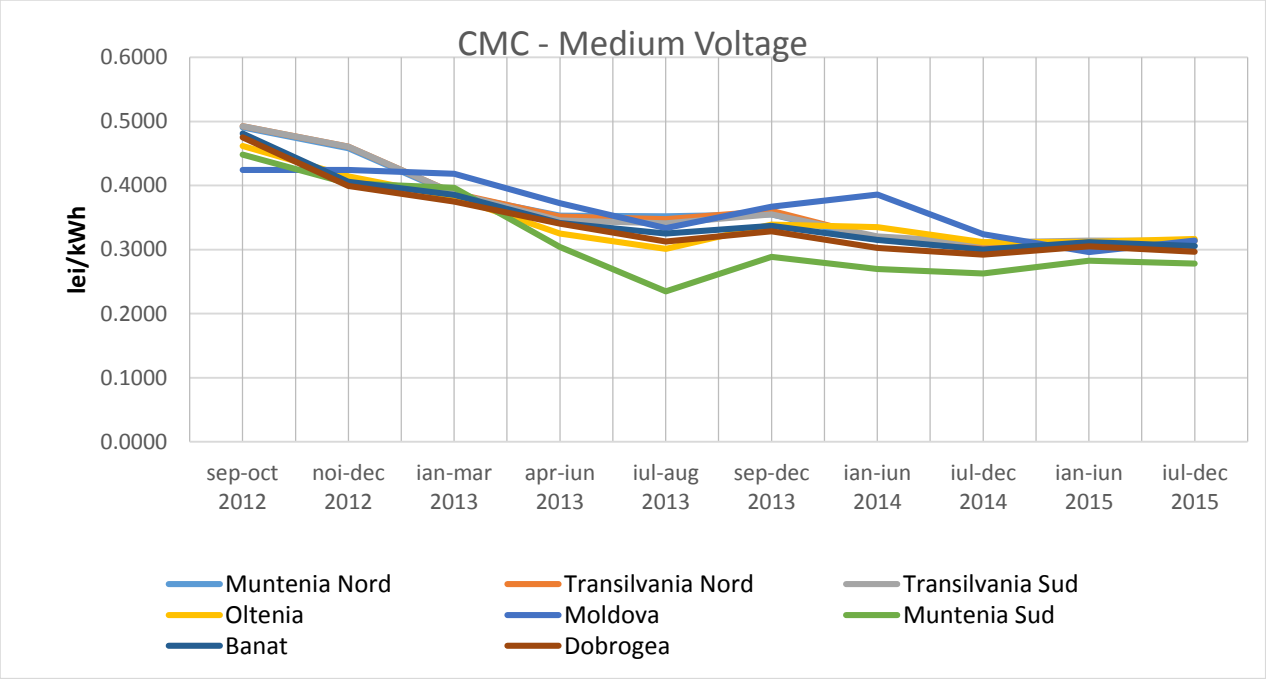
SoLR	CMC tariffs July – December 2015 [RON/kWh]		
	HV (110 kV)	MV (1-110 kV exclusive)	LV (0,1-1 kV inclusive)
S.C Electrica Furnizare S.A. (Approval no. 21/25 June 2015)			
-Muntenia Nord	0.2627	0.3055	0.4441
-Transilvania Nord	0.2661	0.3134	0.4256
-Transilvania Sud	0.2667	0.3135	0.4359
S.C. CEZ Vânzare S.A. (Approval no. 20/25 June 2015)	0.2681	0.3166	0.4539
S.C. E.ON Energie România S.A. (Approval no. 24/25 June 2015)	0.2682	0.3139	0.4564
S.C. Enel Energie Muntenia S.A. (Approval	0.2420	0.2783	0.4134

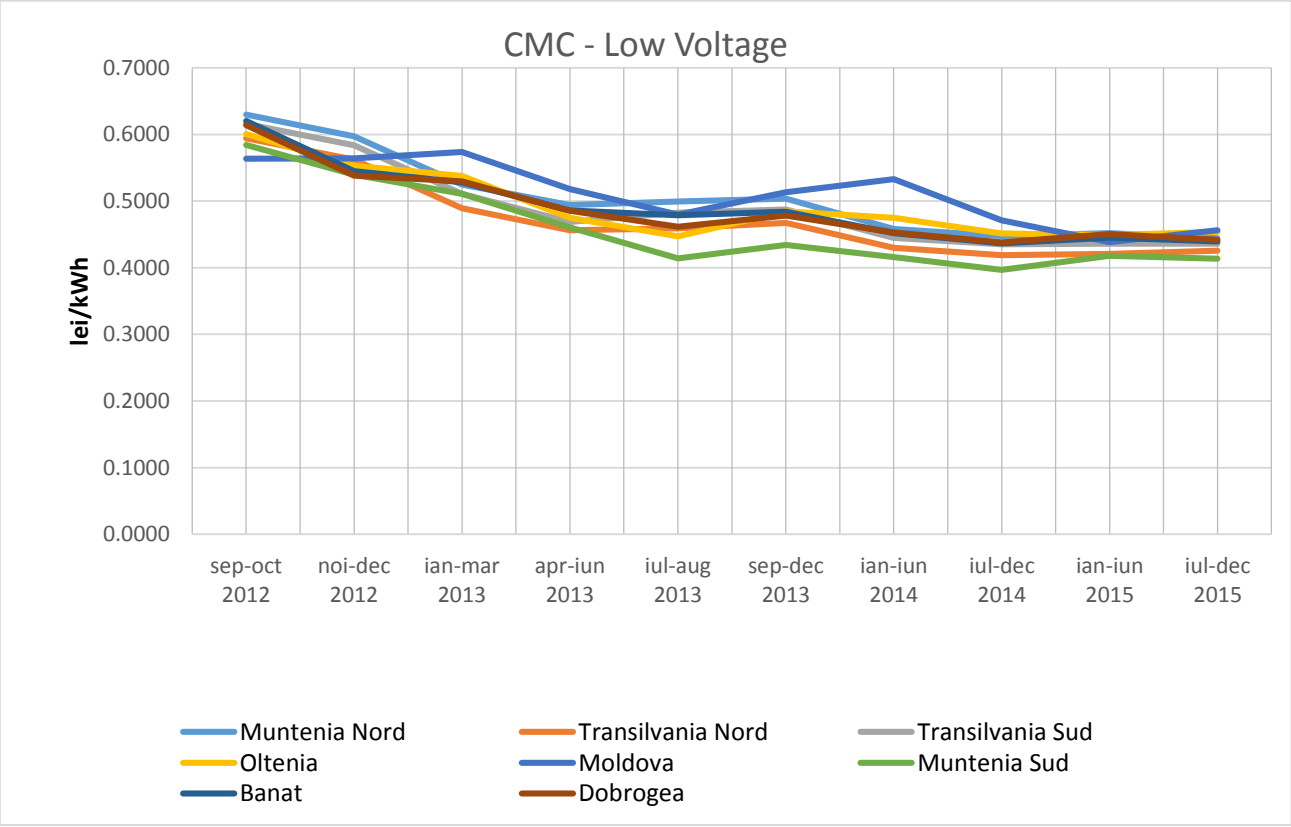
no. 22/25 June 2015)			
S.C. Enel Energie S.A. (Approval no. 23/25 June 2015)			
- Banat area	0.2609	0.3057	0.4393
- Dobrogea area	0.2525	0.2965	0.4418

Starting with the second quarter of 2015, the purchase of electricity supplied at CMC tariffs was done through the Centralized Market for Universal Service (CMUS), the justified acquisition costs being set based on the closing prices of auctions held quarterly on the CMUS.

CMC tariffs evolution is presented in the following graphs:







Regulated tariffs for households in 2016

Under the *Methodology for setting tariffs applied by suppliers of last resort to final customers*, approved by ANRE Order no. 92/2015, at the end of 2015 the household's regulated tariffs were approved, applicable starting with 01.01.2016 (by ANRE Order no. 176/2016). After the calculations for establishing the average return price of electricity

supplied at regulated tariffs, necessary in 2016, resulted that conditions are met **for the reduction by 5.36% of regulated tariffs in force at the end of 2015**.

CMC tariffs

Under the *Methodology for setting tariffs applied by suppliers of last resort to final customers*, approved by ANRE Order no. 92/2015, the CMC values were approved for the 10th stage of phasing out regulated tariffs (1 January 2016 – 30 June 2016), as follows:

SoLR	CMC tariffs January - June 2016 [RON/kWh]		
	HV (110 kV)	MV (1-110 kV exclusive)	LV (0,1-1 kV inclusive)
S.C Electrica Furnizare S.A. (Approval no. 37/22 December 2015)			
-Muntenia Nord	0.2906	0.3273	0.4461
-Transilvania Nord	0.2859	0.3301	0.4337
-Transilvania Sud	0.3079	0.3502	0.4587
S.C. CEZ Vânzare S.A. (Approval no. 36/22 December 2015)	0.2899	0.2899	0.2899
S.C. E.ON Energie România S.A. (Approval no. 40/22 December 2015)	0.2996	0.2996	0.2996
S.C. Enel Energie Muntenia S.A. (Approval no. 39/22 December 2015)	0.2669	0.2669	0.2669
S.C. Enel Energie S.A. (Approval no. 38/22 December 2015)			
- zona Banat	0.2878	0.3258	0.4393
- zona Dobrogea	0.2784	0.3169	0.4437

In the 10th stage of phasing out regulated tariffs, the percentages of purchasing electricity from the competitive market for final customers who have not used their eligibility right are:

- 100% of non-households consumption,
- 60% of household's consumption.

The values of the average prices paid for electricity consumption by Romanian final customers, both from the regulated and competitive market (for non-households category, except those with consumption higher than 150,000 MWh annually, respectively for the household's category) in 2012-2015 periods are shown in the table below:

	HOUSEHOLDS			NON-HOUSEHOLDS		
	Price without taxes	Price with taxes	Tariff for services	Price without taxes	Price with taxes	Tariff for services
	RON/MWh	RON/MWh	RON/MWh	RON/MWh	RON/MWh	RON/MWh
2012	365.24	482.43	213.83	361.37	468.37	123.02
2013	400.11	581.31	232.74	364.45	534.42	134.35

2014	412.06	575.07	234.66	318.97	455.35	138.77
2015	422.81	592.80	231.73	321.42	463.83	130.54

Taxes include VAT, excise, cogeneration contribution and the value of green certificates, and the services tariff is the average price for the transmission, distribution, ancillary services and market operation.

3.3. Security of electricity supply

According to the provisions of Article 24 of *Law no. 123/2012 on electricity and natural gas*, in case of an unexpected crisis in the electricity market and where physical safety or security of persons, appliances or installations or system integrity is threatened, transmission and system operator may propose ANRE and the relevant ministry to adopt safety measures. The measures taken in these situations should cause the least effect on the proper functioning of the European internal market and strictly aim at solving the crisis that generated them. Implementation of these measures is done by Government Decision, initiated by the relevant ministry.

During 2015, there were no crisis situations in the electricity market.

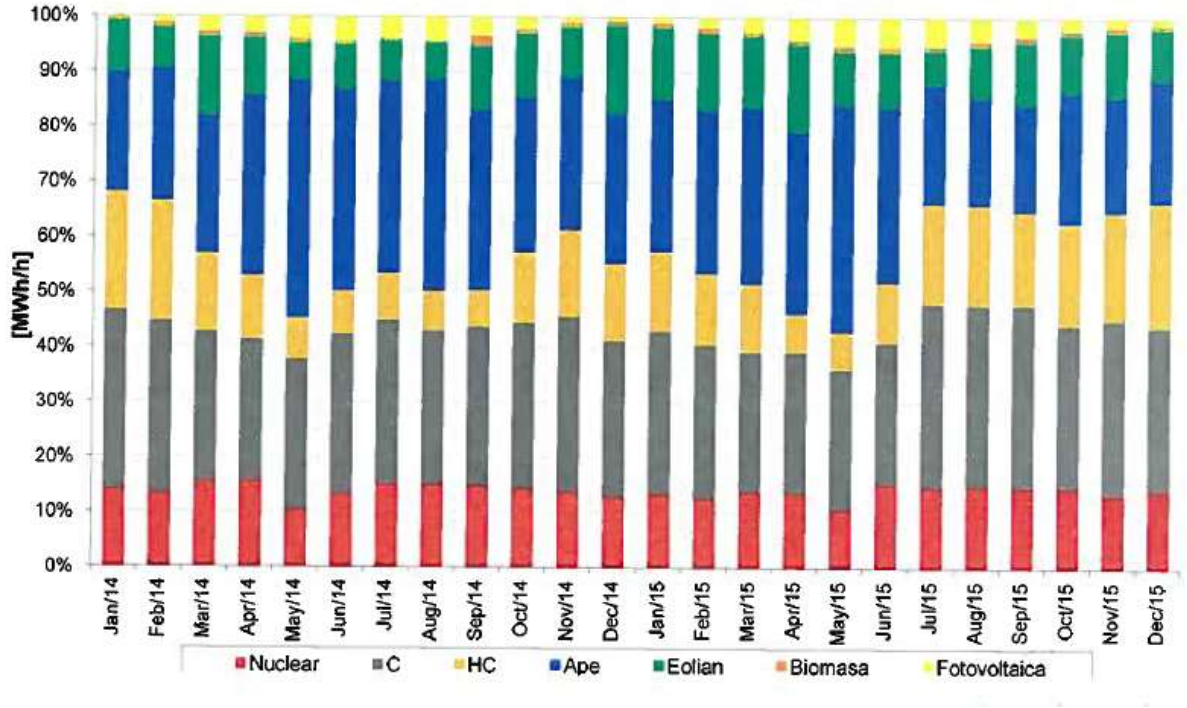
3.3.1 Monitoring the balance between supply and demand

In 2015, electricity generation was of 65.598 TWh, about 1.1% higher than in 2014. Internal consumption amounted at about 58.87 TWh, about 2% higher than in 2014. Romania was a net electricity exporter during 2015, the import-export balance being negative (- 6.729 TWh).

Regarding the used resources, big differences have not been registered compared to 2014. Nuclear and hydro generation registered decreases of 0.26%, respectively 3.88%. Increases were registered in the coal and biomass-based electricity generation (0.02%), solar generation (0.53%), wind generation (1.21%) and hydrocarbons generation (2.37%).

Maximum gross consumption in 2015 was 176 MW higher than the maximum value recorded in 2014, but also with 321 MW higher than the consumption peak of 2013. Thus maximum gross consumption was of 9479 MWh/h and was registered on 8 January 2015 at 6 pm. The minimum value of consumption (4177 MWh/h) was recorded in 12 April 2015, at 3 pm.

The structure of resources used for electricity generation
January 2014 – December 2015



Source: CN Transelectrica SA

The sum of the net maximum installed generation capacity of individual plants at 31 December 2015 was of 20.419 GW, of which 10.623 GW renewable resources and 9.796 GW conventional sources. Net available power and consumption values on the third Wednesday of the month at 11 CET (net values) are shown below.

2015 (MW)	Ian	Feb	Mar	Apr	Mai	Iun	Iul	Aug	Sept	Oct	Noi	Dec
Net available power	21115	21124	21124	21172	21182	21198	21213	21093	21093	20972	20984	20419
Consumption	7314	7651	6936	6282	6361	6330	6200	6098	6072	6672	6313	7609

Source: CN Transelectrica SA

The generation park of a system is considered adequate if it can meet the demand of electricity in all the stationary states of the system under normal conditions. For a perspective evaluation, this capacity is verified for the time of year when NPS reaches the maximum consumption; namely, peak winter evening, using the methodology applied by ENTSO-E at European level.

Installed capacity is required to be significantly higher so that the generation park can provide available power because generation units are periodically removed from operation for repairs and maintenance, are affected by unplanned unavailability or partial reduction of the availability due to different causes. Also, an operational reserve should permanently be kept available to the TSO. Currently, this is sized to quickly balance continuous consumption variations and the unexpected disconnection of the largest units in the system. After the mobilization of the rapid reserve, this must be replaced by loading the slow tertiary reserve so that it can be used in the next incident.

According to the specifications of the ENTSO-E study on system adequacy forecast (Scenario Outlook and System Adequacy Forecast 2015 - 2030), the forecast of the net generation capacities and of the electricity consumption in Romania on 2 work scenarios is presented below:

Scenario A	**2016**		**2020**		**2025**	
	January 7:00 pm	**July 7:00 pm**	**January 7:00 pm**	**July 7:00 pm**	**January 7:00 pm**	**July 7:00 pm**
Net generation capacity (GW)	21.14	21.14	22.95	22.95	25.25	25.25
Consumption (GW)	7.91	6.12	8.18	6.29	9.02	6.81

Scenario B	**2016**		**2020**		**2025**	
	January 7:00 pm	**July 7:00 pm**	**January 7:00 pm**	**July 7:00 pm**	**January 7:00 pm**	**July 7:00 pm**
Net generation capacity (GW)	21.27	21.27	24.59	24.59	26.98	26.98
Consumption (GW)	7.91	6.12	8.18	6.29	9.02	6.81

3.3.2. Monitoring investment in generation capacities

The establishment of new generation capacities and the rehabilitation of existing ones are done under **authorizations** issued by ANRE. The procedure for granting authorizations and conditions of their grant: criteria, power levels, approvals, differentiated by power category and activities are specified in the *Regulation for granting authorizations and licenses in the electricity sector*, approved by **ANRE Order no. 48/2013**. Refusal to grant the authorization or absence of a reply within the deadline, or any decision of the authority considered to be unlawful or tortuous may be appealed to the Bucharest Court of Appeal in accordance with legal provisions.

Authorizations granted in 2015 are presented in the table below:

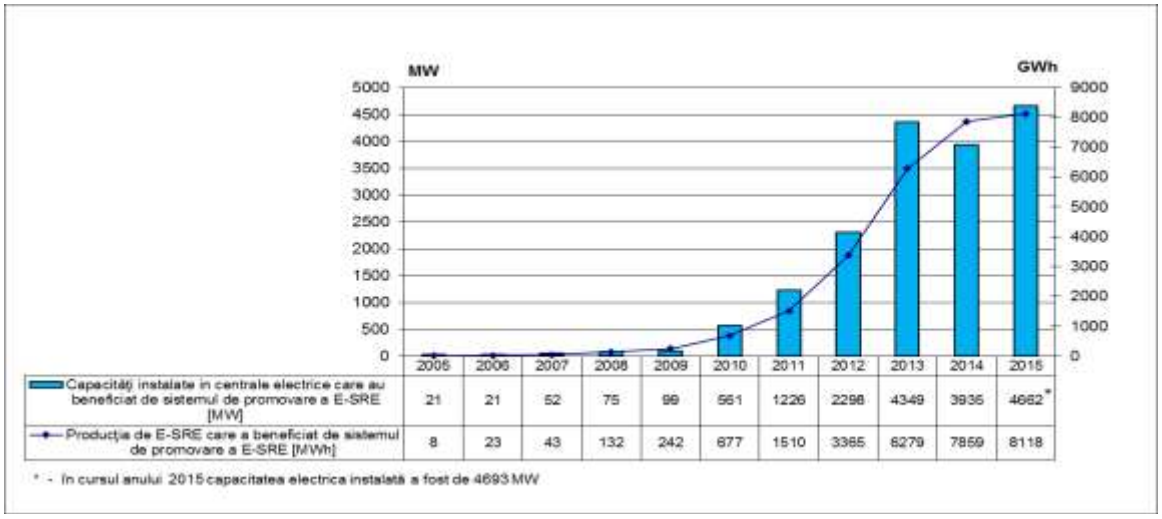
No. crt.	Authorized power plants (by type of energy source)	No. of authorizations granted	Installed electrical power of newly authorized capacities [MW]
1	Solar	27	208.48
2	Wind	3	42.05
3	Hydrocarbons	9	82.57
4	Hydro	5	31.76
5	Biomass	3	22.00
		Total 47	**Total 386.86**

During 2015 a number of 42 authorizations expired. The energy capacities related to these authorizations are totalling 917 MW within 31 solar power plant projects, 9 projects of wind power plants and two thermo power plants. At ANRE's request, part of the economic operators, holding of the expired authorizations, declared that they have given up

establishment of energy capacities because of the economic context that is unfavourable to the continuation of investment projects. Part of them requested and obtained new authorizations in order to continue projects or declared that they would obtain the authorizations prior to starting postponed works.

ANRE approved until 31 December 2015 generation capacities of renewable energy with a total installed capacity of 4,662 MW. Of the total, 2,932 MW are wind turbines, 1,296 - photovoltaic panels and 106 MW - biomass, biogas and landfill gas. At the same time, 328 MW are for small hydro, below 10 MW, out of which 228.8 MW in new power plants, 85.5 MW in refurbished power plants and 13.5 in old small hydro power plants. There are 70 accredited economic operators for the wind power generation, 514 for solar power, 89 for hydro power and 25 for biomass and biogas.

The evolution of electric capacity installed in power plants that benefited from the promotion system of E-RES and electricity produced in these plants for 2005 ÷ 2015 is presented in the figure below. The amount of electricity that benefited from the support system for RES during 2015 was of 8,118 GWh.



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Capacități instalate în centrale electrice care au beneficiat de sistemul de promovare a E-SRE [MW]	21	21	52	75	99	561	1226	2298	4349	3936	4662*
Producția de E-SRE care a beneficiat de sistemul de promovare a E-SRE [MWh]	8	23	43	132	242	877	1510	3385	6279	7859	8118

* - în cursul anului 2015 capacitatea electrica instalată a fost de 4693 MW

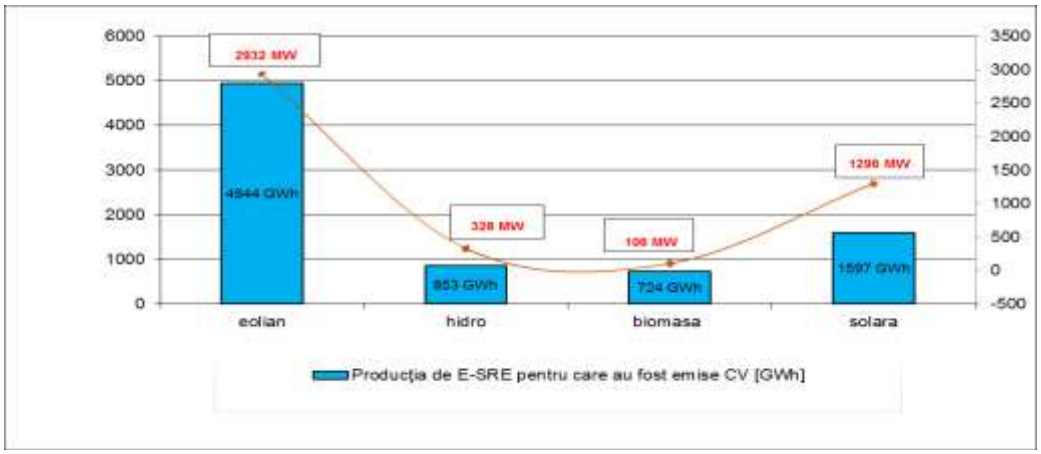
By 2015, there was a high proportion of electricity generated from wind power plants. The structure of E-RES generation that benefited from the promotion system through green certificates in 2015 was the following:
- 60.90% electricity generated in wind power plants,

- 10.51% electricity generated in power plants that generate electricity based on hydraulic power with installed power of up to 10 MW,

- 8.92% electricity generated in biomass-based power plants, including landfill gas and fermenting sludge from wastewater treatment plants,

- 19.67% electricity generated in solar-based power plants.

The structure of E-RES generation and the related installed capacities that benefited from the promotion system through green certificates during 2015, by type of source is presented below:



The bonus support scheme has been introduced for cogeneration capacities starting with April 2011. The scheme was notified to the Commission in accordance with European regulations on state aid.

36 cogeneration producers benefited from the support scheme in 2015. The total amount of electricity generated in high efficiency cogeneration that benefited from the bonus during January – December 2015 was of 4.717 TWh (after adjustment carried out in the month of March 2016), a decrease of 7.5% compared with the value registered in 2014.

Source: CN Transelectrica SA – Projects of common interest

Concerning the **development of electricity networks**, the main investments proposed to be made in accordance with the Power Transmission Grid Development Plan - 2014-2023 are following:

To increase the exchange capacity on western and south-western part of Romania, network reinforcements are planned in the area that will remove congestions, both on the direction E - W at the border with Hungary and Serbia and on transit direction N - S, by strengthening the corridor Portile de Fier - Resita - Timisoara - Arad.

Considering the contribution to the implementation of European Union strategic priorities regarding the Trans-European energy infrastructure, these projects have been included by the European Commission in the first list of projects of common interest (PCIs), reload and approved in the second list. The projects taken into consideration are the following:

- Overhead Line 400 kV d.c. Reşiţa (RO) – Pancevo (Serbia);
- Overhead Line 400 kV Porţile de Fier – Reşiţa and development of the power station 220/110 kV Reşiţa by the a new building of 400 kV;
- Pass to 400 kV of Overhead Line (OHL) 220 kV d.c. Reşiţa –Timişoara – Săcălaz – Arad, including the building of the power stations 400 kV Timişoara and Săcălaz.

Projects will also allow integration in the National Power System of wind power generation units expected in the South-West (Banat) and the existing Portile de Fier hydroelectric power plant.

To increase the transmission capacity in the East area, with Republic of Moldova, asynchronous interconnection by converting stations back-to-back is analysed. OHL 400 kV Suceava (RO) - Balti (Moldova) will increase the transmission capacity provided by the OHL 400 kV Isaccea (RO) - Vulcanesti (MD) and four OHL 110 kV. Using the maximum capacity of this project is conditioned also by the building of OHL 400 kV Suceava - Gădălin included in the Plan.

To increase the transmission capacity between the eastern area (especially Dobrogea) and the rest of the interconnected power system, several projects were planned to strengthen the transmission network. To the projects provided in the 2010 edition of the Plan several projects were added to increase the capacity of existing lines of 400 kV and 220 kV, by replacing the conductors along the entire length or in segments with a section less than the rest of the line.

Among these projects, several major projects contribute significantly by increasing the interconnection capacity with Bulgaria and strengthening the infrastructure that will support the transmission of the flow of power between the Black Sea coast and the North Sea/Atlantic Ocean coast, the implementation of the European Union strategic priorities regarding Trans-European energy infrastructure, prerequisite for achieving energy and climate policy objectives. These projects have been included by the European Commission in the first list of Projects of common interest (PCIs). Part of these projects were resumed on the second list of Projects of common interest.

Transmission projects in the East section (Dobrogea) that are included in the Development Plan for the next ten years are the following:

- OHL 400 kV d.c. Smârdan – Gutinaş;
- OHL 400 kV d.c. Cernavodă - Stâlpu, input/output circuit in Gura Ialomiţei, that will be continued with LEA 400 kV Stâlpu – Braşov;

There are also other projects dedicated to increasing the security of supply of consumption in poor areas, retrofitting and modernization of existing plants.

The main investment objectives whose executions works will start during 2016-2018 are:

Technical upgrading of the electricity transmission network:

- Technical upgrading of the 400/110/20 kV Domneşti station;
- Technical upgrading of the 220/110/20 kV Turnu Severin East station;
- Technical upgrading of the 400/110/20 kV Smârdan station;
- Technical upgrading of the 220 kV Oţelărie Hunedoara station;
- Upgrading the electrical transformer station 220/110/20kV Arefu;
- Upgrading the electrical transformer station 220/110 kV Răureni;
- Upgrading of 220/110 kV Dumbrava station;
- Upgrading the electrical transformer station 220/110/20 kV Ungheni;
- Assembling the transformer T3-250 MVA in the station 400/110 kV Sibiu South;
- Connection of the Turnu Măgurele, Mostistea, Stâlpu, Teleajen stations to the fiber optic network of Transelectrica - stage 2.

Increasing the interconnection capacity:

- OHL 400 kV Gădălin-Suceava,
- OHL 400 kV Suceava –Bălţi,
- Integration of new power plants and congestions removal: Ostrovu Mare station
- OHL 400 kV Ostrovu Mare-RET;

- Upgrading 110 kV Bacau South and Román North stations related to 400 kV Moldova axis
- OHL 400 kV Cernavodă - Gura Ialomiței - Stâlpu,
- OHL 400 kV Smârdan-Gutinaș.

Developing the system operator capabilities (dispatching)

- Integrated platform for operative management of NPS;
- System components replacement EMS SCADA AREVA.

IT and telecommunications infrastructure modernization – with the main projects:

- Electronic communications network upgrade;
- Messaging and related applications upgrade;
- Measurement management of the electricity transited on the wholesale market;
- Platform for the metered data management of the wholesale electricity market.

Investments in the network development are recovered through the transmission tariff set by the regulatory authority based on the justified costs under a reasonable level of profit.

4. Natural gas market

4.1. Network regulation

4.1.1. Unbundling

According to the provisions of *Law no. 123/2012 on electricity and natural gas*, the transport and system operator is organised and operates according to the **independent system operator** model (ISO). With the entry into force of the *Law no. 117/2014 approving Government Emergency Ordinance no. 6/2014*, ANRE assessed the new certification conditions and approved the certification of the National Gas Transport Company "TRANSGAZ" - SA Medias, by issuing **ANRE Order no. 72/06.08.2014**. ANRE Order was notified to the European Commission.

Distribution operators are holders of distribution licenses, which have the specific function of natural gas distribution in one or more defined areas. At the end of 2015, on the Romanian natural gas market, **40 companies** had distribution licenses.

Undertakings from the natural gas sector which carry out regulated activities (transport, storage, distribution, supply) are obliged to ensure separate accounting, legal, functional and organizational separation. Distribution operators that serve a maximum of 100,000 final customers are exempt from the provisions on legal separation.

Undertakings from the natural gas sector have the obligation to submit to ANRE the regulated accounting records until the 1st of July (for the distribution and supply activities) and 31st of August (for the storage and transport activities), of the regulatory year following the one for which the reporting is done.

The regulated accounting records analysed contain the following assessment situations:

- Incomes,
- Expenditures,
- Tangible/intangible assets,
- Inventory assets.

Also, natural gas undertakings have the obligation to submit to ANRE, for review and approval, reports on separation, activity that involves checking assumptions, criteria and rules that will be the basis for the preparation of separate accounting records, which would allow obtaining information on costs, revenues, tangible and intangible assets and inventory items related to regulated activities carried out.

S.C. E.ON Gaz Romania S.A. and S.C. Distrigaz Sud S.A., as distribution system operators had the obligation to establish separation of accounts, legal, functional and organizational separation between the distribution and supply of natural gas. In the case of S.C. E.ON Gaz Romania SA, as a result of legal separation by dividing the society, two legally independent companies have resulted - E.ON Gaz Romania S.A., specializing in the supply of natural gas and E.ON Gas Distributie SA, specializing in gas distribution as well as operation and maintenance of the distribution network. The two new companies have different offices. The legal unbundling process of the other large distribution operator S.C. DISTRIGAZ Sud S.A. was completed in April 2008, resulting S.C. Distrigaz Sud Retele SRL, specializing in gas distribution as well as operation and maintenance of the distribution network, and S.C.

DISTRIGAZ Sud S.A. (later S.C. GDF SUEZ ENERGY ROMANIA and ENGIE ROMANIA etc.), specializing in the supply of natural gas.

Regarding the legal unbundling obligation for underground storage activity, the requirement was performed by the storage operator S.C. Depomureş S.A. The legal unbundling process of the largest storage operator – S.N.G.N. ROMGAZ S.A. is still ongoing. Measures were taken to sanction S.N.G.N. ROMGAZ S.A. for noncompliance with the legal unbundling obligation of the natural gas storage activity.

Other distribution system operators, serving less than 100,000 final customers and that don't have the obligation of legal separation, have established separate accounting records for regulated activities starting with 2007.

The licensed undertakings of natural gas submit annually to the regulatory authority the financial reports and regulated accounting for the regulated activities carried out by them in the gas sector.

Prior to sending to the regulatory authority, the required documents should be audited/verified in accordance with the legal provisions in force, checking especially the compliance with the obligation to avoid cross-subsidization between activities.

4.1.2. Technical functioning

The conditions and rules for using the natural gas transport system in Romania and the transparent and non-discriminatory access of third parties are regulated by the Network Code. In 2013, the document was reviewed and approved by ANRE Order no.16/2013.

The European legislative framework evolution, materialized in adopting the European network codes on capacity allocation mechanisms in the natural gas transport systems, congestion management procedures and balancing of natural gas transport systems led to the necessity of starting a comprehensive process of review of the *NTS Network Code*, approved by ANRE Order no. 16/2013 with subsequent amendments and additions, in order to implement on a national level the European regulations taking into consideration the options provided by these regulations.

This process materialized by approving **ANRE Order no. 160/2015** on the amendment and supplementation of the NTS Network Code approved by ANRE Order no. 16/2013, with subsequent amendments and additions, taking into consideration the following elements:

a. Making amendments and additions only regarding the chapters in the Network Code on the nomination/re-nomination, allocation and calculation of the final daily recorded imbalances value, chapters mentioned in the first stage of the amendment and supplementation of the Network Code provided by ANRE Order no. 54/2014 on some measures for natural gas market development;
b. Solving problematic issues identified up to the moment of drafting the order, taking into consideration the capability of S.N.T.G.N. TRANSGAZ S.A. to implement the proposed amendments, according to which, for the 2015-2016 gas year it can be considered only a limited use of the Virtual Trading Point (VTP) – only for projected and final imbalances subject to Gas Transfer Facility (GTF), considering the capacity reservations already made for the 2015-2016 gas year;

c. reconsidering the principles applicable in case of the capacity transfer between network users both in the NTS entry points and NTS exit points, having regard to the reorganization of the natural gas transport system according to the "entry-exit" model in which the capacity reservation in the entry points is independent of capacity reserve in exit points;
d. ensuring a high degree of clarity to the regulation and specifying the exact duties of each party involved in the specific procedures of the Network Code. In this regard, especially concerning the correlation and allocation procedures, it was considered limiting the responsibility of NTS neighbouring system operators only to the level of the responsibilities assumed by them through the contracts concluded directly with system users and their direct partners in the entry/exit in/from the NTS mentioned in the nominations made;
e. inclusion in the Network Code of the methodology for calculating the value of daily recorded imbalances of network users provided in the *S.N.T.G.N. TRANSGAZ S.A. report on the implementation of interim measures*, given the approval of this report by ANRE Decision no. 2296/11 November 2015.

According to the provisions of Article 45 paragraph (1) and (3) of the *Commission Regulation (EU) No. 312/2014 of 26 March 2014 establishing a Network Code on Gas Balancing of Transmission Networks*, in the absence of sufficient liquidity of the short term wholesale gas market, suitable interim measures referred to in Articles 47-50 of the *Regulation* shall be implemented by the TSOs, these being developed and implemented by each TSO, in accordance with a Report, referred to in Article 46(1) of the *Regulation*, approved by the national regulatory authority in accordance with the procedure set out in Article 46 of the *Regulation.*

In this context, ANRE has assessed both the interim versions and the final version of the *S.N.T.G.N. TRANSGAZ S.A. report on the implementation of interim measures*, proceeding to consultation with national regulatory authorities from Bulgaria - Energy and Water Regulatory Commission (EWRC) and Hungary - Energy and Public Utility Regulatory Authority (HEA) on *Report* content in accordance with Article 46 paragraph (5) in conjunction with the provisions of Article 27 paragraph (2) of the *Regulation.*

After the assessment of the final version of the *Report* of S.N.T.G.N. TRANSGAZ S.A. **ANRE Decision no. 2296/2015** was adopted, under which interim measures applicable in the 2015-2016 gas year were approved.

By the decision to approve the *Report* it was considered setting a deadline for submission by S.N.T.G.N. TRANSGAZ S.A. to ANRE for endorsement of framework contracts of sale and purchase of natural gas for balancing. This step was necessary given the fact that centralized natural gas markets from Romania still do not provide the necessary conditions for trading daily and intra-day standardized products, and the balancing platform that can be used as temporary measure in accordance with Article 47 of the *Regulation* is still not available. Under these conditions it is necessary the effective implementation of the alternative to the balancing platform, as an interim measure, respectively, the operation, by the TSO, of the natural gas sale/purchase trades to balance the NTS and the approval of the standard contracts for sale/purchase of natural gas for balancing, whose role is precisely to compensate for the absence of contracts related to daily and intra-day trading products.

Also, given that the *Report* includes interim measures applicable specifically only for the gas year 2015-2016, it was considered necessary that before the start of the next natural gas year (2016-2017) an update of the Report to be made.

Consequently, by ANRE Decision approving the *Report* it was taken into consideration setting the obligation for S.N.T.G.N. TRANSGAZ S.A. to submit to ANRE up to 15 June 2016 the updated version of the *Report* and an accurate explanation of the elements that must be considered in the updated version, namely: assessment of the balancing activity developed during 1 December 2015 – 1 June 2016, the interim measures proposed for implementation in the 2016-2017 gas year and the way in which the provisions of *Regulation (EU) no. 312/2014* will be applied to the international gas transport networks.

Also during 2015, ANRE has developed and approved revised versions of the *performance standards for transport* (ANRE Order no. 161/2015) and *distribution services* (ANRE Order no. 162/2015).

Storage activity is regulated by the *Regulation on programming, functioning and dispatching of natural gas underground storage* (ANRGN Decision no. 1353/2004). By this Regulation are established technical, technological and commercial rules and requirements, designed to ensure the development of the storage processes in a transparent, objective and non-discriminatory way.

Natural gas storage activity programming is done by storage operators under their contracts with the beneficiaries of the natural gas underground storage service.

For each year of storage, the deadline for the beginning of the programming of injection/extraction of natural gas quantities to/from storage is the date of publication of the Final List for reallocation of available capacities referred to in the *Regulation on access*. In establishing storage programs on each underground storage at cycle, month, day, hour level, storage operators have to consider the following:

1. compliance with the priority order in accordance with the *Regulation on access*;
2. technological regimes agreed with the TSO for each storage, for both injection and extraction;
3. optimal technological regimes for the NTS, both for injection and extraction.

Underground storage operators post on their webpages the necessary public information, including:

- Initial list of available capacities for natural gas storage for the respective injection cycle;
- Requests Register for access to the underground storage of natural gas
- Initial list for storage capacity allocation
- Initial list for storage capacity reallocation
- Final list for storage capacity allocation
- Final list for storage capacity reallocation
- List of remaining capacity available for reallocation
- Weekly report on natural gas underground storage capacity.

In accordance with the provisions of Article 176 of *Law no. 123/2012 on electricity and natural gas, with subsequent amendments and supplements*, in case of unexpected crisis in the natural gas market and where physical safety or security of persons, appliances or installations or system integrity is threatened, TSO may propose to the relevant ministry to adopt safety measures. These measures should cause the least effect on the proper functioning of the European internal market and be strictly designed to solve the crisis that generated them.

Implementation of these safety measures is made by Government Decision, initiated by the relevant ministry. ANRE monitors the implementation of the safeguard measures for the natural gas market, in case these measures were adopted by the state.

During 2015, there were no crisis situations in the natural gas market.

4.1.3. Connection and network tariffs

For the regulated underground storage and transport activities, tariffs and prices are set based on a „revenue–cap" methodology and for regulated distribution and supply activities, tariffs and prices are set based on a „price-cap" methodology.

The regulatory period for any of the regulated activities is of 5 years, except for the first regulatory period (transitory stage), which was established for 3 years.

The tariff system for **the transport activity** includes a set of "revenue-cap" type tariffs which establishes total regulated revenue covering total costs related to one year of the regulatory period. The tariff for the transport services through the National Transport System (NTS), for the first and second regulatory period was unique, with a binomial structure.

By **ANRE Order no. 32/2014** was approved the *Methodology for establishing the regulated revenue, the total revenue and the regulated tariffs for the natural gas transport activity,* by which was introduced the "entry-exit" tariff system.

Starting with 1 October 2015 by **ANRE Order no. 136/2015**, were approved the regulated revenue, total revenue and transport tariffs for the transport of natural gas through the NTS, valid until 30 September 2016, namely:

a) capacity reservation tariff per point/group of points of entry/exit for firm/interruptible natural gas transport services through the National Transport System

RON/MWh/h

Point / group of points for entry/exit in/from the NTS		Types of natural gas transport services						
		Long term	Short term					
		Annual	Quarterly		Monthly		Daily	
			summer	winter	summer	winter	summer	winter
Point / group of points for entry in the NTS	Group of entry points from the production perimeters, from LNG terminals and biogas production facilities or other gases that meet the quality requirements to be delivered/ transported to/from the NTS	0.93	1.62	3.61	2.40	5.36	3.60	8.03
	Group of entry points from the interconnection with other natural gas transport systems from non-EU member states (Medieșu Aurit and Isaccea Import)	3.62	6.30	14.00	9.30	20.77	13.97	31.15
	entry point from the interconnection with other natural gas transport	3.00	5.22	11.61	7.71	17.22	11.58	25.84

	systems from EU member states (Csanadpalota)							
	Group of entry points from the underground storages	1.43	2.48	5.52	3.67	8.19	5.51	12.28
Point/Group of exit points from the NTS	Group of exit points to distribution systems, upstream pipeline networks and final consumers directly connected to the transport system	1.86	3.24	7.22	4.79	10.70	7.20	16.05
	Group of exit points to underground storages	1.50	2.60	5.79	3.85	8.59	5.78	12.89
	Exit point from the interconnection with other natural gas transport systems from EU member states (Csanadpalota)	6.70	11.66	25.93	17.22	38.46	2.86	57.69
	Exist point from the interconnection with other natural gas transport systems from non-EU member states (Ungheni)	0.81	1.41	3.13	2.08	4.64	3.12	6.96

b) volumetric tariff for the quantity of natural gas delivered to distribution systems: 3.63 RON/MWh;
c) volumetric tariff for the quantity of natural gas transported only through the NTS: 4.38 RON/MWh;
d) volumetric tariff for the quantity of natural gas transported: 3.53 RON/MWh.

Tariffs referred to in points b) and c) contain the tax value on monopol referred to in the *Government Ordinance no. 5/2013.* The tariff referred to in point d) does not contain this value.

A significant share in the structure of transport tariffs is represented by the monopoly tax and the tax on special constructions. For example, in 2015, in the volumetric component of the transport tariffs approved for SNTGN TRANSGAZ S.A. the two taxes had a share of approx. 3% for the quantity of natural gas transported to distribution systems and 19% for the quantity of natural gas transported only by NTS.

Also, the share of costs over which the operator cannot interfere, but necessary for the business (taxes, fees imposed by central and local authorities) in the average transport tariff is 19%.

The tariff system for the **distribution activity** includes differentiated tariffs on licensed distribution operators and consumer categories.

For 2015, the categories of consumers for which the regulator establishes differentiated distribution tariffs are the following:

1. Distribution tariffs
B.1. Consumption up to 23.25 MWh
B.2. Annual consumption between 23.26 MWh and 116.28 MWh

B.3. Annual consumption between 116.29 MWh and 1,162.78 MWh
B.4. Annual consumption between 1,162.79 MWh and 11,627.78 MWh
B.5. Annual consumption between 11,627.79 MWh and 116,277.79 MWh
B.6. Annual consumption over 116,277.79 MWh .

2. Proximity distribution tariff
B.6.1. Customers with an annual consumption over 250,000 MWh.

For the distribution activity, a regulated unitary income is set to cover unitary costs related to one year of the regulatory period. The value of distribution services are invoiced monthly for a distribution system user.

Distribution tariffs are monomial and quantify fixed and variable costs related to the distribution activity. Distribution tariffs apply to quantities of natural gas distributed. The calculation methodology is approved by ANRE Order no. 42/2013, with subsequent amendments and additions.

Transport and distribution tariffs for the most relevant categories of final customers are as follows:

Cons. **Tariff**	**I4-1,I4-2 (Annual consumption 418.6 TJ)**	**I1 (Annual consumption 418.6 GJ)**	**D3 (Annual consumption 83.7 GJ)**	**D3, D3b (Typical household - heating, food preparation and hot water)**
	EUR/GJ	**EUR/GJ**	**EUR/GJ**	**EUR/GJ**
Transport tariff	0.59	0.59	0.59	0.59
Distribution tariff	1.74	2.14	2.17	2.14

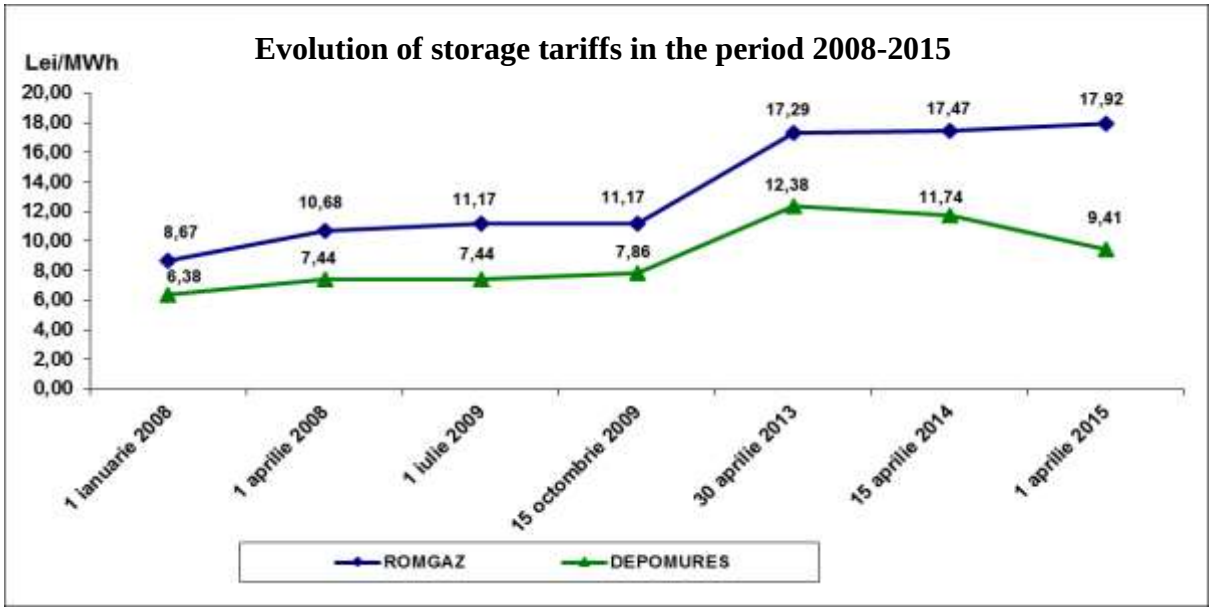
The tariff system for the **underground storage activity** includes a set of *revenue cap* tariffs which establishes total regulated revenue covering total costs for the operation during a year of the regulatory period.

Under the provisions of ANRE Order no. 22/2012 approving the *Methodology for approving prices and setting regulated tariffs in the natural gas sector, with subsequent amendments and additions*, ANRE approved, by ANRE Orders no. 67/2015 and 58/2015, for licensed operators for the operation of underground storage S.C. DEPOMUREŞ S.A. Targu Mures and ROMGAZ S.A. Medias its branch Ploiesti, total income, regulated revenue, the fixed component for capacity reservation and volumetric underground injection and extraction of natural gas components related to the tariff for underground storage service, for the period April 2015 - March 2016, the fourth year of the 3rd regulatory period.

An important share in the storage tariffs structure is represented by the costs over which the operator cannot interfere, but necessary for the business (taxes, fees imposed by central and local authorities). Therefore, in the case of S.C. DEPOMUREŞ S.A. Targu Mures operator, their share is of 7.18%, respectively S.N.G.N. ROMGAZ S.A. Mediaș with a share of 5.40%.

Tariffs in force for natural gas storage activity, charged at the date of this report by the licensed operators in the natural gas sector are the following:

Tariff component	M.U	National Gas Company Romgaz S.A. Medias	S.C. "Depomureş" - S.A. Târgu Mureş
Fixed component for capacity reservation	RON / MWh / complete storage cycle	13.68	6.12
Volumetric component for natural gas injection	RON / MWh	2.37	2.32
Volumetric component for natural gas extraction	RON / MWh	1.87	0.97



4.1.4. Cross-border issues

Monitoring investment plans

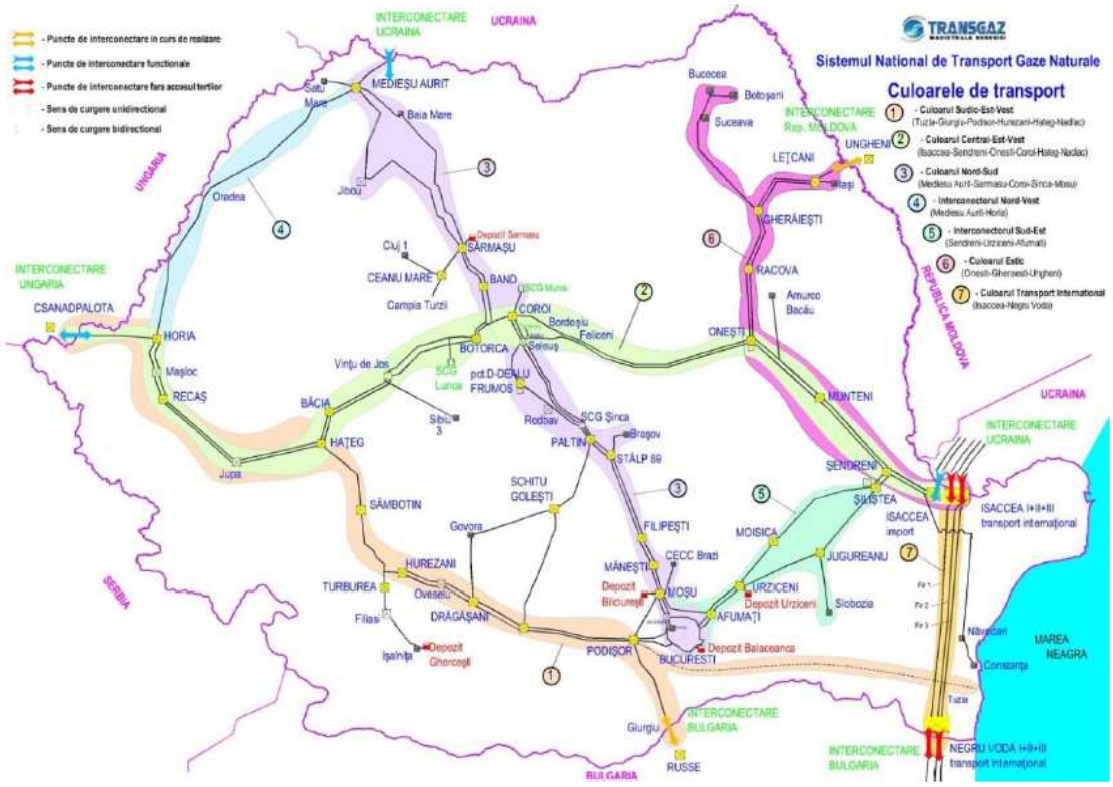
Concerning the approval and monitoring of the TSO investments plans by the regulatory authority, we mention that these attributions are provided to the regulator by the provisions of the *Law no. 123/2012 on electricity and natural gas*.

Natural gas transport system development plan during 2014-2023 period provides the development directions of Romanian natural gas transport network and the main projects that SNTGN Transgaz SA intends to implement over the next 10 years in order to achieve a maximum degree of transparency regarding the development of the national natural gas transport system and the possibility of updated information for market participants regarding existing and planned transport capacities, so that, through public consultation, decisions on investment in the gas transport network meet market requirements.

The Development Plan meets the requirements of the European energy policy regarding:

- ensuring security of supply of natural gas;

- increasing the interconnection level of the national natural gas transport network to the European network;
- increasing the flexibility of national natural gas transport network;
- liberalization of the natural gas market;
- creating an integrated natural gas market in the European Union.



Source: SNTGN Transgaz SA

TSO sent this plan to ANRE and it was approved by ANRE Decision no. 2819/2014.

Launching the approval process of the *Second list of Projects of Common Interest* and approval of cost allocation methodology for these projects were the main actions undertaken at European level under the provisions of *Regulation (EU) no. 347/2013 on guidelines for trans-European energy infrastructure.*

ANRE held the process of evaluating the projects proposed by promoters of investments for their inclusion in the *Second list of Projects of Common Interest*. In 2015 there were numerous meetings to identify the needs for transport infrastructure in the region of Central South-Eastern Europe.

Of the initiatives launched on this occasion we mention organisation of CESEC group and promotion of natural gas pipeline which will ensure the link between Bulgaria and Austria via Romania and Hungary (to interconnect Bulgaria - Romania - Hungary - Austria) in short BRUA. The European Commission validated on 19 January 2016 funding to the sum of 179 million Euros the works to be carried by the TSO for the development of BRUA - Phase 1. Thus, Transgaz will have some of the necessary funding to execute, on the Romanian territory, the works in question.

The project involves the development of a natural gas transport capacity between existing interconnection points with natural gas transport systems in Bulgaria (at Giurgiu) and Hungary (Csanadpalota) by building a new pipeline. The pipeline would have a total length of 550 km, on the corridor Giurgiu - Plateau - Corbu - Hurezani - Haţeg - Recaş - Horia and three compression stations located along the pipeline (SC Corbu, SC Haţeg, SC Horia).

After commissioning, the project will ensure a natural gas transport capacity of 1.5 bln.cm/y towards Bulgaria and 4.4 bln.cm/y towards Hungary. Project implementation deadline is 2019 and the estimated value amounts to 560 million euros.

Also, **ANRE Order no. 157/2015** was issued approving the *Methodology for the evaluation of investments in Projects of Common Interest in the gas infrastructure, including risks relating to them.*

The methodology has been drafted according to the provisions of Article 13 paragraph (6) of *Regulation (EU) no. 347/2013 of the European Parliament and of the Council of 17 April 2013 on guidelines for trans-European energy infrastructure and repealing Decision No. 1364/2006/EC and amending Regulations (EC) no. 713/2009, (EC) no. 714/2009 and (EC) no. 715/2009*, and the *Agency for Cooperation of Energy Regulators Recommendation no. 3/2014 on incentives for Projects of Common Interest and a common methodology for risk evaluation.*

The methodology describes the steps the TSO or storage operators has to go through in order to obtain incentives, by evaluating investments in infrastructure projects for the transport/storage of gas and the risks specific to these projects.

The methodology describes the criteria used by ANRE in the assessment of requests submitted to it by TSO/SO to provide incentives for specific risks of infrastructure projects for the transport/storage of gas, by comparison with the extent to which the specific risks faced by the project are already covered by the regulated tariff. The analysis takes into account the possibilities of avoiding specific risks through appropriate measures other than incentives.

Considering the provisions of Article 12 paragraph (3) of *Regulation (EU) no. 347/2013 of the European Parliament and of the Council of 17 April 2013 on guidelines for trans-European energy infrastructure and repealing Decision no. 1364/2006/EC and amending Regulations (EC) no. 713/2009, (EC) no. 714/2009 and (EC) no. 715/2009*, S.N.T.G.N. Transgaz S.A. from Romania and Földgázszállító Zártkörűen Működő Részvénytársaság (FGSZ) from Hungary, as project initiators, have submitted to ANRE a joint investment request in Projects of Common Interest.

The request refers to the following Projects of Common Interest included in the Ten-year development plan (TYNDP) 2013-2022 prepared by ENTSO-G and in the *First list of projects of common interest* adopted by the European Commission in 2013, respectively:

- for Romania - the project 7.1.5 "Cluster, respectively gas transport corridor from the Caspian region and the EU, by pipeline from Bulgaria to Austria via Romania and Hungary"
- for Hungary – projects 6.13 „Cluster, respectively gas transport corridor Romania-Hungary-Austria" and 6.14 „Project of common interest to achieve reverse flow from Csanadpalota or Algyő".

The projects aim to develop a transport infrastructure between four Member States: Bulgaria-Romania-Hungary-Austria respectively connecting the four gas markets, thereby creating a transport corridor to Central Europe to transport natural gas from the Caspian region and the potential sources of the Black Sea.

The request has been notified to the Agency for Cooperation of Energy Regulators (ACER), in accordance with the provisions of Article 12 paragraph (3) of *Regulation (EU) no. 347/2013.*

After analysing the request for cross-border cost allocation, by **ANRE Decision no. 2080/7 October 2015** the method of cross-border costs allocation relating to Projects of Common Interest from the *First list of the European Union* numbers 6.13, 6.14 and 7.1.5 was approved. The request was submitted by the project initiator National Natural Gas Transport Company Transgaz S.A. from Romania and Földgázszállító Zártkörűen Működő Részvénytársaság (FGSZ) from Hungary, as follows:

a) National Natural Gas Transport Company Transgaz S.A. covers the costs relating to developing on the Romanian territory of the Project of Common Interest no. 7.1.5, from the *First list of Projects of Common Interest of the European Union*;

b) Földgázszállító Zártkörűen Működő Részvénytársaság covers the costs relating to developing on the Hungarian territory of the Projects of Common Interest no. 6.14 and 6.15, from the *First list of Projects of Common Interest of the European Union*.

The coordinated decision of the ANRE and HEA (Magyar Energetikai És Közmű-Szabályozási Hivatal) on the joint request for cross-border allocation of costs related to Projects of Common Interest submitted by S.N.T.G.N. Transgaz S.A. from Romania and Földgázszállító Zártkörűen Működő Részvénytársaság (FGSZ) from Hungary was signed at 6 October 2015. The coordinated decision from the regulatory authorities is used by the project promoters to obtain financial assistance from the European Union as grants for the project/projects.

4.1.5. Compliance with the provisions of the European legislation

Compliance with decisions of ACER and the Commission

According to the provisions of Article 102(^1) of *Law no.123/2012 on electricity and natural gas, with subsequent amendments and additions „ANRE shall respect and implement all relevant decisions, legally binding, of ACER ... and the Government, line ministry and other specialized agencies of the central government, where appropriate, will take all necessary steps in this regard, according to their tasks and competences*".

In order to implement the provisions of the *Regulation (EU) no. 1227/2011* and the provisions of *ACER Decision no. 01/2012 regarding the registration format in accordance with the provisions of Article 9 paragraph (3) of REMIT* and the need to adapt the national regulatory framework to international developments concerning the implementation of REMIT, **ANRE Order no. 1/2015** was issued establishing the *National Register of wholesale energy market participants* and approving the *Registration Procedure of market participants to the wholesale energy market*, published in the Official Gazette of Romania no. 80/ 30 January 2015.

Thus, as of 18 March 2015, participants in the wholesale energy market in Romania have the obligation to register with the *National Register of wholesale energy market participants* established and managed by ANRE according to the procedure set out in the Annex to the Order. At the time of writing this report, 609 economic operators, wholesale energy market participants have registered in the National Register and sent data to CEREMP-ACER. As of 7 October 2015, they have the obligation to submit data on trades on wholesale energy market to ACER, including orders to trade and trades concluded on organized markets and fundamental data from the European Networks of Transmission and System Operators for electricity and natural gas. The second stage of reporting begins at 7 April 2016 and concerns the reporting of contracts concluded outside organized markets and of transport contracts

In 2015, there were not issued other binding ACER Decisions.

4.2. Promoting competition

According to *Law no. 123/2012 on electricity and natural gas, as amended and supplemented*, the natural gas sector in Romania is divided into two segments: the regulated and competitive market. This segmentation is designed to set clearly the specific economic activities that are under continuous surveillance: the regulated market (transport, storage, distribution tariffs and regulated prices for households) and those that function freely, based on competitive mechanisms. In fact, since this is a regulated area of the economic sector, it needs to be noted what falls under the scope of supervision by the regulator, the rest of the economic relations being carried on freely as part of the mechanisms of a market economy.

Annual consumption of natural gas has continued to decline, reaching around 11.6 billion cubic meters, a decline of about 5% in 2015 compared to 2014, due to a slight decrease in the consumption of final customers.

In 2015, total natural gas consumption was 121,726,748.658 MWh. Total number of natural gas final customers was 3,480,661, of which 182,265 non-households (5.24%) and 3,298,396 households (94.76%).

This year, the final customer consumption was 111,244,195.163 MWh, of which non-household consumption accounted for 80,992,734.448 MWh (72.80%) and household consumption represented 30,251,460.715 MWh (27.20%).

Natural gas consumption is ensured by the domestic production and imports. Domestic production was 118,816,674.270 MWh, while imports were 2,910,074.388 MWh.

The number of participants in the gas market in Romania grew steadily as the market was liberalized, especially in the supply of natural gas, including, in 2015:

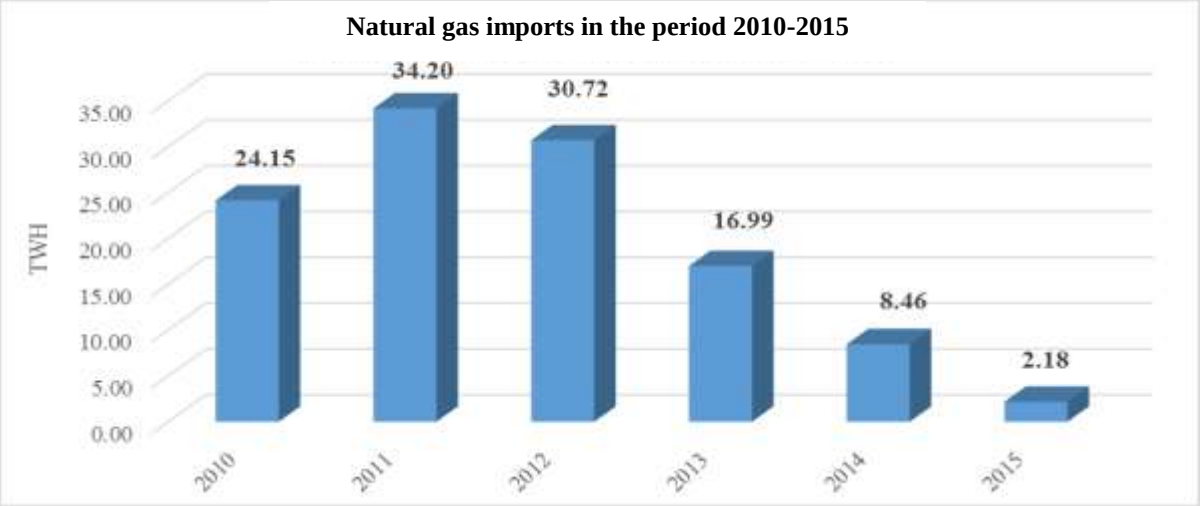
- A National TSO – Transgaz;
- 6 producers: Romgaz, OMV Petrom, Amromco Energy, Raffles Energy, Foraj Sonde, Stratum Energy;
- 6 external suppliers that bring natural gas from foreign sources in Romania: Wintershall, Axpo Elveţia, Gdf Suez Ungaria, Imex Oil, Mol Zrt. and Wiee Hungary;
- 2 storage operators: Romgaz, Depomureş;
- 40 distribution operators – the largest being Distrigaz Sud Rețele SRL and E.ON Gaz Distribuție S.A.;

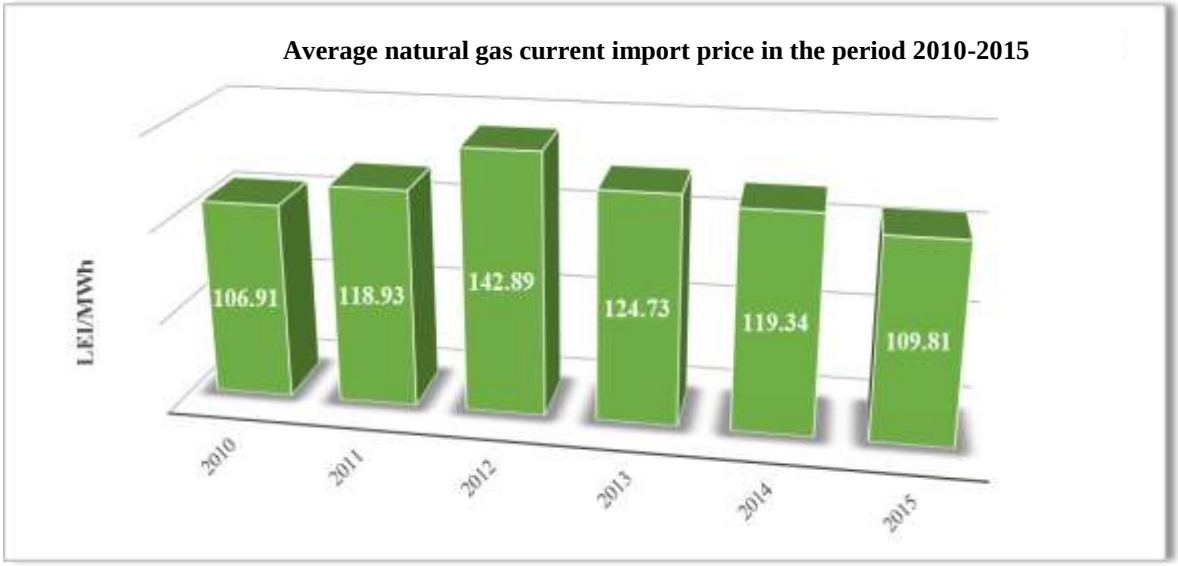
- 76 suppliers active on the competitive natural gas market, out of which 39 suppliers are active in the regulated natural gas market.

4.2.1. Wholesale natural gas market

In 2015, natural gas domestic production, current and extracted from storage, which entered into consumption accounted for 97.61% of total sources. The first two producers (Romgaz and OMV Petrom) covered together 94.85% of this source.

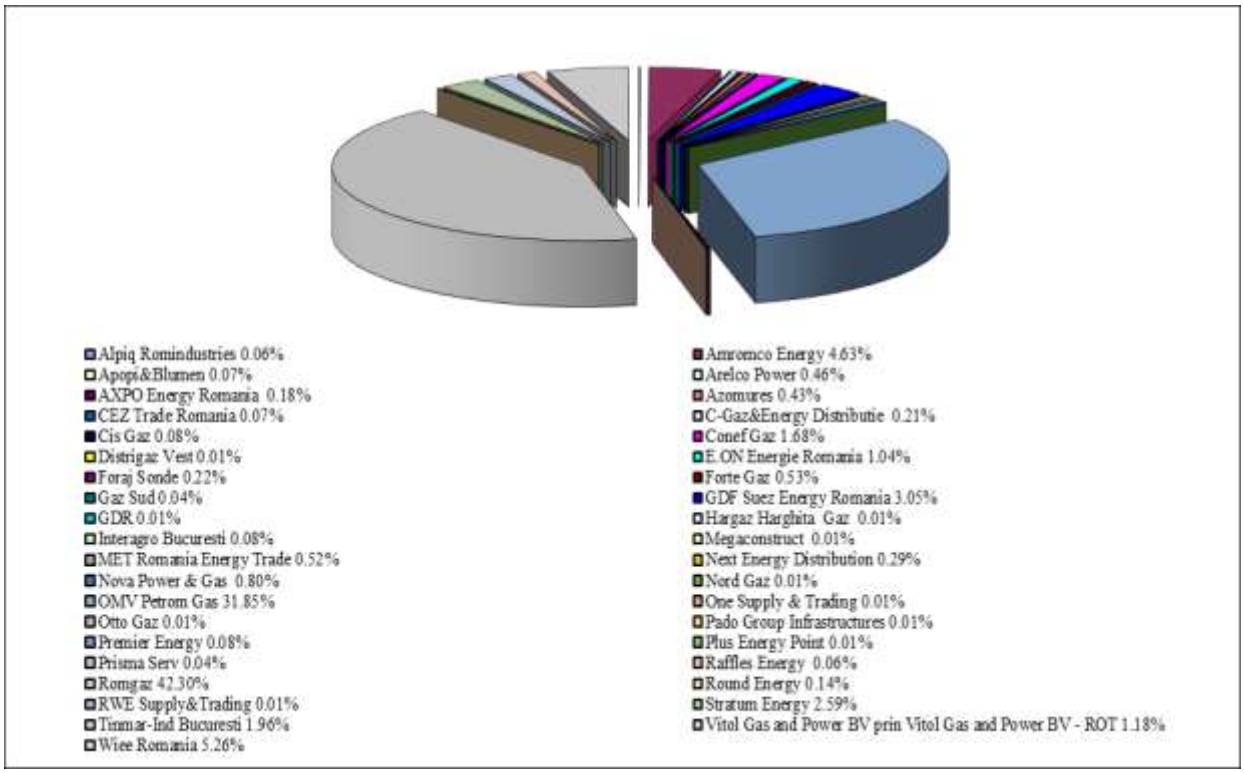
Imports entering in consumption, current import and extracted from storage, represented 2.39%. The first three importers – internal suppliers – achieved together 94.89%.





The quantities of exported natural gas in 2015 were very low, approximately 11,694.640 MWh, which represents 0.01% of total production.

In 2015, 39 holders of supply licenses issued by ANRE conducted activities on the wholesale natural gas market, the market volumes traded by them being 84,949,525.190 MWh, a decrease of approximately 41% over the previous year. A breakdown of the structure of this market and percentages of suppliers participating in the market, by traded volumes, is shown in the chart below:



Centralized markets

By *Government Emergency Ordinance no. 35/2014 amending Law no. 123/2014 on electricity and natural gas, approved with amendments and additions by Law no. 174/2014*, it was established the obligation of trading natural gas on centralized platforms for Romanian natural gas producers and suppliers of natural gas acting on the Romanian natural gas market. According to these rules of law, ANRE issued **Order no. 118/2014** *approving the Methodology for establishing the obligation of natural gas producers and suppliers to conclude transactions on the centralized natural gas markets in Romania*, by which were set annual quotas specific to the two categories of operators, producers and respectively suppliers for natural gas trading on centralized platforms in Romania.

Year	Producers	Suppliers
2015	35%	30%
2016	30%	25%
2017	25%	20%*
2018	20%	15%*

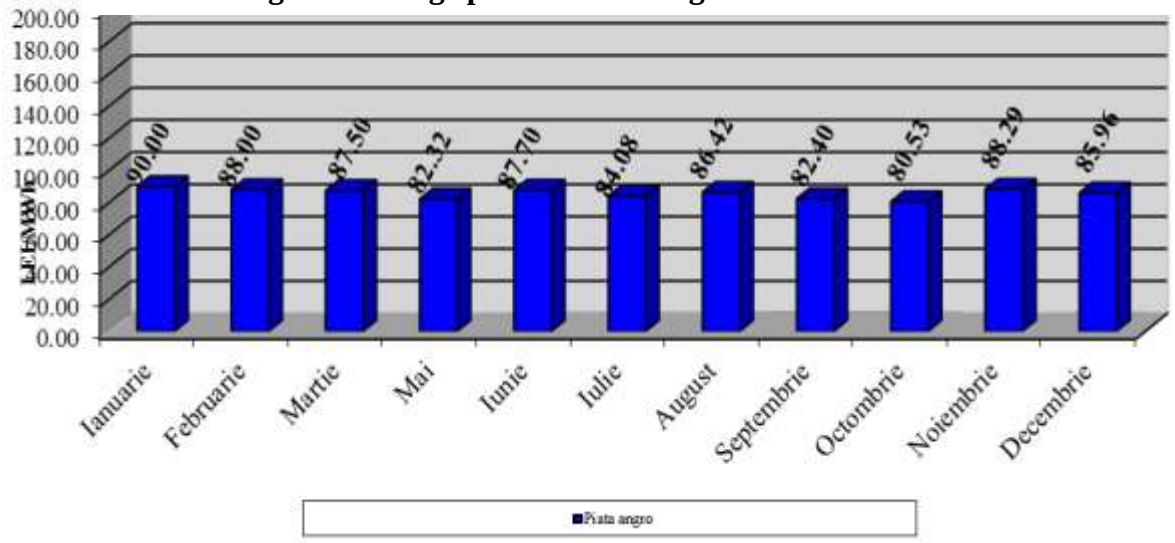
*According to Law no. 174/2014 suppliers 'obligation was limited to 2016

In 2015, a number of 30 suppliers concluded trades on the centralized markets, the contracts concluded by them totalling a volume of 1,720,544.000 MWh, as follows:

Month	**Monthly prices concluded on centralized markets (RON/MWh)**	**Traded quantities (MWh)**
January	90.00	106,000.000
February	88.00	206,000.00

March	87.50	10,000.000
April	85.50	15,000.000
May	82.32	49,000.000
June	87.70	37,500.000
July	84.08	2,813.000
August	86.42	60,445.000
September	82.40	255,932.000
October	80.53	719,054.000
November	88.29	121,500.000
December	85.96	137,300.000
Average weighted price 2015	**83.77**	**1,720,544.000**

Weighted average price of natural gas on centralized markets



4.2.2. Retail natural gas market

For 2015, natural gas consumption in Romania, structured on types of consumers, was as follows:

Final customers			**Connection type**	**No. of customers**	**Consumption * (MWh)**	**Share in total consumption**
Households			Customers connected to the NTS	2	568.417	0.00%
			Customers connected to the distribution system	3,298,394	30,250,910.62	27.19%
			Total Households	**3,298,396**	**30,251,479.04**	**27.19%**
Non-households	Secondary + Industrial	Heat producers **for the population**	Customers connected to the NTS	11	3,101,827.80	2.79%
			Customers connected to the distribution system	696	9,109,386.60	8.19%
			Total Heat producers for the population	**707**	**12,211,214.40**	**10.98%**
		Heat and electricity producers	Customers connected to the NTS	14	13,909,858.00	12.50%
			Customers connected to the distribution system	471	6,932,008.80	6.23%
			Total electricity and heat producers	**485****	**20,841,866.79**	**18.74%**
		Other	Customers connected to the NTS	124	21,378,174.98	19.22%

	secondary and industrial	Customers connected to the distribution system	27,366	13,947,517.66	12.54%
		Total other secondary and industrial	**27,490**	**35,325,692.64**	**31.76%**
	Tertiary	Customers connected to the NTS	17	18,638.74	0.02%
		Customers connected to the distribution system	44,615	4,892,112.04	4.40%
		Total tertiary customers	**44,632**	**4,910,750.78**	**4.41%**
	Commercial	Customers connected to the NTS	61	435,542.43	0.39%
		Customers connected to the distribution system	109,375	7,267,649.09	6.53%
		Total commercial customers	**109,436**	**7,703,191.52**	**6.92%**
	Total non-households		**182,265**	**80,992,716.13**	**72.81%**
TOTAL			**3,480,661**	**111,244,195.163**	**100.00%**

* Total consumption delivered to final customers (not including technological consumption, energy consumption and deviations due to measuring instruments).
** We mention that the number of clients producing heat and electricity is included in the number of clients producing heat and electricity, which is why they were not counted in the total number of final customers.

Natural gas consumption in 2015 decreased by 4.61% compared to 2014, reaching approximately 121,726,748.658 MWh (approx. 11.6 billion cubic meters).

In 2015, the share of quantities consumed by households of total consumption delivered by suppliers was **27.19%** and the number of these customers represents **94.76%** of the total natural gas final customers.

Although the number of non-households represents only **5.24%** of all final customers of natural gas, the share of quantities consumed by them is **72.81%** of total consumption delivered by suppliers in 2015.

Six companies have conducted production and supply activities: SNGN Romgaz SA, S.C. OMV Petrom SA, S.C. Amromco Energy SRL, S.C. Raffles Energy SRL, S.C. Foraj Sonde SA and S.C. Stratum Energy LLC.

The situation of companies that supply gas to the most relevant categories of final customers is as follows:

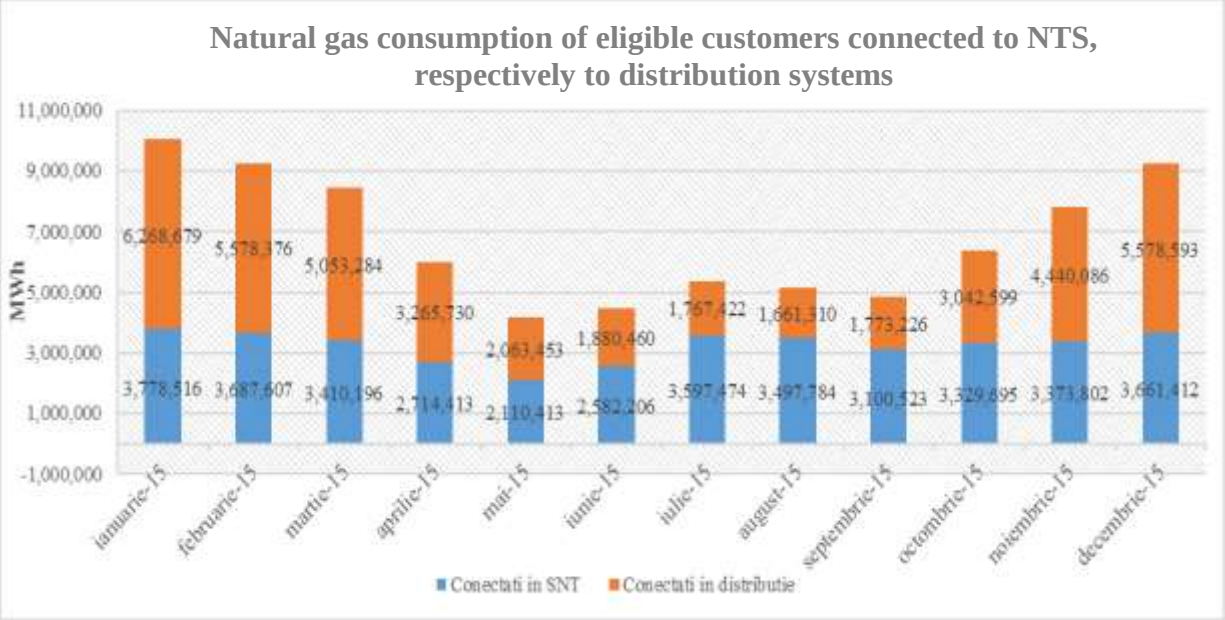
Suppliers Final customers	Shares of the first three companies (%)
Electricity and/or heat producers	92.95
Non-households	65.39
Households	92.27

On the **regulated market** in 2015, the final customers were served by 39 suppliers; total number of final customers supplied on the regulated market was of **3,292,505,** representing only households (5891 households switching supplier), and the natural gas quantity supplied to them was of **30,026.953 GWh** (31% less than in 2014). Market shares of the three main suppliers are presented in the table below:

Suppliers	**Market share (%)**
GDF SUEZ Energy Romania	46.28
E.On Energie Romania	43.36
Congaz	2.69

On the **competitive market**, 74 suppliers were active. In the table below is presented the situation of suppliers of final customers in the competitive market, whose market shares are above 5%; one of them is also a producer (S.N.T.G.N. Romgaz S.A.). Total consumption was **81,217.261 GWh** (up from 2014 with aprox.11%).

Suppliers	Market share (%)
OMV Petrom Gas	22.49
Romgaz	22.47
GDF SUEZ Energy Romania	20.29
E.On Energie Romania	13.90
OMV Petrom (branches)	7.55



At the end of 2015, there were **188,156** final customers who have switched suppliers on the natural gas competitive market, compared to **10,558** in 2014, representing an increase of about 10% of the real natural gas market opening degree compared to 2014, which amounted in 2015 to about 66% of total consumption.

The number of customers who have exercised their right to choose the supplier of natural gas has recorded a strong increase in 2015, following the liberalization of the internal market for natural gas for non-households on 1 January 2015, which implies that final ANRE-regulated prices for this category of customers have ceased their applicability.

Thus, from 1 January 2015, all non-households operate in the competitive natural gas market, where prices are determined freely through competitive mechanisms. Under these conditions it was necessary for them to exercise their eligibility, namely to choose their natural gas supplier and to conclude with it a negotiated contract for the sale and purchase of natural gas, through direct negotiation of the price and commercial conditions or through the acceptance of a standard offer published by the supplier, or to resort to a supplier selection process through specific procedures of auction/public procurement.

In order to support final customers and to ensure that they can choose knowingly the natural gas supplier, in the context of an increased competition between suppliers, ANRE aims that

all suppliers who have B1-B4 and A1-A2 final customers in their customer portfolio have standard updated offers for them, so that customers who have not yet taken the step to the conclusion of a negotiated contract of sale-purchase to have sufficient information available for this step. Standard offers are published by each supplier on its webpage and the links to this information are posted by ANRE on its webpage as a list, permanently updated and verified. Also on ANRE website is displayed the list of undertakings, holders of natural gas supply license.

ANRE has constantly monitored data on the supply carried out in these conditions. Considering the stage of conclusion of sale-purchase contracts by non-households and the requests of suppliers with the largest share of such customers in their portfolio in order for ANRE to provide the necessary regulatory framework for continued supply of natural gas to non-households who have not signed contracts during 2015, ANRE issued *ANRE Order no. 97/2015 amending and supplementing Order no. 107/2014*.

Given that 91% of all non-households who had to exercise the eligibility rights were in the gas suppliers S.C. E.ON Energie Romania SA and S.C. GDF Suez Energy Romania SA portfolios, based on the reports submitted by them, the evolution of the negotiated sale-purchase contracts conclusion process during 2015 was as follows:

Denumire furnizor	% din total clienți noncasnici care au optat pentru furnizarea în regim negociat în cursul anului 2015									
	15 ianuarie	31 ianuarie	28 februarie	31 martie	30 aprilie	31 mai	30 iunie	31 iulie	31 august	31 decembrie
S.C. E.ON Energie România S.A.	23,43%	36,23%	47,65%	52,78%	58,58%	63,02%	63,94%	65,27%	67,63%	70,15%
S.C. GDF Suez Energy România S.A.	40,44%	44,10%	46,87%	53,12%	58,87%	65,19%	72,20%	76,27%	76,92%	77,49%

On 31 December 2015, the natural gas supply was done under contracts of sale-purchase tacitly accepted for a total of 24,240 non-households form S.C. E.ON Energie Romania SA portfolio and a number of 17,170 non-households from SC GDF Suez Energy Romania SA portfolio. The evolution of non-households in the portfolios of these suppliers who have not exercised their eligibility during 2015 is shown below:

Denumire furnizor	Număr clienti noncasnici din portofoliul propriu pentru care furnizarea gazelor naturale se realiza în regim reglementat la data de 1 noiembrie 2014	Numărul clienților noncasnici care nu și-au exercitat dreptul de eligibilitate în cursul anului 2015									
		15 ianuarie	31 ianuarie	28 februarie	31 martie	30 aprilie	31 mai	30 iunie	31 iulie	31 august	31 decembrie
S.C. E.ON Energie România S.A.	81.197	62.175	51.778	42.503	38.341	33.632	30.030	29.280	28.196	26.284	24.240
S.C. GDF Suez Energy România S.A.	76.276	45.429	42.637	40.522	35.761	31.369	26.552	21.204	18.099	17.601	17.170

According to *Law no. 123/2012 on electricity and natural gas*, final customers no longer have the right to return to regulated supply if they have exercised their eligibility rights.

4.2.3. Recommendations on supply prices, investigations and measures to promote competition

Setting regulated prices for customers who have not exercised their eligibility right

Regulated prices are differentially set for each licensed supplier and customer category, depending on the configuration of the natural gas supply systems.

Prices are monomial and quantify the fixed and variable costs relating to the regulated supply activity.

Regulated prices apply to natural gas quantities supplied in a regulated regime.

Regulated prices are differentially set for every holder of supply license, as follows:

a) for companies that have legally separated the natural gas supply from the distribution - by type of customer category for which the supply of natural gas is done in a regulated regime, placed in established areas where the affiliated undertaking has the license for natural gas distribution, based on the annual consumption and type of systems (transport/distribution) by which the supply of natural gas is done;

b) for companies that have not legally separated the natural gas supply from the distribution - by type of customer category for which natural gas supply is made in a regulated regime, placed in established areas served as licensed distribution operator, based on the annual consumption and type of systems (transport/distribution) by which the supply of natural gas supply is done.

We mention that, under the provisions of *Law no. 123/2012 on electricity and natural gas, with subsequent amendments and additions, Government Decision no. 488/2015* was issued on establishing the purchase price for natural gas from domestic production for households and heat producers, only for the natural gas quantities used to produce heat in cogeneration plants and heating plants for household consumption, during 1 July 2015 – 30 June 2021, by which was established an annual increase in the purchase price of natural gas from domestic production, values that were included by ANRE in the calculation of regulated prices.

Thus, according to *Government Decision no. 488/2015*, the purchase price of natural gas from domestic production was set as follows:

RON/MWh

	Households and heat producers, only for the natural gas quantities used to produce heat in cogeneration plants and heating plants for household consumption
01.07.2015	60.00
01.07.2016	66.00
01.04.2017	72.00
01.04.2018	78.00*
01.04.2019	84.00*
01.04.2020	90.00*

*) The purchase price for natural gas from domestic production for households and heat producers, only for the natural gas quantities used to produce heat in cogeneration plants and heating plants for household consumption, starting with 1 April 2018, is set to be reassessed after an analysis carried out by the end of March 2018.

In accordance with the provisions of Article 181 paragraph (5) of *Law no. 123/2012 on electricity and natural gas, with subsequent amendments and additions,* purchase price of gas from domestic production is determined by Government Decision based on a proposal from the line ministry and is updated by ANRE and ANRM in accordance with the provisions of the *Roadmap for phasing out regulated prices for final customers*.

Thus, as of 1 January 2015, ANRE evaluated the unitary fixed amount designed to cover **the costs of purchasing natural gas for households only**, as follows:

- **On 1 January 2015**, the purchase price of natural gas from domestic production for the regulated market for households was set at 53.30 RON/MWh. Thus, the unitary fixed amount designed to cover the costs of purchasing natural gas for households and heat producers only for the natural gas quantity used to produce heat in cogeneration plants and heating plants for population consumption for January – March 2015 has remained unchanged at 71.15 RON/MWh.

- **On 1 April 2015**, the purchase price of natural gas from domestic production for the regulated market for hoseholds was set at 53.30 RON/MWh. Thus, in April 2015, was published the evaluation of the fixed unitary amount to cover the costs of purchase of natural gas for April – June 2015, for households with the value of 68.30 RON/MWh.

- For **July 2015 - June 2016**, according to the provisions of *Government Decision no. 488/2015*, the purchase price of natural gas from domestic production for the regulated market, for hoseholds was set at 60.00 RON/MWh. Thus, ANRE has estimated the fixed unitary amount to cover the purchase price of natural gas for households and heat producers, only for the natural gas quantity used for the production of heat in cogeneration units and heating plants for the population, for July 2015 – June 2016, at 80.30 RON/MWh, compared to the previous value of 68.30 RON/MWh.

All documents relating to the evaluation of the fixed unitary amount to cover the costs of purchasing natural gas for households have been published on ANRE website.

It has to be noted that there have been assessed the differences of purchasing cost of natural gas for the period October to December 2014, representing the unitary correction component for the difference between the fixed unitary amount recognised by ANRE to cover costs of purchasing natural gas (GUC), including related services, designed for resale in the regulated supply, and the actually incurred costs recognized by ANRE to the operator performing the regulated supply.

The GUC monthly unitary difference was determined by subtracting from the GUC realized by the company, the GUC value included by ANRE in regulated prices. Thus, starting with 1 April 2015, costs recovery component for natural gas acquisition is 0.12 RON/MWh for S.C. GDF SUEZ ENERGY ROMANIA S.A., representing 0.11% of the regulated price related to B1 consumption category, respectively 7.13 RON/MWh for S.C. E.ON ENERGIE ROMANIA S.A., representing 6.03% of the regulated price related to the B1 consumption category.

To calculate the unitary cost differences of natural gas were taken into account the provisions of *Law no. 123/2012 on electricity and natural gas, as amended and supplemented*, according to which supply at a regulated price for non-households is maintained until 31 December 2014, and for households until 30 June 2021.

Thus, the adjustment percentages of final regulated prices for households, during 2015, determined as average based on the market share of each licensed operator performing the supply of natural gas on the regulated market were:

- at April-May 2015 of about - 4%;
- at 1 July 2015 of about 11%.

Falling regulated prices from 1 April 2015 were mainly due to the reduction of import percentages from 3% to 0%, of share of natural gas extracted from storage from the total

quantities supplied from 25.33% to 0%, of distribution tariffs at S.C. DISTRIGAZ SUD REȚELE S.R.L. with approximately 21% and to the maintenance of approximately constant of distribution tariffs at S.C. E.ON DISTRIBUTION ROMANIA - S.A.

Rising prices from 1 July 2015 with a percentage of 11% was due to the change in the following items:

- increase of current domestic production price from 53.30 RON/MWh to 60.00 RON/MWh, with an impact of about 6.5%;
- inclusion of the percentage of imported gas in the winter, with an impact of about 1.5%;
- inclusion of gas quantities to be extracted from storage in winter, with an impact of about 4.5%;
- decrease of unitary transport cost, with an impact of about -1,5%.

Therefore, in 2015, regulated prices recorded an average growth of approximately 7% for households, mainly reflecting the domestic production price change according to the roadmap of phasing out regulated tariffs.

4.3. Security of supply

According to Article 102 of *Law no. 123/2012 on electricity and natural gas***,** the line Ministry monitors security of supply issues, particularly regarding the supply/demand balance on the national market at the level of expected future demand and available supplies, envisaged additional capacity, planned or under construction, quality and maintenance of networks and measures necessary to meet peak demand and shortfalls of one or more suppliers. In this respect, every two years, before 31 July, it publishes a report outlining the findings of monitoring these issues, and any measures taken or envisaged to address them and forwards the report to the European Commission.

5. Consumer protection and dispute settlement in electricity and gas

5.1. Consumer protection

Electricity

Law no. 123/2012 on electricity and natural gas defines the *"vulnerable customer"* as the final customer being part of a household group that, for reasons of age, health or low income, is at risk of social exclusion, and in order to prevent this risk, benefits from social protection measures, including financial ones. Social protection measures and eligibility criteria for them are established by norms and regulations. The vulnerable customers are the main beneficiaries of the social aids envisaged in the process of the gradual phasing out the regulated prices/tariffs.

In accordance with the *"Procedure regarding terms and conditions for granting the social tariff to electricity household consumers"*, approved by ANRE Order no. 38/2005 as lately amended and supplemented, vulnerable consumers with average monthly income per family member less than or equal to the minimum wage set by governmental decision have the right to apply for social tariff. The social tariff was designed based on the consumption quota with increasing progressively differentiated prices, in such a way that up to the threshold of 90 kWh/month the average return price is less than that resulting from the application of any other tariff for households supplied at low voltage. About **979,751 consumers** (5% less than in 2013) of the total of **8,616,275 households,** benefit of social tariff.

Compared to the situation presented in 2014, in 2015 it was completed the review of the regulatory framework for the **supply of last resort**. Among other things it introduced a new bill model and a new model for the Consumption Convention.

Also, it was developed the *Framework - Procedure on the obligation of suppliers of last resort of electricity and natural gas to settle final customers' complaints* (ANRE Order no. 16/2015). The procedure establishes the stages for taking over, recording, analysing, establishing measures and handling complaints relating to electricity and natural gas supply. The *Framework - Procedure* is applied by suppliers of electricity and natural gas in order to solve complaints from final customers for the following activities: energy contracting, billing the energy supplied, offers of prices and tariffs, continuity of supply, ensuring the quality of energy supplied, operation of meters, switching, final customers information in accordance with the requirements of the legislation in force, resolution of complaints against the supplier made by final customers regarding non-compliance with the legislation in force, resolution of other final customers' complaints.

It was revised *The Regulation on informing final customers of electricity and natural gas* (ANRE Order no. 96/2015) by which it was intended to determine greater accountability of suppliers of electricity and natural gas in the correctly, completely and accurately information of their final customers. It was also established a uniform system of reporting by suppliers of electricity and natural gas on the activity of informing final customers, specifying the content of the report and the mode of submitting to ANRE the data and documents relating to the informing activity.

Performance standard review for the electricity supply activity has been approved by ANRE Order no. 118/17.07.2015. The main amendments refer to:

a) monthly transmission by electricity suppliers of statistical indicators, review of guaranteed levels of performance indicators and increase of compensations that suppliers pay their final customers for non-compliance of these guaranteed levels, so as to discourage suppliers in not fulfilling their obligations towards final customers;
b) compensations for non-compliance of the guaranteed level are paid by the supplier of last resort to the household and final small non-household, on supplier's own initiative, and to the large final non-household based on written request sent to the supplier in 30 calendar days from fulfilment of conditions for granting compensation. Compensations for non-fulfilment of guaranteed performance indicators are paid by suppliers of last resort only in case of consumption sites supplied under universal service, as this is a guaranteed supply service.

Also, the *Procedure on granting compensation to households for receiver appliances damaged as a result of some incident caused by the network operator* (ANRE Order no. 177/16.12.2015) was reviewed.

Regarding promotion of smart metering, in 2015, concessionaire distribution operators submitted to ANRE proposals on developing pilot projects, whose results would offer the necessary information for setting conditions and elements regarding the development of the national roadmap for smart metering systems implementation, and the national plan for the smart metering systems implementation. ANRE assessed the proposals of concessionaire distribution operators in accordance with Annex no. 3 – *Criteria for approval of pilot projects on electricity smart metering systems implementation*, of ANRE Order no. 145/2014 and approved in March 2015 the pilot projects that respected the criteria set. 14 pilot projects were approved for 6 concessionaire distribution operators.

Following the analysis of the progress of pilot projects development regarding smart metering systems implementation at 30 June 2015 according to set measures, ANRE Order no. 145/2014 was amended in August, extending the deadline up to which pilot projects can be requested and approved. Therefore, the two distribution operators FDEE Muntenia Nord and FDEE Transilvania Nord, whose pilot projects did not qualify previously as eligible according to requirements, received approvals for 4 pilot projects.

Table 1 shows the centralizing situation of pilot projects regarding the implementation of electricity smart metering systems approved by ANRE in 2015.

Distribution operator	No. of pilot projects	No. of customers included in pilot projects	Total value of pilot projects [RON]
Enel Distribuţie Banat	3	9,961	5,275,260
Enel Distribuţie Dobrogea	4	10,000	4,928,379
Enel Distribuţie Muntenia	1	11,392	6,650,281
CEZ Distribuţie	2	20,150	16,085,781
E.ON Distribuţie România	2	23,237	8,303,582
FDEE Transilvania Sud	2	23,047	22,893,216
FDEE Transilvania Nord	2	5,335	4,069,333
FDEE Muntenia Nord	2	2,143	1,433,938
TOTAL	**18**	**105,265**	**69,639,770**

Monitoring results of smart metering systems implementation process were included in the Reports analysing the progress of pilot projects development regarding smart metering systems implementation at 30 June 2015, 31 August 2015 and 1 November 2015, submitted to the ANRE Regulatory Committee

A set of performance indicators for smart metering systems was defined so as the evolution of electricity smart metering systems implementation can be followed during the implementation process and a period after its completion. These indicators will be applied for all projects that imply electricity smart metering systems, so as to verify the degree of achievement of objectives set. Performance indicators target the following issues: progress of electricity smart metering systems implementation, electricity smart metering systems structure, economic effects, qualitative performance indicators, information security conveyed through electricity smart metering systems.

Implementation areas were defined and relevant data and information were set that characterize these areas from a technical, economical, qualitative and socio-demographic point of view. By processing these data it will be achieved prioritization/ranking of each concessionare distribution operator's areas, through a multi-criteria analysis, in order to evaluate the implementation potential of electricity smart metering systems and prepare the national plan and roadmap for the implementation of electricity smart metering systems.

Concessionaire distribution operator	No. of implementation areas	No. of substations	No. of meters			Average monthly consumption/ meter (kWh)	No. of planned meters for metrological replacement during 2016-2020	Value not amortised for meters to be replaced (RON)	Network was refurbished in the last 5 years: %
			Total	Single-phase	Three-phase				
CEZ Distribuţie	2,606	13,268	1,398,919	1,322,403	76,516	112,70	1,202,115	86,068,358	10
Enel Distribuţie Banat	448	7,679	866,366	759,696	106,670	251.54	360,022	73,690,952	5
Enel Distribuţie Dobrogea	344	5,498	626,627	577,942	48,689	234.13	301,874	62,323,993	19.64
Enel Distribuţie Muntenia	254	6,805	1,201,804	1,072,787	129,013	343.74	569,298	156,808,264	13.36
E.ON Distribuţie România	2,552	9,857	1,154,729	1,101,939	52,790	104.60	947,300	0	4
FDEE Muntenia Nord	1,414	10,218	1,246,502	1,158,577	87,925	107.41	730,766	0	13.25
FDEE Transilvania Nord	1,963	8,719	1,224,969	1,132,469	92,500	110.55	576,320	0	11.34
FDEE Transilvania Sud	1,782	6,059	1,078,383	878,898	224,212	122.03	627,864	0	8.39
TOTAL	**11,363**	**68,103**	**8,798,299**	**8,004,711**	**818,315**	**173,34**	**5,315,559**	**378,891,567**	**10.67**

The analysis report on the progress of pilot projects on smart metering systems implementation at 01 November 2015 revealed the following conclusions:

- Post-implementation results on the benefits in question are not relevant to all pilot projects due to very short period from the completion of the pilot project implementation to the date of achievements reporting (the absence of relevant monitoring period) and provides no eloquent prerequisites for decision making on the roll-out.
- Cost-benefit analyses submitted by distribution operators do not allow a comparative analysis of the results obtained, as they were done on different analysis models that follow operator's business strategy, with specific aims and focus.
- Cost-benefit analyses are positive for Enel Distribuţie, E.ON Distribuţie România and FDEE Transilvania Sud and negative for CEZ Distribuţie.

The result was the need to impose by ANRE a detailed model of cost-benefit analysis or the performance by ANRE of a cost-benefit analysis for all distribution operators, possibly through an impartial external consultant in order to avoid allegations of non-transparency and lack of objectivity.

The measures proposed are:

- Establishing a period of 6 months or a year for monitoring period of pilot projects carried out in 2015, so as benefits and costs quantifying should be based on concrete results across all distribution operators, including FDEE Transilvania Nord and Muntenia Nord.
- Amendment of ANRE Order no. 145/2014 regarding deadlines set for the approval of the national roadmap for smart metering systems implementation and national plan for smart metering systems implementation.
- Realization, during 2016, of the monitoring of pilot projects carried out in 2015, and implementation of pilot projects for electricity smart metering systems in urban and rural areas with recently not refurbished networks, to provide relevant information for implementation sizing of electricity smart metering systems nationwide.
- Contacting an external consultant for establishing a suitable cost-benefit analysis model for projects regarding the installation of electricity smart metering systems completed/future, and for establishing interoperability requirements that electricity smart metering systems must comply with and the analysis of distribution operators proposals relating to communication technologies, standards and communications protocols used.

Natural gas

Given the removal of regulated prices (for non-households at 1 January 2015, and on 1 July 2021 for households) and competition development on this market, it imposed the setting of legislative measures to ensure access of final customers to information on commercial terms for the supply of natural gas in the pre-contractual and contractual phase. Compared to 2014, the regulatory framework has not been changed, except the amendments and additions introduced by ANRE Order no. 107/2015 to facilitate efforts of final non-households to switch suppliers.

To quantify the quality of the natural gas supply activity to final customers, by *Order no. 37/2007 regarding the approval of the Performance standard for the supply of natural gas,* ANRE established the minimum performance level to carry out this activity.

Quality of supply activity is evaluated based on the performance indicators for the following activities:

a) contracting natural gas;

b) billing natural gas supplied;

c) settlement of final customers complaints relating to quality requirements of natural gas supplied;

d) informing final customers in accordance with the requirements of this performance standard;

e) settlement of complaints brought by applicants/final customers against the supplier for not complying with the performance standard;

f) settlement of other complaints and demands of applicants/final customers.

The performance standard for the natural gas supply activity sets the following performance indicators:

a) Guaranteed performance indicators – GPI – indicators that establish minimum performance levels for the conduct of the supplier's activity and for the breach of which the supplier will automatically pay the affected applicant/final customer the penalties provided in this standard. These indicators are:
   - GPI 1 – Contracting of natural gas;
   - GPI 2 – Resolution of requests of final customers regarding bills;
   - GPI 3 – Quality of supplied natural gas;
   - GPI 4 – Resolution of requests of final customers regarding measuring of natural gas quantities;
   - GPI 5 – Penalities due to failure of supplier's payment obligations.

b) Annual performance indicators – API – indicators that set annual perfomance levels in the natural gas supply activity. Natural gas supplier has the obligation to annually report to ANRE the level of achievement of the following indicators:
   - API1 – Processing contracting applications;
   - API 2 – Responses to final customer's requests;
   - API 3 – Supply resumption in case of limitation/interruption as a result of failure to pay;
   - API 4 – Information on performance indicators.

ANRE monitored the achievement of guaranteed performance indicators – GPI, based on the reports of licensed natural gas suppliers. In 2015, there were a total of 400,955 final customers' requests, as stated in the table below:

Guaranteed performance indicator	Number of requests received		The number of requests resolved within the deadlines imposed by IPG		Number of applicants/final customers who were paid penalties		The amount of penalties paid (RON)	
	households	Non-households	households	Non-households	households	Non-households	households	Non-households
GPI 1- Contracting natural gas	268,060	64,528	268,060	64,528	0	0	0	0
GPI 2- Requests on bills	43,852	16,968	43,849	16,968	3	0	200	0
GPI 3- Quality of natural gas	102	36	102	36	0	0	0	0
GPI 4-Requests on measuring	5,587	1,821	5,585	1,820	2	1	175	55
GPI 5-Penalities due to failure of supplier's payment obligations	1	0	1	0	0	0	0	0
Total	**317,602**	**83,353**	**317,597**	**83,352**	**5**	**1**	**375**	**55**

For non-compliance with guaranteed performance indicators, natural gas suppliers paid penalties to 5 households and one non-household, totaling 430 RON.

Regarding vulnerable customers who use natural gas for heating, they receive monthly aid for heating during the cold season, called aid for natural gas. The method of granting this aid is set by *Governmental Emergency Ordinance no. 70/2011 on social protection measures during the cold season, as amended and supplemented*, this being a measure of support, borne

from the state budget and/or, where appropriate, local budgets, intended for vulnerable customers with incomes up to a threshold established by law and which aims to cover all or, where appropriate, a portion of home heating costs. Aid amounts and the income level relate to the reference social indicator - RSI.

5.2. Dispute settlement

Final customer's complaints

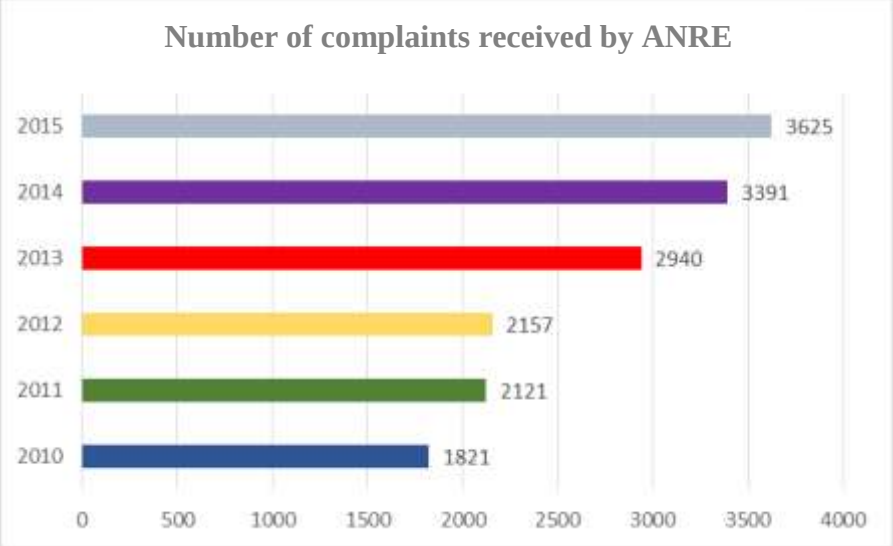
Final customer's complaints handling obligations are included in the license conditions, framework contracts and supply standards. Supply license holders must ensure the recording, investigating and resolving of complaints made against them by the final customers. It is mandatory to have a department that handles every complaint against the license holder by a final customer who considers oneself wronged by the practices of the license holder. It shall be established and maintained a register of requests, intimations and complaints addressed by the final customers, and the way to solve them. In 2015, electricity supply license holders received 103,244 petitions from final customers and natural gas supply license holders received 18,882 complaints (reports according to ANRE Order no. 16/2015)

If the final customer is not satisfied with the response received from the undertaking, it may apply to ANRE which, based on the provisions of *Government Ordinance no. 27/2002, as amended and supplemented*, assesses and formulates responses to issues raised in the complaints. For complaints that require additional verifications, control actions are requested.

Depending on the issues addressed, dealing with complaints is different: from written answers including explanations and references to legislation in force, to checks on site, to direct talks with the parties involved.

In case the issues notified in the complaints, relating to non-compliance with legal provisions by the undertakings, are proving justified, ANRE sends them reminder letters setting out measures for compliance with legal provisions in force and/or legal measures are taken for imposing sanctions.

During 2015, ANRE registered and solved a number of **3,625 complaints** submitted by natural and legal person's beneficiary/ applicant of the services provided by undertakings in the electricity and natural gas sectors.



Out of the 3,625 complaints, 2,639 were focused on the electricity sector and 986 on natural gas sector.

A total of 3,049 complaints were sent directly to the ANRE, and 576 complaints were forwarded to ANRE by other public institutions.

Electricity

The following table presents the main categories of problems identified in the complaints settled in the electricity sector:

No.	Main issues reported	2015	[%]
1	Billing of electricity	576	21.83
2	Suspicion of stealing electricity	461	17.47
3	Quality of electricity	393	14.89
4	Contracting connection works	119	4.51
5	Notice / Disconnection / Reconnection / Termination / Cancelation	110	4.17

Through its **control activity**, the regulator seeks achievement of works and services of appropriate quality to the performance requirements required by law by the participants involved in the production, transmission, distribution, supply and use of electricity, including those involved in the design and development of installations and equipment used for carrying out these activities. In 2015, **694 control actions were carried out in the electricity sector**. Following the control actions, **reports finding contraventions and imposing sanctions were drawn up**.

Natural gas

During 2015, **986 complaints** referred to the natural gas sector. All complaints received were solved within the legal timeframe and in accordance with the regulations in force, informing the petitioners and institutions through which they were sent to ANRE, as appropriate.

The following table presents the main categories of issues identified in the complaints solved in the natural gas sector:

No.	Main issues reported	2015	[%]
1	System access	83	8
2	Connection to the system	157	16
3	Contracting, billing	191	20
4	Supply (termination, quality)	96	10
5	Installations	206	21

ANRE conducted **187 control actions in the natural gas sector** during the period analysed. Following the control actions, **reports finding contraventions and imposing sanctions were drawn up**.

The total amount of fines imposed in both the electricity and in the gas sector was 40,151,000 RON.

Dispute settlement

During 2015, were solved only 2 requests regarding **disputes in the electricity sector** at the conclusion of contracts. The provisions of the *Procedure on the settlement of disputes occurred in concluding contracts in the electricity and heat produced in high efficiency cogeneration*, approved by the Annex to ANRE Order no. 35/2013, have been applied.

In the gas sector, during 2015 there were no requests for mediation of **pre-contractual disputes in the natural gas sector**, according to *Procedure on mediation of disputes arising from the conclusion of contracts in the natural gas sector*, approved by ANRE Order no. 35/2013.

For the **settlement of disputes arising in the performance of contracts** between electricity and natural gas wholesale and retail market participants, *ANRE Order no. 61/2013 was issued approving the Regulation on the organization and functioning of the commission for settling disputes on the wholesale and retail markets between electricity and natural gas market participants*.

During 2015, there were 7 requests for settling disputes in the natural gas sector.

Network access disputes were mainly settled through replies to complaints received, without having to issue decisions in this regard.

The regulatory framework developed by ANRE and implemented by orders and decisions has a major impact on economic and social conditions, given that it is binding to regulated natural and legal persons.

The possibility of contesting the individual administrative acts or regulations of the regulator is an important factor in ensuring its accountability to consumers.

Thus, orders and decisions issued by ANRE can be challenged in court by natural or legal persons who believe that by applying those regulations, some of their rights have been violated.

Current status of proceedings pending before the courts:

Total: 494 ongoing cases in 2015, of which **111** have been finalized.

Classification of disputes handled by ANRE in courts in 2015, in the electricity, natural gas and efficiency sector, depending on their subject, is presented below:

- Administrative – 127 cases;
- Contravention law - 234 cases;
- Insolvency - 81 cases;
- Labour law - 5 cases;
- Free access to public information – 2;
- Claims - 40 cases;
- Criminal law - 1 case;
- Actions in progress – 4 cases;

In 2015, out of the total number of cases completed, **111** respectively, **90% of them were favourably solved for ANRE**.

Given ANRE activity of electricity, natural gas and energy efficiency market regulation, we mention that of the total ANRE orders and decisions that were challenged in court by undertakings from the electricity and natural gas sectors (ie. Hidroelectrica, Nuclearelectrica, Radet, Electrica Furnizare, OMV Petrom, GDF, E.ON Energie, TRANSGAZ, E-RES producers and others) and which have been subject of administrative cases, out of those definitively solved, 100% of them were solved favourably to ANRE.

In what regards reports finding contraventions and imposing sanctions, we mention that part of them referred to the sanctioning of OPCOM and Centralized Market for Bilateral Contracts participants for the trading/accepting to trade of electricity buy/sale offers not complying with the legislation in force (ie. OPCOM, Complexul Energetic Oltenia, Axpo Energy România SA etc.).

Contraventions complaints made against reports of finding contraventions and imposing sanctions mentioned and that were solved during 2015 were favourable to ANRE at a rate of approximately 90%.