

Hungarian Energy Office

Annual report to the European Commission

Budapest, August 2009

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Summary

The report includes information on the fulfilment of the tasks that are specified by Section (9) of Article 3, Article 4 and Section (8) of Article 23 of the Directive 2003/54/EC and by Section (6) of Article 3, Article 5 and Section (1) of Article 33 of the Directive 2003/55/EC.

The Act 110 of 2001 on electricity (hereinafter the former Electricity Act), the Act 86 of 2007 on electricity (hereinafter the new Electricity Act), the Act 42 of 2003 on natural gas supply (hereinafter the Gas Act), the Act 40 of 2008 on natural gas supply (the new Gas Act) and the secondary legislation on their enforcement provide for the establishment of the electricity and natural gas market in Hungary. The amendments of the mentioned laws are in accordance with the requirements of the relevant EU Directives.

The foundation of the Hungarian Energy Office (hereinafter: HEO) was ordered by the Act 41 of 1994 on natural gas supply. The present tasks of the HEO are determined by the Act 18 of 2005 on district heat supply (hereinafter: the District Heat Supply Act), the Act 42 of 2003 on natural gas supply (hereinafter: the Gas Act), the Act 40 of 2008 coming into force fractionally in 2008 and in 2009 (hereinafter: the new Gas Act), the Act 86 of 2007 on electricity (hereinafter: the Electricity Act), and the government and ministerial decrees issued on the basis of these acts. The Act 67 of 2008 on the escalation of the competitiveness of district heat supply (hereinafter: Act on a more competitive district heat supply) was issued in 2008. This act will significantly extend the tasks of the HEO from 2009.

The key tasks of the HEO are the regulation of natural gas and electricity companies (licensing, approval, price preparation, price reviews), surveillance, consumer protection and information supply. After the full opening of the electricity market, there have been changes in the role and activity of the HEO. Beside the regulation of the energy industry licensees, price application, consumer protection and information supply, also the surveillance of the competitive market, enhancing competition, guarding and forcing fair competition, monitoring the competitive market environment, and if necessary changing or initiating changes in this environment have been increasingly important. Legal remedy against the resolution of the HEO may be exclusively sought in front of a court of law.

The Act 57 of 2006 on the central administrative bodies, and the legal status of the members of the government and of the secretaries of state defined that the HEO is a governmental office, controlled by the Government and supervised by the Minister of Transport, Telecommunication and Energy.

As of 1 January 2007, based on the provisions of Section (5) of Article 71 of Act 57 of 2006, the HEO reported to the Government through the Minister responsible for the energy sector, and informed the competent Committee of the Parliament about its activities. This report presents the annual activities of the HEO for the fourteenth time.

Regulation of the energy market and licensing

The energy market was a regulated market from 1994 till the end of 2002. On 1 January 2003, the gradual opening of the markets, first the liberalization of the electricity market, then on 1 January 2004 the liberalization of the natural gas market started. In the first step, only the large industrial customers, and from 1 July 2004 all non-residential customers may enter the competitive market.

The electricity market was characterized by a hybrid model till the end of 2007. This means that a public utility and a free market segment were working parallel. Since 2008, the hybrid model has ceased to exist and a competitive market model has taken its place. In the latter model, the competition can be restricted only in the interest of the protection of vulnerable consumers, or with a view to prevent the abuse of market power. Customers and traders can purchase, and producers can sell electricity under free market conditions.

In accordance with the 2003/55/EC Directive of European Parliament and Council concerning common rules for the internal market in natural gas and the Section (1) of Article 32 of the Act 63 of 2005 on the amendment of the Gas Act, all customers have been eligible since 1 July 2007, thus the opening of the natural gas market was completed already in the last year. The number of registered eligible customers entering the competitive market was 786 on 1 January 2008 and amounted to 3938 by the end of the year. The breakdown of this total is: 1423 non-residential and 2515 residential consumers. The share of the competitive market in the annual total natural gas consumption amounted to 29.8%. The number of traders having license for trading on the competitive market was 25.

Both the production and the supply of district heat remained activities subject to license, and the installation of a district heat equipment is subject to license only over a heat output of 5 MW. However, licensing competence is divided between the municipalities of settlements and the HEO. All district heat producers that also generate electricity must apply for a license to the HEO, while the licensing of district heat production without electricity generation falls under the competence of the municipalities. According to the Act on a more competitive district heat supply, the HEO will perform the task of price review in connection with district heat prices from 1 July 2009.

In 2008, the Office issued 1053 resolutions. From amongst these, 344 pertained to the electricity industry, 108 to the natural gas industry, 19 to the district heat production falling under the competence of the HEO, 476 to data supply, 2 to electricity price issues and 104 pertaining to consumer protection issued not on consumer complaints.

Consumer protection

In 2008, the Office had 1841 cases related to consumer protection. This case number is 41.35% less than in the previous year. The largescale diminution is a result of sharing the competence amongst the HEO and the Nemzeti Fogyasztóvédelmi Hatóság (Hungarian Consumer Protection Authority). 65% of the complaints managed by the HEO were direct consumer complaints. The number of the complaints pertained to the electricity industry licensees excluding those managed by the Hungarian Consumer Protection Authority diminished to 17.2%. In case of the natural gas industry licensees the diminution eventuated at a much lower – approximately 25% - rate. Complaints were evaluated, resolutions were issued and measures were taken continuously. As a result of the experience gained during the process of consumer complaint management, the HEO imposed a fine of 2 million HUF in only one case, and ordered other obligations for the licensees in 8 resolutions. As a consequence of not meeting the obligations of quality of service, the HEO imposed a fine of 50 million HUF in only one case.

In 2008, the HEO conducted a consumer satisfaction survey for the fourteenth time. In the opinion of approximately 10 000 electricity consumers and 10 000 natural gas consumers there were no significant changes in the tendencies of the former years. The most critical fields were the uninterrupted supply, restoration of breakdowns, complaint management and the quality of Call Centres in both sectors, and the accuracy of bill in the natural gas sector.

The HEO maintained active relations with other administrative bodies working in the field of consumer protection. An especially intensive dialogue developed between the HEO and the Hungarian Consumer Protection Authority. The HEO gave professional support in the management of the consumer complaints difficult to be judged, and the two authorities clarified the competences and the formal and contentual requirements of data supply obligation. The HEO operated the Energy Interest Representation Board (EIRB) also in 2008 with a view to ensure the continuity of the dialogue between customers and licensees.

Price preparation, price regulation (electricity, natural gas, district heat)

In 2008, a new era started in the electricity supply as a consequence of ceasing the public utility supply and the appearance of the so called universal service. For the consumers not entitled for universal service the administrative price of electricity as a product has ceased. These large non-residential customers can buy electricity only from competitive market traders, who are chosen by these customers and willing to undertake their supply.

The so-called feed-in obligation scheme is regulated from the year 2008 by the Govt. Decree 389/2007 (23.12) on Feed-in Obligation and Price of the Electricity Generated from Renewable Sources or Waste, or Co-generated Electricity enforcing the provisions of the Electricity Act. The generation of electricity sold in the framework of the feed-in obligation scheme obtained significant support also in 2008 through the fixed administrative prices.

In 2008, the natural gas market was still characterized by the so called 'hybrid market' model (co-existence of a public utility segment and a competitive market). Accordingly, the consumers choosing public utility supply (consumers who do not wish to enter the competitive market) were able to purchase the product (natural gas) by paying administrative prices (public utility prices) for complex services including both the price of the energy and the price of system use. Customers entering the competitive market were able to buy the energy at a non-regulated price, while also paying administrative charges for system use.

The working out of the chapters on price regulation, price supervision and connection fees of the New Gas Act was in process in 2008. This new act serving as a regulatory basis from 2009 for the full opening of the natural gas market is developed on the basis of the new natural gas model.

It can be observed in both sectors that the price preparation activity of the HEO tends to focus on monopolistic activities expected to remain within the framework of administrative price setting as a consequence of market opening and the gradual extension of competition. The price preparation activity included the preparation of the decrees on the charges for system use, in the case of electricity on the prices of feed-in obligation and the universal service, and in the case of natural gas on end-user prices. A new price regulation period (effective between 2009 and 2012) has started with regard to the electricity system use. The preparation of

starting prices was preceded by a detailed asset and cost review – carried on almost in the whole year of 2008 – and the shaping of the regulatory system of the new period.

In 2008, the HEO judged three requests on price revision on their merits. Two of them were declined, one of them was partly accepted. The requests of the E.ON Energiaszolgáltató Kft. as a universal service licensee, the TIGÁZ Zrt. as a public utility natural gas supply licensee and the TIGÁZ as a natural gas distribution licensee were evaluated within deadline, while there has not been any decision made yet on the request of the E.ON Trade Zrt, as a natural gas public utility wholesaler, which was submitted in November 2008. In five other cases, the licensees withdrew their requests.

In 2008, the HEO in the lack of any relevant legislation did not perform any direct tasks in connection with district heat prices. However, the Act on a more competitive district heat supply (generally known as the Robin Hood Act) sets diverse new tasks on the HEO from the year 2009.

Energy saving

The Office cooperated in the implementation of the energy saving and improved energy efficiency strategy of the Government. As an expert, it participated in the work of the inter-ministerial commission evaluating tenders aiming at the improvement of energy efficiency, as well as in the work of the Commission of the Environmental Protection and Infrastructure Operational Programme selecting the projects. It also assisted in the preparatory work of issuing calls for tenders.

Energy information

The supply and the processing of technical and economic data relating to the licensees required by the HEO for meeting its responsibilities as well as the data supply towards international organisations and co-authorities were continuous.

Publicity and information

The President of the HEO, in compliance with his task specified by the relevant law, submitted a report on the activities of the HEO in 2007 to the Government in 2008. The HEO prepared its annual national report presenting the operation of the electricity and natural gas markets in accordance with the Directive 2003/796/EC and with the appropriate content specified by 2003/54/EC Directive on electricity, and the 2003/55/EC Directive on natural gas.

The HEO continuously supplied information to consumer representative organizations on the issues of licensing, price preparation, market analysis and market regulation through the Energy Interest Representation Board.

On its homepage, the HEO regularly publishes the drafts of its resolutions for consultation and the final versions of its resolutions of public interest for information. The HEO provides information on current issues related to its work and publishes the public technical and

economic data of electricity and natural gas undertakings with a content specified by a number of background legislation.

The HEO performs its data supply obligations towards international organizations (EUROSTAT, International Energy Agency, etc.) regularly including, among others, the supply of data on average consumer prices of electricity and natural gas.

Experts of the HEO played an active role in the various organizations of the European Commission, as well as in its professional committees, in the working groups of the Council of European Energy Regulators (CEER), and of the European Regulators Group for Electricity and Gas (ERGEG).

The HEO issued also in 2008 its publication presenting the activity of the HEO and the key technical and economic data of the supervised sector, and the Electricity Statistical Yearbook containing the data of the electricity system. The senior management of the Office regularly informed the written and electronic press on issues related to consumers.

On its homepage at www.eh.gov.hu, the Office provides information on its activities, its resolutions of public interest, its announcements, and the main events concerning the energy market.

Claims against the resolutions of the Office

In 2008, in addition to the cases of consumer protection, the HEO made 1053 resolutions. 25 were challenged at law court. From among them 4 cases were tried, and 21 cases are still in progress. 81 lawsuits were carried over to 2008 from earlier years. From among these cases 58 were tried in 2008 and 23 cases are still in progress.

The HEO proceeded in 1841 cases associated with consumer protection. Stakeholders submitted claims to courts of law in 62 cases against the resolution of the HEO. From among these, 11 cases were tried and 51 cases are still in progress. 51 lawsuits were carried over from the former years to 2008. From among these cases, 39 lawsuits were tried and 12 cases are still in progress.

Regulation and operation of the electricity market

Regulatory issues

Licensing and supervision

In 2008, HEO issued 343 resolutions on licensing for electricity undertakings. From among them, 42 were simplified licenses for small power plants and 117 were resolutions on license modifications. HEO issued 32 trading licenses, 73 resolutions on the approval or modification of codes, approved 67 events in relation with corporate law and other cases and made 12 resolutions on imposing fines.

Generation licences

The licensing procedures of power plants have been changed as far as the license for the selection of primary energy sources has ceased by the provisions of the Electricity Act effective since 1 January 2008.

The licensing conditions themselves have not been changed by the provisions of the new act. This means that only the power plants of a capacity of or exceeding 50 MW that have an operational licence for generation, or small power plants of a capacity of or exceeding 0.5 MW that have a simplified licence for small power plants have the right to generate electricity.

The establishment of wind power plants has been possible only by tendering since 1 January 2008. In 2008, HEO did not invite tenders since the relevant decree required for tendering was lacking.

Licensing procedure of small power plants

Another new element in licensing is that since 1 January 2008 the amount of electricity to be fed in under feed-in obligation (quota), the duration of the obligatory feed-in, and the expiration date of the operational licenses must be determined by HEO also for small power plants generating electricity by co-generation, taking into account the international commitments of Hungary on the share of renewable electricity, the competitiveness of power generated from renewable sources, the impact of the given technology on the balanced operation of the electricity system, the ability of consumers to pay, the position of the system operator, the extent of obligatory public utility electricity supply, and the extent of other approved supports. The co-generated electricity has also fallen under the scope of feed-in obligation since 1 January 2008. The new regulation extended the scope of feed-in obligation also to small power plants (e.g. gas engines) based on combined cycle electricity generation (co-generation), but does not contain any special licensing conditions.

In 2008, HEO imposed fines in six cases, on small power plants generating electricity without having a license.

Licensing procedure of wind power plants

As long as wind power plant tenders are not invited, the previously introduced 330 MW system limit is valid (the licenses on their establishment have been issued). This 330 MW is the maximum capacity limit of wind power plants to be permitted, and has to be interpreted as a system limit. In accordance with this limit, HEO issued licenses only for isolated wind power plants.

Inspection of power plants

In the course of the inspections performed at power plants in 2008, HEO concluded that the required fuel reserves specified in legal regulations were available in all power plants, and in several places reserves even exceeded the required quantity. Maintenance was carried out upon different principles but according to the schedule on all locations thus ensuring reliability and availability.¹

Power plants observed the regulations of environmental protection, so the developments and reconstructions carried out earlier made the power plants suitable for complying with the strict norms, and no power plant had to be closed.

Reviewing the status of quality assurance, it can be claimed that all of the power plants were operating quality assurance systems. These systems are adapted and audited according to the changes. Some of the large power plants have started the development of an integrated quality controlling, environment controlling, labor health and labor security system. Several power plants have an integrated environment centered controlling and quality controlling system.

Licensing and supervision of transmission companies

In accordance with the provisions of the Electricity Act coming into force in October 2007, MAVIR Zrt. submitted its application for the operational license for system operation within deadline. The application was approved by the Office on 1 January 2008 in its resolution 84/2208.

In accordance with the provisions of the Electricity Act, a special balance circle for the settlement of the electricity falling under feed-in obligation (hereinafter: KÁT) was established on 1 January 2008. The balance circle manager is the transmission system operator MAVIR Zrt.. The relevant decrees on the operation of this balance circle were promulgated at the end of December in 2007, however, this late date of promulgation did not make it possible either for MAVIR Zrt. or for the KÁT generators to prepare properly.

Right after the operation of the KÁT balance circle started, KÁT generators submitted several complaints to HEO on the operation of MAVIR Zrt. and the legitimacy of its measures taken in May and also in June, when MAVIR Zrt. started billing. Concerning the huge number and the nature of complaints, HEO investigated the activity of MAVIR Zrt. within the framework of a procedure initiated ex officio.

¹ During the gas restrictions in January 2009, in the Kelenföld power plant of the Budapesti Erőmű Zrt. they could not shift to oil-burning with the gas-turbine.

The investigation of MAVIR Zrt. was closed in July 2008. As a result, HEO imposed obligations on MAVIR Zrt. to help KÁT generators.

Licensing and supervision of distribution network companies

The legal unbundling of network companies as business associations providing regulated services as natural monopolies, and supply and trade licensees who are business associations selling electricity under free market conditions has been completed on the Hungarian energy market.

In order to implement the relevant directive of the European Union, the unbundling of the distribution network and the electricity trade activities took place in the case of three of the six distribution network licensees on the basis of the licences issued by HEO on 1 January 2007. The other three distribution network licensees applied for the modification of the licence issued in 2003 to bring the legal unbundling into effect. HEO issued the resolutions on license modifications on 1 January 2008.

On 1 January 2008, HEO also modified the licenses issued on 1 January 2007 in order to comply with the new provisions of the Electricity Act and its associating decrees.

During the year 2008, network licensees were operating in accordance with the laws and the rules of legal unbundling. There were no other changes in the structure of their organisation or in their operation in 2008.

Licensing procedure of electricity traders and universal service providers

The new Electricity Act significantly simplified the licensing process of electricity trading. Applicants have to submit fewer documents to HEO in the licensing procedure. In addition to the comprehensive trading license that also entitles for the direct supply of consumers, HEO introduced the restricted trading license and the simplified trading license as well.

Restricted license can be exclusively applied for on the basis of wholesale kind of activities because it does not entitle the licensee for supplying consumers. Simplified license can be exclusively applied for by the operator of a private electricity line subject to license, to supply the customers connecting to the private electricity line. If an applicant sells electricity exclusively to licensees or only to one user, it may apply to the Office for a simplified license, i.e. it is exempted from the obligation to prepare Business Conduct Rules.

The obligation to submit to HEO a financial guarantee in a given proportion of the licensee's annual electricity sales has ceased to exist. Since 1 January 2008, every kind of financial guarantees has been managed by the system operator MAVIR Zrt (the guarantee specified on the basis of the balancing energy, which was required also before and the new guarantee specified on the basis of the KÁT). In addition to this, the obligation of entry into the firm register of Hungary of the restricted electricity trading license applicants, and the previous requirement of an initial capital (a minimum of 50 million HUF) has been cancelled, as well. Furthermore, the Electricity Act ceased the license for cross-border trade, so such activities can be performed legally without a separate license from 1 January 2008.

On 1 January 2008, HEO modified all the electricity trading licenses issued earlier and falling under the authority of the Electricity Act in accordance with the new statutory provisions coming then into force. In the course of the year 2008, 32 electricity trading licenses - including 10 restricted and 1 simplified trading licenses – and 4 universal service licenses were issued.

The Electricity Act obliged the former public utility suppliers (defined as such by the old Electricity Act) to submit application also for electricity trading license besides applying for a license for universal service. Furthermore, the licence for public utility wholesale was cancelled by the coming into force of the Electricity Act thus the former public utility wholesaler submitted its application for an electricity trading licence in order to be able to maintain the continuity of its activity.

Licensing procedure of the organized electricity market

The effective Electricity Act in one of its transitional provisions allows HEO to oblige the transmission system operator in a resolution to submit an application for a license for the operation of the organised electricity market unless any application is submitted to HEO till 30 June 2008. Since there was no such application submitted to HEO till the given deadline, HEO obliged MAVIR Zrt. in its resolution 741/2008 issued on 4 July 2008 to submit an application through its affiliate company for the establishment and operation of the organized electricity market. MAVIR Zrt., after requesting the extension of the deadline specified in the resolution, submitted the application on 11 September 2008. The licensing procedure has not been finished till 30 December 2008.

Allocation of cross-border capacities in 2008

MAVIR Zrt. and the cooperating system operators have performed cross-border capacity auctions since 2003 at the common intersections. When comparing the results of the annual auction of 2007 and the previous years to the results of the annual auction of 2008, the following statements can be made. With regard to import possibilities, there were no significant changes in the quantity of available capacities however, the potential sources were restructured. Accordingly, the available capacity from Austria to Hungary grew from 100 MW to 300 MW and from Slovakia to Hungary decreased from the former 900 MW to 700 MW. With regard to the export of electricity, the capacity available for transports from Hungary to Croatia dropped by 150 MW to 450 MW. On the other intersections and directions, the usual amounts of capacities were allocated. Since January 2008, a joint auction has been introduced on the Slovakian-Hungarian intersection, which is a significant change in the monthly auctions. Monthly auctions were conducted by MAVIR Zrt.

With regard to import directions, the settlement price for cross-border capacity that emerged on the auctions of the year 2007 was 7.96 EUR/MWh on the Slovakian, 7.74 EUR/MWh on the Romanian, and 2.97 EUR/MWh on the Austrian intersections. In 2008, the settlement prices doubled on the Romanian intersections to 16.79 EUR/MWh, while the Austrian settlement price grew by 400% to 12.17 EUR/MWh. (Certainly, these prices assume 100% utilization). MAVIR Zrt. did not announce auction on the Slovakian intersection, which is to

be regarded as another determinant intersection, because of the decrease in available capacities and already allocated capacities still reserved for the year 2008.

With regard to export directions, the year 2008 can be considered very unique. 2007 was an extremely dry year in the Balkan region and since the generation of hydro power plants is fundamental in the region, the import of electricity has increased significantly. Accordingly, while the settlement price for cross-border capacity was 1.00 EUR/MWh on the Croatian intersection and 4.40 EUR/MWh on the Serbian intersection on the auction in 2007, the prices grew to 11.86 EUR/MWh and 8.95 EUR/MWh, respectively in 2008.

In November 2008, the annual auction for 2009 brought the following changes. The changes in the amounts of capacities relative to the previous years are as follows. The import capacity from Austria decreased to 180 MW (by 120 MW), from Slovakia to 400 MW (by 300 MW), and increased to 75 MW (by 25 MW) from Romania. The reason behind the falling import capacities from Austria and Slovakia is that the transmission system operators of the Middle-East European region are planning to introduce a stream based, coordinated capacity allocation in 2009, therefore – in agreement with the regulating authorities – they decreased the amount of the annual capacities by 40% on the debit of the monthly auctions (this practically means that the values did not change but capacities will be allocated on monthly auctions instead of the annual one).

With regard to export directions, the available transmission capacity to Croatia was 600 MW (it was 450 MW in the last year), and also the Serbian as well as the Romanian export capacities increased (by 25 MW and 50 MW in turn). On the other intersections and directions, the usual amounts of capacities were allocated. There were no significant changes in the settlement prices in the import directions relative to the previous year. In export directions, however, prices – compared to the outstandingly high prices of 2007 – returned to the usual prices of the previous years, which means a drop from 11.86 EUR/MWh to 0.58 EUR/MWh in the case of Croatia and a fallback from 8.95 EUR/MWh to 1.88 EUR/MWh in the case of Serbia.

The electricity shortage experienced in the South-East European region in 2007 because of hydrologic conditions was over by 2008 and was restored at a usual, regular level, which resulted in a decreasing export both towards Croatia and Serbia.

Regulation of responsibilities of the transmission system operator and the distribution network companies

In Hungary, one TSO (MAVIR Zrt.) and six distribution companies (DSOs) were in operation in 2008.

Until 31 December 2005, MAVIR Zrt. was owned by the state, and had purely a system operation license. Following this, from 1 January 2006 till 31 December 2007, it had both a system operation and a transmission network license for being a subsidiary of the MVM Holding (as such, it was also the owner of transmission network assets). These two licenses were replaced by one single transmission system operation license on 1 January 2008 on the basis of the Electricity Act.

Since 1 January 2008, MAVIR Zrt. has been responsible for operating and balancing the balance circle established for the settlement of the electricity falling under feed-in obligation (KÁT). The rules required to perform these activities are specified in the Governmental Decree 389/2007 (23.12) on the feed-in obligation and the feed-in price of the electricity generated from renewable sources or waste, or co-generated electricity, the Governmental Decree 109/2007 (23.12) on the distribution of the electricity falling under feed-in obligation to be conducted by the system operator and the determination of prices applicable in the course of distribution and the Business Conduct Rules of MAVIR Zrt. The latter one was approved by HEO in its resolution 86/2008 on 1 January 2008 then in the resolution 753/2008 dated on 27 June 2008.

Each of the six distribution companies operating in Hungary are owned by professional foreign investors. Three of them are owned by E.ON, two of them are owned by RWE-EnBW and one of them is in the ownership of EdF. On 30 June 2008, the share of German investors in the ownership of the six distribution companies was 81.6% and that of French investors was 18.4%.

There were no significant legal changes in the responsibilities of the distribution network licensees. The only modification that took place was the completion of the enforcement decree of the Electricity Act with a new regulation on the transformation or translocation of connection devices and connection point, as well as the public network and its frame.

Unbundling of activities

Requirements of unbundling in the Hungarian electricity industry

In Hungary, the obligatory provisions on the unbundling of natural monopoly activities (system operation, transmission, distribution) from other, competitive electricity sector activities (generation, trading and supply) are included in the Electricity Act and its enforcement decree.

In 2006, the system operator was reintegrated into the state owned MVM Zrt, which also performed generation and commercial activities, and therefore Hungary switched from the previous ISO (Independent System Operator) model to the TSO (Transmission System Operator) model, which is in line with the Directive. As a result of the transaction, the transmission network became the property of the system operator, which functions as a separate subsidiary but still a part of MVM Zrt. Holding. MVM Zrt. created a corporate structure, in which the holding company coordinating the subsidiaries does not perform any licensed electricity market activities. In 2008, as the single system operator in Hungary, MAVIR Zrt. performed its licensed activity as an independent subsidiary of MVM Zrt. Support functions that were centralized within MVM Zrt. in 2007, e.g. IT, finance, accounting etc. kept up also in 2008. HEO paid and will pay a special attention to the supply of services within the company group, and the outsourcings - allowing for cross-financing.

In 2008, there were no significant changes in the field of regulation of the unbundling of activities. However, the relevant legislation on electricity has been fine-tuned with regard to the transmission system operator and network licensees since 1 September. In virtue of this amendment, unbundling rules will not govern the members of the supervisory board in

general, but purely the members of the decision-making supervisory board as specified in Article 37 of the Act 4 of 2006 on business associations.

Practical experience on the compliance of the rules on unbundling

Transmission system operator

The transmission system operator (similarly to the independent system operator before) is physically unbundled from other activities of the vertically integrated company (separate headquarters and office buildings). The previous ownership unbundling has led to a strong and independent corporate culture at the system operator, which meant that not only professional, but also financial and business decisions were made independently from other electricity sector activities. The wave of outsourcings, which is also increasingly characteristic of the energy sector, had an impact also on the transmission system operator. Outsourcings were carried out at the system operator in 2007. In the course of 2008, the contracts on outsourcing were modified, essentially with regard to costs.

Distribution network companies

In 2008, all of the distribution activities were performed in vertically integrated companies with legal unbundling. Network assets are owned by the network companies.

The communication of distribution licensees towards third parties is not sufficiently independent yet, however the framework of legal unbundling induces a continuous improvement in this field. 2008 witnessed a much more clear separation both in structure and in management associating with legal unbundling. It still often occurs, however, that the same person represents both the distribution and the trade licensee at various sector events, although licensees lay more stress on personal unbundling than before.

Legal unbundling decreases the importance of the unbundling of accounting, because distribution licensees perform non-network activities only at an insignificant rate.

Competition

In 2008, the operation of the domestic electricity market was very different from what was usual in the previous years. The legal changes of 2007 pertaining to the electricity market, which switched the former public utility system to the scheme of universal service with a more moderate authority control, and a narrower circle of affected customers, came into force in 2008.

The narrowing of the circle of customers entitled for universal service relative to the circle of customers entitled for public utility supply resulted in the fact that several medium and small customers were obliged to enter the free market in 2008. Therefore the share of the consumers circle falling under the authority of the administrative pricing (before 2008 those entitled for public utility supply, since 2008 those entitled for universal service) decreased from 80% to 36% of the total consumption. The majority of consumers who crowded out from universal

service remained in contracted relationship with their former supplier – who has had also a license for trade since 2008 – however, their new contracts are not falling under the authority of administrative pricing any more.

Table 1 The proportion of the regulated (public utility and universal supply) and the free market consumption within the total consumption (%)

	2003	2004	2005	2006	2007	2008
Free market consumption	10,3	20,0	32,8	36,7	21,9	64,4
Regulated consumption	89,7	80,0	67,2	63,3	78,1	35,6

The above detailed changes in the retail market had only a moderate influence on the operation of the wholesale market. Due to the stiffness of the contractual relationships, including the intactness of the long term power purchase agreements (PPAs) of MVM concluded with the domestic power plants and its import contracts in particular, the dominance of MVM on the wholesale market has not changed. The majority (approximately 70%) of the electricity required to satisfy the domestic demand reached the suppliers and the traders supplying the customers through the MVM group.

The changes in regulation, however, induced certain structural shifts among the different sales channels. The share of sales to free market participants within the total sales of MVM tripled, while the share of those sales that fall under the authority of any kind of administrative price regulation decreased by the half - from 80% to 40%. 70% of the total excess demand of the traders supplying free market customers (amounting to approximately 14 TWh) was provided by MVM.

Meanwhile, there was only a slight change in the relative market positions of power plant investors due to the stiffness of the PPA system. The total share of domestic producers within the gross consumption remained unchanged (90%): the share of net import within the gross consumption, which decreased to 10% in 2007 from 15 to 20% of the years subsequent to the market opening did not exceed 10% in 2008 either. The slight decline in net import is resulted from the vivid export activity of traders similarly to the year of 2007 and the difficulties experienced during the fulfilment of the import contracts of MVM.

However, the retail market positions of traders seem to have changed significantly. There were considerable restructuring in the power relations of traders on the market of eligible customers: the share of certain traders shrank to a large extent, while the share of others multiplied. This, however, meant a far more moderate shift in the power relations on the whole retail market (including also the sales within the framework of universal service): the changes in the positions of the traders concentrating their sales on the large consumers segment of the free market were attenuated by the permanent dominance of the former public utility suppliers in the residential and small consumer segment. All in all, it can be said that the free market activity of traders has been continuously strengthening since the beginning of market opening.

Wholesale market

The Hungarian generation market showed a low concentration also in 2008, using conventional tools for analyzing concentration. In the course of the privatization of the power plant sector between 1995 and 1997, the majority of power plants belonging to the vertically integrated state corporation (Magyar Villamos Művek Tröszt) were acquired by foreign strategic investors (Electrabel, RWE, AES) - *Table 2*. The market share of the three largest generators was 62% in terms of installed capacities and 59% in terms of generation, while the Herfindahl-Hirschman Index (HHI), which may vary between 0 and 10 000 and measures the concentration of a market, would be somewhere between 1400 and 1800 depending on the calculation method, which indicates a less concentrated, multi-participant market in ordinary circumstances.

Table 2 Market share of the domestic power plant companies (groups) on the basis of installed capacity (2007) and generation (2008)¹

	Installed capacities (MW)	Market shares (on the basis of installed capacities) ¹¹	Generation (TWh)	Market shares (on the basis of generation) ¹²
MVM ²	2560	29%	15,2	38%
Electrabel ³	1676	19%	3,2	8%
AES ⁴	1197	14%	2,5	6%
RWE ⁵	863	10%	5,3	13%
Atel ⁶	389	4%	2,2	5%
EdF ⁷	406	5%	2,0	5%
Other domestic power plants ⁸	1755	20%	5,9	14%
Total values regarding all of the domestic power plants	8846	100%	36,3	90%
Nett import			3,9	10%
Gross consumption			40,2	100%
The 3 largest power plants⁹				
	5 433	62%	23,7	59%
HHI-index¹⁰				
		1520		1781

1. In the table under the notion of power plant company we mean the investing group owning the power plant. For the sake of simplicity we did not try to strain off the power plant units active on the market of system level supplies (e.g. Dunamenti F, or the AES Tisza blocks).
2. MVM: Paksi Atomerőmű Zrt., Vértesi Erőmű Zrt., MVM GTER Gázturbinás Erőmű Kft.
3. Electrabel: Dunamenti Erőmű Zrt.
4. AES: AES-Tisza Erőmű Kft, AES Borsod Energetikai Kft.
5. RWE: Mátrai Erőmű Zrt.
6. Atel: Csepeli Áramtermelő Kft.
7. EdF: Budapesti Erőmű Zrt.
8. The totalized share of power plant investors owning a market share under 5%.
9. The 3 power plants qualified as the largest ones on the basis of installed capacity (MVM, Electrabel, AES) are not the same as the 3 largest power plants on the basis of generation (MVM, RWE, Electrabel).

10. If we calculate on the available capacity or the capacity as a subject of effective consumption we get lower concentrated values taking the import capacities into consideration.
11. Calculated on the basis of gross installed capacities (data of 2007).
12. Nett generation of the power plant company divided by the gross domestic consumption (data of 2008).

While the concentration is low in terms of power plant capacity, the concentration is high in the wholesale market. The reason for this is that the capacity required for supplying end-customers was contracted by the former public utility wholesaler (MVM Rt.) in the years of the privatization of the power plant sector (1995 to 1997) through long term power purchase agreements. Through the long term PPAs, MVM Trade Zrt. (hereinafter MVM) disposed over approximately 70 to 80% of the total available capacity of domestic power plants in 2008, which practically meant that approximately 73% the generation of domestic power plants was sold through one single company, the MVM (*Table 3*).

Table 3 Structure of realization of the domestic power plants

	Electricity realization (TWh)					Share
	2004	2005	2006	2007	2008	2008
MVM - PPA¹	22,8	23,8	23,6	26,5	26,8	73%
Trader²	1,9	2,9	3,2	3,6	3,2	8%
Feed-in obligation³	3,0	4,4	4,5	5,0	6,5	18%
Other	3,6	2,1	2,0	1,9	0,2	1%

1. Guaranteed electricity purchases within the confines of PPA or electricity purchases over that by the MVM Rt, the MVM Zrt., and the MVM Trade Zrt. (public utility wholesaler till 2007). The public utility wholesaler license ceased in 2008 and the MVM Trade Zrt. has owned only a trading license since that. The numbers do not contain the electricity purchases not falling within the confines of PPA (till 2007 the realizations of certain power plants within the framework of feed-in obligation belonged to this category).
2. The realizations of the power plants towards the traders contain the power plant purchases of the MVM Partner Zrt. too.
3. The customers of the power plant realizations falling under feed-in obligation were mainly the public utility suppliers and at a smaller rate the public utility wholesaler till 2007, and from 2008 the MAVIR Zrt. exclusively.

In addition to the PPAs contracted with domestic power plants, MVM also had long term import contracts, as a result of which it was MVM who could deliver energy on nearly half of the cross-border import capacities, though, as a consequence of cross-border capacity access problems experienced by its suppliers, it could provide only the half of the former volume of import in 2008. The aforementioned difficulties only slightly affected the market positions of the company due to the relatively small importance of import contracts: the majority (approximately 80%) of the primary (purchased from import sources and domestic power plant sources) electricity purchases required for satisfying gross domestic consumption was carried out through the MVM group henceforward, which was therefore a dominant player on the wholesale market also in 2008.

The structure of the electricity wholesale market is different in the case of sales to universal service providers and to traders. Universal service providers continue to purchase electricity through fixed channels and at regulated prices due to HEO's resolution on significant market power. In November 2007, public utility suppliers concluded electricity sales contracts (so

called VEASZ) with MVM for four years. The selling prices to universal service providers within the framework of VEASZ were regulated by the resolution 839/2008 (30. 06. 2008) of HEO, the selling prices of universal service providers to the end-users are regulated by the decree of the Minister of Economy and Transport 115/2007(XII. 29.) on the pricing of universal service of the electricity market, and the product packages to be provided within the framework of universal service. In the administrative price segment of the universal service (though its size is just a fragment of the public utility segment), the dominance of MVM remained unchanged, as much as 80% (Table 4). The remaining purchases of universal service providers were primarily covered by co-generated electricity or electricity produced from renewable energy sources by small power plants sold to MAVIR at administrative prices and allocated on the affected suppliers.

Table 4 Structure of purchase of the public utility/universal suppliers

	Electricity purchase ¹ (TWh)					Share 2008
	2004	2005	2006	2007	2008	
MVM²	23,5	18,7	17,7	22,9	10,5	82%
Feed-in obligation	2,3	3,6	3,7	4,4	2,3	18%
Other	0,8	0,7	0,9	0,8	0,0	0%

1. The table contains only the amount of electricity purchased on the customer demands developing within the framework of public utility or universal supply. The table does not contain the electricity purchased by the public utility suppliers to suffice distribution network loss (the distribution network loss was sufficed by the MVM Rt./MVM Zrt./MVM Trade Zrt. till 2007).
2. The table does not contain the realizations of the public utility suppliers to suffice distribution network loss.

The purchases of free market traders were not constrained by law contrary to those of public utility suppliers, therefore the market structure was much more heterogeneous in this segment, which is much smaller than the public utility segment, and the dominance of MVM prevailed purely to a limited extent. However, MVM increased its free market sales parallel to the increasing free market consumption, so its role in supplying the traders who supply eligible customers was increasing continuously. The primary purchases of traders (excluding trade between traders) essentially came from four sources (Table 5). These are the import sources, the electricity sales from power plant (and import) capacities contracted by MVM through PPAs, spare capacities of domestic power plants not contracted by MVM and from 2008 the sales of energy fed in by MAVIR in the framework of feed-in obligation. The majority of electricity purchased from primary sources (a significant part of which passes several traders) was sold on the Hungarian retail market, and only a smaller part was sold abroad. In 2007, the switchbacks to the public utility segment resulted in a temporary shift in the sales structure of traders towards foreign markets, but the original rates restored by 2008.

Table 5 Primary structure of purchase of the traders¹

	Electricity purchase (TWh)					Share 2008
	2004	2005	2006	2007	2008	
Import²	5,2	6,0	7,7	9,9	11,9	35%
MVM	1,9	6,5	6,5	5,1	14,3	42%
Domestic power plants	1,9	2,9	3,2	3,6	3,2	9%

Other ³	0,2	0,2	0,2	0,2	4,5	13%
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1. By the primary structure of purchase of the traders we mean the electricity purchased directly from domestic power plant or import, or from the MVM as (former) public utility wholesaler. The table does not contain the trade between traders. The purchases of the traders does not contain the purchases of the MVM Trade Zrt. on the purpose of comparison of the periods before and after 1 January 2008 (though since 2008 the MVM Trade Zrt. has been conducting its activity on the basis of a trading license).
2. The import of traders in the table does not contain the electricity purchased and realized beyond the borders.
3. Till 2007 these numbers contain principally the balancing energy purchased from the system operator, but from 2008 it involves also the electricity falling under feed-in obligation purchased from the system operator.

In Hungary, there is not any organized energy market (energy exchange); therefore electricity trade is fundamentally conducted within the framework of bilateral contracts. The process of transactions in 2008 is shown by *Figure 1*.

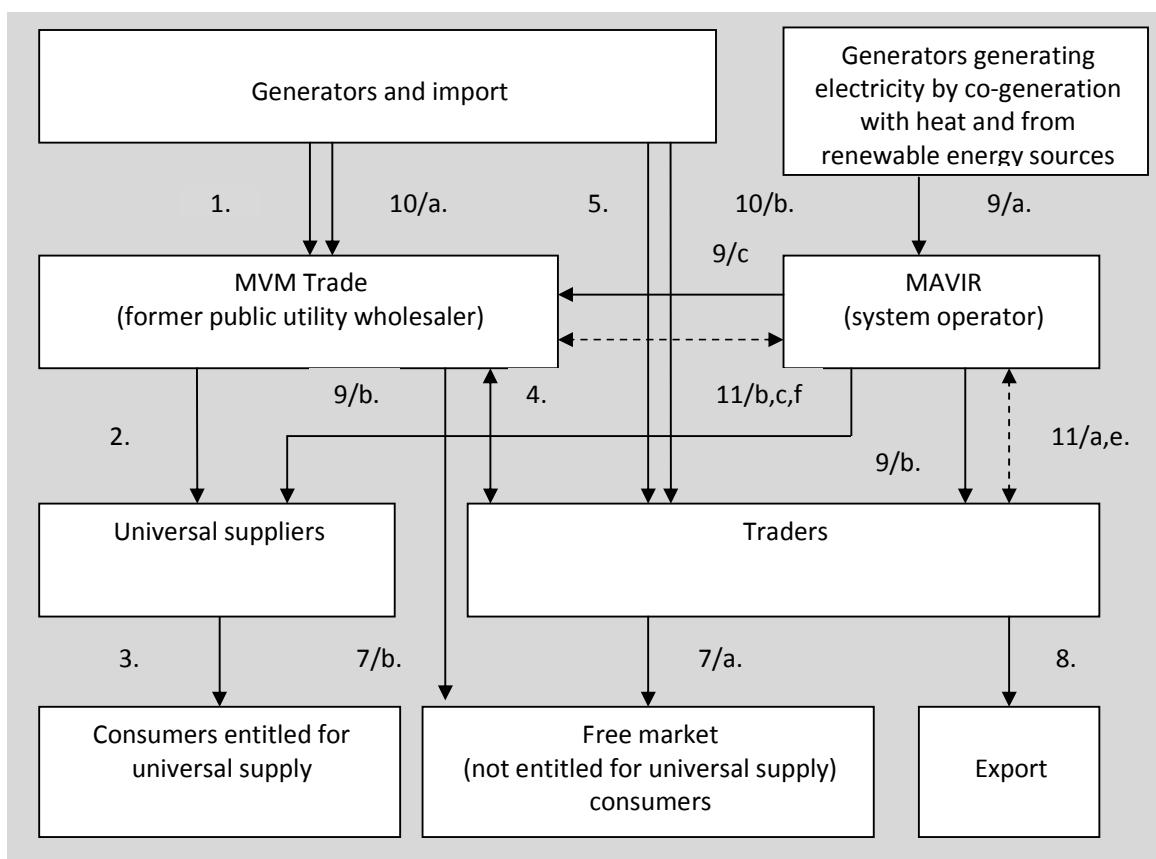


Figure 1 Transactions on the electricity market

Domestic power plants sold the majority of their generation (*Table 6*) through long term PPAs concluded with the former public utility wholesaler (MVM) (**1**), 18 % of their production (co-generation and generation from renewable sources) was sold to MAVIR (**9/a**) within the

framework of feed-in obligation and at prices set in the relevant decree. Hardly 9% of power plant generation was sold directly on the free market through short term (typically one year) contracts (5). Typically, PPAs covered a period of 15 to 20 years, but the parties adjusted the price and quantity of the electricity to sell annually within the framework of annual trade contracts. MVM sold the electricity contracted through PPAs or originating from import sources to universal service providers supplying customers entitled for universal service at administrative prices within the framework of four year VEASZ contracts (long term electricity sales contracts) (2-3). In 2008, 36% of domestic electricity sales were realized through this channel subject to administrative pricing.

MVM sold the majority of the electricity to traders through bilateral contracts or through public capacity auctions (4). Although traders primarily based their activity on import sources in the first year of the market opening, the sales of power plant capacities contracted by MVM became the key source of purchases for the free market traders in addition to import (10/b) in a few years' time (after the initial excess import capacities disappeared). The share of the electricity coming from the free capacities of power plants seldom exceeded 20% of the primary purchases of traders in the last years since market opening. As much as 90% of primary trader purchases went through secondary trade within the trade sector (6), before the electricity was sold to users (7/a-b) or on export markets (8). In fact, total of the demand of free market customers was satisfied through traders. The sales of electricity generated from renewable energy sources or co-generated with heat fall in a special sale category (9/a-b). The system operator (MAVIR) is obliged to purchase this electricity from the generators within the framework of feed-in obligation (KÁT) at a price specified by law, and in an amount and within a period determined by the resolution of HEO (9/a). Traders and universal service providers are obliged to purchase the electricity sold within the framework of KÁT in the proportion of their sales to users (9/b, 9/c).

Table 6 Types of transactions on the wholesale market (2008)

Eladó		Customer	Type and duration of the transaction	Amount of electricity realized in 2008-ban	Other
1.	Domestic power plant	MVM	PPAs (contracts with 15-20 years long duration and annual trading settlements)	26,8 TWh	Administrative price till 31 December 2003; Free market prices from 1 January 2004 till 31 July 2006; Administrative price from 1 August 2006 till 31 December 2006; Free market prices from 1 January 2007
2	MVM	Universal service provider	4 years long contract (VEASZ)	10,5 TWh	Administrative price
3.	Universal service provider	<i>Customer entitled for universal supply</i>	<i>Universal service provider contract</i>	<i>12,8 TWh</i>	<i>Retail market transaction at an administrative price</i>

4.	MVM	Trader	auction, bilateral contract	14,3 TWh	Realization of electricity on the free market contracted by PPAs
5.	Domestic power plant	Trader	bilateral contract	3,2 TWh	Realization of non-contracted free capacities
6.	Trader	Trader		19,0 TWh	
7/a.	Trader	<i>Free market customer</i>		22,1 TWh	<i>Retail market transaction at a free price</i>
7/b.	MVM	<i>Free market customer</i>		1,1 TWh	<i>Retail market transaction at a free price</i>
8.	Trader	Export market		9,2 TWh	
9/a.	Generators generating electricity by co-generation and from renewable energy sources	MAVIR	feed-in obligation	6,5 TWh	At a price determined by law, and for a period and in a quantity determined by license
9/b.	MAVIR	Traders and universal service providers	part of feed-in obligation allocated on traders and universal service providers	6,3 TWh	To be purchased in the rate of consumer's realization
9/c.	MAVIR	MVM	part of feed-in obligation allocated on the MVM	0,2 TWh	
10/a.	Import	MVM		2,3 TWh	
10/b.	Import	Traders		11,9 TWh	
Market of system level supplies, network losses and balancing energy					
11/a.	Trader	MAVIR	annual contract	0,6 TWh	System level services
11/b.	MVM	MAVIR	annual contract	0,5 TWh	System level services
11/c.	MVM	MAVIR	annual contract	0,5 TWh	Transmission network loss
11/d.	MVM	Distributor	annual contract	3,3 TWh	Distribution network loss
11/e.	MAVIR	Traders		0,6 TWh	Balancing energy
11/f.	MAVIR	MVM		0,1 TWh	Balancing energy

Market events and changes in the regulation

The second half of 2008 saw several market and regulatory events that influenced significantly the future operation of wholesale market.

The Decision 2008/C 223 of the European Commission which closed the investigation initiated against Hungary in the subject of state aids were issued on 4 June 2008. The Decision concluded that power plants received illegal state aids through the PPAs and requested the Hungarian authorities to end these state aids. In order to execute the Commission's Decision, the Parliament passed the Act 70 of 2008 on certain issues in association with electricity on 10 November 2008, which provide for the ending of PPAs and oblige the affected power plants to pay back the illegal subsidies decreased by the sum of investments not returned or not expected to return under free market conditions.

On the effect of the actions of public administration following the Decision of the Commission, MVM Trade Zrt. started renegotiating the PPAs regarded as the source of state aids. It concluded new, medium-term (5 to 8 years) product based contracts with the majority of power plants (except for Dunamenti Power Plant, and AES Tisza Power Plant). With renegotiating the agreements, MVM Trade transformed its former PPA portfolio into a smaller but more competitive one.

On 30 June 2008, HEO issued its resolution 739/2008 on significant market power (SMP resolution) in which it designated MVM Trade Zrt as an undertaking with SMP and imposed auctioning obligation and price limit on it. The resolution (which was amended by the resolution 963/2008 in December 2008) specified three different price limits, two for the sales to universal service providers in 2008 and in 2009 (16.34 HUF/kWh and 15.60 HUF/kWh) and one (19.05 HUF/kWh) for the company's total sales on the wholesale market in 2009.

In the course of the approval of the auction rules (resolution 821/2008), HEO prescribed 5.6 TWh sales for October and 1 TWh for the first quarter of 2009 (annual, quarterly and monthly products to be transported in 2009 were sold on both auctions). The low amount of electricity (compared to the sales of 10 TWh in 2007) sold on the auctions is resulted from the narrowing portfolio of MVM and the product structure (the high rate of monthly products). The resolution of HEO specified special rules on the participation in the auction: only distributors, domestic users and traders entering into consignment contracts with them can take part in the first phase of the auction. Traders without consignment contracts can participate only in the second phase. However, even in this case, they were subject to a restriction on sales since they were allowed to sell the products purchased on the auctions only to domestic users. The (mean) selling prices of the auctions were limited by the resolution of HEO (at a level of 20.5 HUF/kWh), and the highest consignment fee that may be specified in a consignment contract was determined at a level of 0.5 HUF/kWh.

MVM Trade held the auction specified in the relevant resolution on 27 and 28 October.

Retail market

The main characteristic of the retail market is still the dual structure even after the changes of the regulation: the co-existence of an administrative and a free price segment. However, the

relative weights of the two segments shifted to a large extent. The public utility supply at administrative prices that any consumers could avail was replaced by the universal service in 2008, which related to a much narrower circle of consumers. In 2008, only residential customers and customers with a connection capacity not exceeding 3x50 A were entitled for universal service.

Since 1 January 2009, the circle of those entitled for universal service was to be narrowed by the Electricity Act to the circle of customers under 3x20 A connection capacity, however the circle of customers entitled for universal service was significantly extended by the new Gas Act passed on 9 June 2008. It increased the connection capacity limit to 3x63 A and extended the right to publicly financed institutions specified in a separate statutory provision, local governments, their publicly financed institutions performing public functions, legal entities of the church performing public functions and institutions maintained by foundations performing public functions. As a result, the number of customers entitled for universal service will increase rather than decrease. Customers entitled for universal service are still supplied by their former suppliers who now own universal service licenses. The universal service provider is obliged to sell electricity at administrative prices and conclude a contract with the users entitled for universal service.

Customers not entitled for universal service have already purchased electricity from the free market (primarily the large customers) or just entered the free market when the public utility segment ceased (mainly medium and small customers). Small customers entering the free market after the public utility supply ceased usually stayed with their former supplier who supplied these customers in the possession of a trading license.

The companies with universal service license, which are E.ON Energiaszolgáltató Zrt., Budapesti Elektromos Művek Nyrt., Észak-magyarországi Áramszolgáltató Nyrt. and Dél-magyarországi Áramszolgáltató Nyrt., are interested also in the operation of distribution networks through their subsidiaries or joint ventures. Universal service providers are owned by three multinational companies, E.ON, RWE and EDF, which supplied customers not only through their affiliates entitled to provide universal service, but also through their trading subsidiaries established with a view to perform free market activities. Thus, the market share of these companies within the total domestic retail market was very significant, approximately 81% even 5 years after the market opening in 2003.

Despite the strong market concentration, there were traders entering the market, who also undertook to supply users in addition to their domestic wholesale activity. The circle of these traders included both multinational companies with several subsidiaries in the region and small domestic traders. In 2008, there were 10 traders operating on the retail market, whose owners were fully independent from any of the domestic distribution network companies. Their market share was approximately 19%, but only 10% excluding the traders belonging to MVM group.

In 2008, the market share of the former public utility suppliers decreased continuously at a slow pace. The market share of 6% they lost in the last year appeared in the increasing market share of MVM. Although the total shares of traders' independent from the network companies remain unchanged relative to 2007, the relative position of the certain participants changed significantly. (Rapid changes like this are not rare in this segment: there was a trader who entered the retail market in 2007, gained a 3% market share, and then in 2008 gave up their electricity trading activity.) Those traders who go through significant changes in their market

position concentrate their activity primarily on large customers, which seems to confirm the assumption that the primary scene of the retail market competition is still the market of large customers.

Domestic prices in comparison with the prices of the European Union were in the middle range both in the residential and in the industrial customer segments in 2007. The user prices of both categories grew by the first half of 2008 relative to the other member states of the Union. The rise in prices was relatively small in the case of residential customers, so Hungary still can be found in the middle range, however, in the case of the non-residential customers it belongs obviously to the most expensive countries.

Measures aimed at preventing the abuse of market power

The ex post tasks of a competition surveillance authority specified in the Act 57 of 1996 on Prohibition of Unfair and Restrictive Market Practices governing the posterior investigation and sanctioning of market abuses are performed by the Hungarian Competition Authority (Gazdasági Versenyhivatal, hereinafter GVH). The ex-ante interventional rights specified in the Electricity Act, which aim to prevent market abuses, are exercised by HEO.

The Electricity Act applies special rules to avoid market abuses. It introduced the legal definition of significant market power, which, although new in the regulation of the electricity industry, was already known in the telecommunications sector. The Electricity Act and the associating enforcement decree include detailed rules on the designation and treating of licensees with significant market power.

Within the framework of the new regulation, HEO as a supervisory authority may impose special additional obligations (e.g. public capacity auction, cost-based pricing etc.) on all licensees including both wholesale and retail market players who, following a market analysis, turn out to have significant market power. The imposition of obligations all served to prevent the abuse of market power and enhance the efficiency of competition. HEO, in cooperation with the GVH and relying on market analyses, designate the licensees who have significant market power and imposes special additional obligations adjusted to their market positions.

HEO acting within its legislative competence conducted the required market analysis on the wholesale market and on the market of ancillary services, and issued its resolutions on 30 June 2008 (739/2008 and 727/2008). In the course of the procedure conducted on the wholesale market, HEO designated MVM Trade Zrt as an undertaking with significant market power and imposed on it the obligation of auctioning and a price limit. The resolution 821/2008 on the approval of the public auction, and the resolution 963/2008 on the modification of price limits imposed on the sales to the universal service providers in 2009 associate with the resolution on the wholesale market.

HEO designated MVM Trade Zrt as a licensee with significant market power in the market of reserves for balancing, and the MVM GTER Zrt on the market of breakdown reserves. HEO imposed on the affected companies an obligation of bidding in addition to the obligation of cost based pricing.

Security of supply

Security of electricity supply

Preparations for winter

The Office examined and evaluated the preparations of licensees for the winter period, and drew the following conclusions:

- the power plants accomplished their winter preparation programs,
- the power plants accomplished their annual maintenance programs till 31 October 2008.
- the supply of power plants with fuel is ensured by contracts.
- all of the power plants, the fuel stockpiles of whose are determined by statutory provisions, possess the required stock.

These were the facts that helped the Hungarian power plant system to handle without any particular problems the restriction of gas supply implied by the Russian-Ukrainian debate.

In the winter period, the capacity balance of the Hungarian electricity system can be regarded as reassuring if the import capacities on the northern and eastern borders do not decrease significantly, and the export capacities on the southern borders do not increase significantly. In this case, the available capacity is sufficient to satisfy the demand, and also the reserve capacity, which is sufficient according to the plans, is available. In the cold winter period, however, natural gas disconnection may occur in the case of the hydrocarbon fired power plants, therefore the cooperation between the MAVIR dispatch centre and the MOL dispatch centre is a must. Though measures were taken in order to prevent the coal from being winter-killed, such an event cannot be fully excluded. A case like this could hinder the generation of the Mátra Power Plant and a quick measurement would be necessary to involve reserves.

Network development

The transmission system operator MAVIR Zrt. is responsible for ensuring the long term and secure availability of the system with its development, maintenance and operation activities performed on the transmission network constituting a part of the Hungarian electricity system, in line with Hungarian and international requirements and thus providing for the maintenance of the domestic electricity supply at a European level. Within the framework of network development:

- the Hungarian section of the Békéscsaba-Nagyvárad 400 kV cross-border line and the extension of the Békéscsaba 400/120 kV substation were completed in December 2008. These works were implemented in such a way to allow a further extension, which is the development of a third 400 kV connection into the direction of Romania. With the implementation of the Békéscsaba – Frontier (Nadab) – Arad 400 kV project, the second Hungarian-Romanian 400 kV connection would come into existence, which would improve system security also at a European level, in addition to the enhanced security of supply of the area.
- The renewed 400/220/120 kV substation in Göd providing for the electricity supply of Budapest and its region was inaugurated in November 2008. The Göd substation plays an important role not only in domestic energy supply but also provides a facility to

connect the Hungarian and the Slovakian electricity systems since this is one of the two 400 kV transmission system connections between the Hungarian and the Slovakian electricity system, which makes the Göd substation an important element in the cooperation of the European electricity systems, as well. As a result of the reconstruction, the substation became remote controlled by the Albertirsa operation center in August 2008, which means that the technologic supervision of the whole substation is made in the Albertirsa operation center and all the required interventions (connection operations) are made from there.

Price preparation, price regulation

The electricity as a product

A new era started in the electricity supply in 2008 with the ceasing of the public utility segment, which was replaced by universal service. Residential customers and non-residential small customers were allowed to purchase electricity within the framework of universal service, which means that they continued to buy electricity at an administrative price. Customers not entitled for universal service could not buy the electricity as a product at an administrative price any more. These large non-residential customers in the new system may purchase electricity as a product solely from the electricity traders of the competitive market and at a price evolved in negotiations. There are only very few possibilities for HEO to influence this price. Generally, it can be said that the customers purchasing electricity in big amounts and continuously (as a baseload product) or at night have more chance to realize lower prices, however, this requires continuous information.

The prices of universal service introduced on 1 January 2008, and the rise in the charges for system use induced a 9.8% increase in prices to residential customers in comparison with the public utility prices in 2007.

As a consequence of the rise in prices at the beginning of 2008 – perceived by many customers as an exaggerated price increase – the claim that budgetary organs, institutions performing public functions (public institutions) and a bigger proportion of non-residential customers should satisfy their electricity demand at a more favorable price than market prices, came to the front in 2008. Therefore the Parliament expanded the circle of non-residential customers entitled for universal service by the modification of the Electricity Act and empowered the Government to specify in a decree the circle of customers who are entitled for universal service after submitting a request to the universal service provider. This circle includes the budgetary institutions, the institutions performing public functions, publicly financed institutions of the local municipalities performing public functions, legal entities of the church performing public functions, and institutions maintained by foundations performing public functions. On 1 January 2009, the enforcement decree of the Electricity Act was modified on the basis of the above mentioned requirements. The extended circle of customers and the experience gained in 2008 made it necessary to issue a new decree on universal service [44/2008 (12.31) KHEM], which also included the detailed determination of the acknowledgement of costs of the universal service providers' electricity purchases.

The average rise in prices, including also the charges for system use, affecting customers supplied within the framework of universal service was below 3% (2.9%) in January 2009 in virtue of a decision of the price authority. Within this, the price paid for the energy as a product decreased by 1%.

System use

The tariff rates of system use effective from 1 January 2008 were set on the basis of the price adjustment mechanism of the 2005-2008 price regulation periods in accordance with the relevant ministerial decree effective from 1 February 2005.

The specific administrative prices for natural monopole activities (transmission system operation, ancillary services, distribution) were determined by the Decree of the Minister of Economy and Transport (GKM) 119/2007 (29.12) on charges for electricity system use. By virtue of domestic regulation taking into account also the various international practices, only those who receive electricity from the network have to pay a charge for system use. Those who feed electricity in the network (power plants) are excluded from this obligation.

The new decree was developed by the redefinition and supplementation of the decree [57/2002 (12.29.) GKM] effective in 2007. One of the main novelties of this decree was that distribution charges were specified for five voltage levels instead of the former three then four voltage levels. The price authority decided not to extend the distribution basic charge to small customers although it would have been justified professionally (the extension happened in January 2009). In accordance with the provisions of the Electricity Act, a separate public lighting distribution charge was introduced, which aimed at covering the maintenance costs of passive public lighting devices.

The structural changes in charges was followed by the increase of the distribution balancing charge to be paid by low voltage customers with profiles, from 0.05 HUF/kWh to 0.5 HUF/kWh.

Distribution charges (excluding the above mentioned balancing charge and the public lighting distribution charge) increased by 8.6% on the average.

Since 2008, the former transmission charge and the system operation charge have been merged. The new transmission - system operation charge excluded the various components of tax nature, which were included in the former system operation charge (coal penny, stranded cost, support for electricity generated from renewable sources or co-generation). The new charge, however with a different content, was lower by 76% than the sum of the transmission and the system operation charges in 2007 (only 1 HUF/kWh instead of 4.2 HUF/kWh). The decrease excluding the mentioned items was approximately 7%, which was resulted from the increasing incomes of MAVIR.

The charges for ancillary services (0.672 HUF/kWh) remained unchanged.

On 1 January 2008, the system use charges (the sum of charges for distribution, transmission - system operation and ancillary services) dropped by 14% to 56% (approximately 23% on the average) depending on the voltage level. The above mentioned values include the effect of the

cessation of the components of tax nature of the former system operation charge. The aggregated system use charges excluding these items were higher than in 2007 by approximately 0.6% to 10.2% (6% on the average) depending on the voltage level.

The third 4-year price regulation period of the electricity system use (from 2005 to 2008) was over in 2008 and a new one started in 2009 (2009 to 2012). The preparation of the starting prices of the new period involved the detailed review of assets and costs of the licensees concerned. The representatives of the largest organizations of customer protection participated as observers. HEO involved external experts in the preparation of the review in order to help the deeper examination of the various fields, by concluding supply contracts with the experts appointed to the various fields. With a view to be well-founded and transparent, HEO specified and published on 30 June the viewpoints of cost justification in a methodology guideline according to Article 4 of Section 142 of the Electricity Act, and after the reviews were closed, it published on its homepage the cost values – by licensees and by activities – serving as bases for the starting prices of January 2009. On 31 October, HEO prepared and published its methodology guideline on the price regulation system of the new price regulation period according to Article 5 of Section 142 of the Electricity Act. The new price regulation mechanism elaborated in this guideline and discussed with the affected participants in more rounds meant a significant shift towards the direction of the price-cap regulation, which tends to spread increasingly also in the international practice. This mechanism gives more business independency and responsibility to the licensed companies. The new prices specified by the decree 43/2008 (23.31.) of the Minister of Transport, Telecommunication and Energy (KHEM) on the amendment of the decree 119/2007 (12.29.) of the Minister of Economy and Transport (GKM) on the system use charges of electricity came into force on 1 January 2009.

On 1 January 2009, the transmission system operation charge increased by 42%, the charges for ancillary services decreased by 37%, while the distribution charges grew by approximately 17% on the average. The main reason for the high rate for the latter is that there was a rise exceeding 50% in the purchase costs of the distribution network losses.

An annual distribution charge of 1800 HUF (excluding VAT) (in case of a controlled tariff category only 600 HUF) was imposed on the smallest consumption places including also residential customers. The costs that have been covered by the basic charge since 2009 were covered previously by the consumption proportional distribution turnover charge, so the increase in this charge was lower than it would have been without it. In other words, the introduction of the basic charge did not mean an effective rise in the costs, but induced a restructuring among the various groups of customers.

On 1 January 2009, the aggregated changes of the system use charges - depending on the voltage level – varied between a decrease of 17% concerning the taking out of electricity at high voltage and a rise of 11% concerning the taking out of electricity at low voltage. The average growth of the changes was 6.2%.

Electricity falling under feed-in obligation

The prices for the electricity falling under feed-in obligation changed on 1 January 2009 and the prices for the co-generated electricity changed on 1 July due to changes in gas prices.

The increase in the prices in January was varying between 0 and 9.1%. The significant standard variation resulted from the application of different price regulation formulas of the various energy sources.

In July, the price of energy generated by gas fired cogeneration – simultaneously with the changes of public utility prices of natural gas in April and July - and according to the provisions of the effective Govt. decree [389/2007 (12.23.)] - increased by 6.6%.

In 2008, the conditions of the feeding-in of electricity sold in the framework of feed-in obligation at supported price changed significantly with regard to the submission of schedules, and the sanctioning of the deviations from the schedule, that is the introduction of an operational penalty. The ‘simple’ obligation of submission of schedules was completed with a sanction. A penalty has to be paid for the deviation from the schedule beyond a given tolerance limit determined in terms of capacity and weather. The same penalty has to be paid for failing to submit schedules and the delayed submission.

For co-generation facilities, the obligatory feed-in remained guaranteed depending on their capacity, and the preferred purpose of use of cogenerated energy (district heat) and energy efficiency (based on the provisions of the above mentioned decree). Based on the formula specified in the decree, the feed-in price changed less than by 1 percentage point lower than the inflation in the case of non-natural gas fired generation, and according to an index, which takes into account the change of natural gas price in 60% and the inflation 1 percentage point lower than the percentage value of the forecasted inflation in 40%, in the case of natural gas firing.

The decree – in the case of licenses received on application submitted after 1 January 2008 (quota) – allows for the inflation indexation specified in the obligatory feed-in prices also with regard to electricity generated from renewable energy sources or from waste if a 1 percentage point efficiency improvement is achieved.

By the end of 2008, the total capacity of gas engines generating and supplying electricity based on feed-in obligation increased to approximately 500 MW. At the same time, since the market of district heat was close to its saturation point, there was an apparent intent on behalf of investors to target the market of energy generation for non-district heat purposes, mainly by establishing small cogeneration units of a capacity under 6 MW. However, after 30 June 2006, the higher feed-in price could only be guaranteed for specific institutions (budgetary organs, local municipalities and their publicly financed organizations, other institutions performing public tasks).

Thanks to feed-in obligation and the associated favorable feed-in prices, 2008 was also characterized by a keen interest of investors and the willingness to generate. As a result of capacity extension and the increasing generation, the amount that can be regarded as an incentive – in spite of the rise in the price of natural gas resulted from the appearance of several big combined cycle gas turbines and gas engines in the feed-in obligation system - was rising significantly.

The source of incentives is the price premium built implicitly in the price of feed-in electricity, allocated on traders by MAVIR Zrt and forwarded to customers. On the grounds of the virtual survival of the accounting system of 2007 also in 2008 (though the system of accounting changed significantly in 2008), the amount of incentives amounted to 65 billion HUF in 2008

relative to 48 billion HUF in 2007. From this amount, 19 billion was pertaining to electricity generated from renewable sources; 45 billion is co-generated electricity and 1 billion derived from electricity generated from waste.

In the case of the electricity falling under feed-in obligation, the rise in feed-in prices was 2.25 to 6.6% on 1 January 2009. This notable standard deviation was induced by the application of different price regulation formulas of the various energy sources (renewable – non-renewable) and on the different ways of generation (cogeneration – other than cogeneration).

Requests on price reviews and price modifications

In 2008, HEO received initiations from the universal service providers on the rise of prices six times. In five cases, suppliers withdrew their claims. One of the not withdrawn claims of E.ON Energiaszolgáltató Kft. was refused. The licensee challenged the resolution; the trial will take place in 2009.

Profit cap, incentives of quality of supply

The Office was responsible for the inspection of the profitability of electricity distribution licensees and public utility licensees (till 2007 as base year) in every year, taking into account the profit cap, which depended on the capital cost justified for the reference year. The inspection set out that in 2007 the affected licensees had no extra profit to be reimbursed to customers. Since the base year of 2008, HEO has been responsible for - simultaneously with the appearance of universal service providers who replaced public utility suppliers – the inspection of the maximum amount of the universal service margin. HEO is obliged to conduct the inspection till 31 March every year.

With regard to E.ON TITÁSZ Zrt. distribution licensee, the Office made a decision in accordance with the relevant law, on an obligatory 0.5% decrease in distribution charges for a calendar year, because of the deterioration of its indices of quality of supply in 2006. (The decision was challenged at law court, and HEO won the case). By virtue of the decision, its free market customers paid decreased distribution charges from 1 August 2007 till 31 July 2008. The account of public utility customers of TITÁSZ (from 2008 the customers entitled for universal service) was credited in two installments - in November 2007 and in spring 2008 - by an approximately 91 million HUF in total. For accounting reasons, TITÁSZ paid the remaining approximately 7 million HUF to foundations to aid vulnerable customers living its accounting area.

HEO imposed a fine of 50 million HUF – since it did not have authority to impose price decrease - on E.ON ÉDÁSZ Zrt distribution licensee because of the decline in its distribution quality supply indices in 2007 (ÉDÁSZ did not challenge the decision at law court, but paid the fine).

Since 2009 – as a base year – the HEO has had legal authority again specified in the decree on charges for system use to impose price discount on distribution licensees if their distribution quality indices deteriorate.

The new elements of the system of incentives of distribution quality were introduced in the above mentioned (issued on 31 October 2008) methodology guideline of system use and price regulation. In accordance with the guideline, the changes in the indices of quality of supply affect the rate of the inflation correction factor to be taken into consideration during the process of the annual adjustment of prices. (Distributors obtain their reasonable income – from the prices that are uniform nationwide - through an income restructuring mechanism introduced in 2006 and detailed in the decree on the charges for system use. Therefore there was no reason anymore to maintain the institution of profit cap.)

The examination of the possibility to extend this quality of supply incentives system also to the transmission system operator is in process.

Public service obligation, consumer protection

Approval of codes

With the introduction of universal service replacing public utility supply on 1 January 2008, and the significant changes in the tasks of network licensees it became justified or even necessary for each electricity licensee to issue new Business Conduct Rules. After comprehensive discussions in more rounds, several issues of the Business Conduct Rules were laid on a new basis, including the content of the contracts concluded with customers, the way of the conclusion of a contract and the way of treating vulnerable consumers and the customers who breach a contract were laid on a new basis. As a result, HEO issued 10 resolutions on the approval of Business Conduct Rules, and issued six resolutions on the modification of Business Conduct Rules in 2008.

Quality of supply

The minimum quality requirements concerning individual consumers are prepared on the basis of the annual data supply of the scheme of Guaranteed Services and the evaluation of the 2006-2007 activity of licensees was completed in August 2008, and can be seen also on the webpage of HEO. In 2008, also the scheme of Guaranteed Services itself was modified in accordance with the new regulation and also in line with the activity of the distribution licensees keeping the continuity of right, and also with the activity of universal service licensees operating within the new legal framework. The novelty of the regulation is that expectations were specified also on the activity of trading licensees for the first time in 2008. Since 1 January 2009, in addition to the extension of the circle of trading licensees, also the increasing amount of penalty to be paid by licensees to customers and the automating – of the majority – of the obligation of penalty payment are significant changes. HEO issued a total of 54 resolutions on the scheme of Guaranteed Service in 2008.

In 2008, also the regulation of the quality of client service - constituting a part of quality of service - was renewed. The new requirements and the relating reporting obligation and the modified system of sanctions have been applied since 1 January 2009. The new regulation

specified service quality in the case of call centres, written forms and personal contact too. Within the framework of this – rather than determining requirements on a basis base – uniform requirements are determined according to licensee types. Furthermore, it fine tunes the calculation methods of the various indices and allows for a quarterly evaluation and even sanctioning in relation with the quality indices of call centres. HEO issued 10 resolutions on the quality of client service in 2008.

In accordance with the provisions of the Electricity Act and its enforcement decree that came into force on 1 January 2008, licensees have to maintain a client service office in each small region. It caused problems in different order of magnitude for licensees to answer the challenges of this provision. E.ON companies had to establish 82 offices in the first quarter of 2008, while ELMŰ Nyrt and ÉMÁSZ Nyrt established 24 altogether, and DÉMÁSZ had to establish 20. Licensees opened permanent client service offices in county towns and local offices in other towns. Though the operation of the local office system can be regarded as complete from the second quarter of 2008, 28.2% of the personal requests were received in these offices.

The obligatory opening of the offices – ignoring any economic viewpoints and the fact that the supply areas are different from the small regions - has generated new problems. In contrast to the even and good rate of utilization of permanent offices, the uneven client turnover of local offices often induced exaggerated deviations. Turnover indices of permanent offices with the best and the worst utilisation ranged between 2 and 4 in 2008. These figures show that the client turnover is approximately evenly divided between permanent offices. On the contrary, these indices of local offices varied from 10 to 25, which mean that there are local offices with a regular and with low turnover too. A good example for the last one, that there were 8 offices in the country where the number of the clients per one hour did not reach 1. The local offices with the highest turnover had 17 clients per hour, while the national average is 4.6 clients per one hour.

Table 7 shows the client turnover of the offices according to hours and office types in comparison with the total number of the offices of a given type.

Table 7 Turnover of the customer service offices

	Order of magnitude of the hourly client turnover (capita)			
	1-10	11-20	21-30	over 30
Share of the permanent offices	7,9%	52,6%	26,3%	13,2%
Share of the local offices	92,4%	7,6%	0,0 %	0,0 %

Accordingly, it would be worth rethinking the regulation of the local offices so that customers be charged only with the maintenance costs of those offices where the operation results in an essential, assessable and measurable improvement of comfort for customers.

In 2008, HEO conducted a consumer satisfaction survey giving a comprehensive picture on the satisfaction of customers with the activity of distributors and universal service licensees for the fourteenth time. 7400 household customers and 2600 non-household customers participated in the survey. The method of the survey underwent significant changes relative to the previous years, so HEO issued 6 new resolutions on this subject in 2008. Modifications were needed to provide for a better utilization of the received data in the regulatory work.

According to the new methodology, the activities performed by the various licensees are evaluated by the rate of the satisfaction weighted by the importance instead of the gap between the importance and satisfaction (GAP). As a consequence, the outcome of 2008 cannot be compared directly to the figures of the previous years.

On the basis of aggregated results, it can be stated that 2008 did not bring any significant changes relative to the previous years. Customers still focus on the uninterrupted supply, the technical parameters of the electricity supplied, and the early restoration in the case of interruption from among the activities of distribution licensees. Within the sphere of tasks of universal service licensees, customers were the least satisfied with the service quality of complaint management and call centres.

Breakdowns

Reliability of the electricity supply

HEO may determine minimum quality requirements and expected service levels since 2003 continuously and the new Electricity Act in force since 1 January 2008 ensures this possibility as well. On the basis of this authority, HEO issued the network operation safety resolutions effective from 2006 at the end of 2005. The resolutions were challenged at law court by the licensees. The trials were finished in 2008. The judgment of the court strengthened the legality of the provisions included in the resolutions of HEO. As a consequence, the possible fines imposed by HEO cannot be queried either.

In the above mentioned network operation safety resolutions effective from 2006, issued at the end of 2005 for the distribution licensees and based on the performance of the period of 2002 to 2004, HEO prescribed a continuous improvement in the indices of breakdowns accompanied with outages relative to the performance of the previous year, expressed in percent. Pertaining to the continuous supply of electricity, two minimum quality requirements and four expected service levels, while pertaining to the network operation safety, one minimum quality requirement and two expected service levels were specified. In addition, HEO determined three other minimum quality indices as financial incentives including the reimbursement of charges for system use and imposing fines. These are the following:

- System Average Interruption Frequency Index
- System Average Interruption Duration Index
- Outage Index.

HEO evaluated the reliability of electricity supply in 2007 on 9 July 2008. Distribution licensees, the Hungarian Electricity Transmission System Operator (MAVIR) Zrt and several consumer interest representing organizations were invited for this event. In addition to the indices listed in the former section, HEO analyzed other indices as well (for example the restoration of supply in the case of planned and not planned interruptions longer than 3 minutes).

HEO found that one of the internationally used indices applied for the measurement of the continuity of the supply of customers - frequency of interruptions -, showed a continuous improvement since 2000 till 2005, dropped a little bit (to 1.83 interruptions per customer) in 2007 compared to 2006. Another internationally used index for the measurement of the

continuity of supply was the average duration of interruptions. In the case of this index, the improvement experienced from 2000 till 2005 stopped in 2006 and stagnated in 2007. The duration of interruptions per customer was 130.78 minutes in 2007, which matches the values of the international middle range.

With regard to the duration of interruptions, the indices of two licensees with the worst indices – E.ON Tiszántúli Áramszolgáltató Zrt and E.ON Észak-dunántúli Áramszolgáltató Zrt – were 20% lower than the national average. Also, with regard to the duration of interruptions, the average duration of interruptions significantly increased in the year under review at E.ON Dél-dunántúli Áramszolgáltató Zrt and DÉMÁSZ Hálózati Elosztó Kft. The index of ELMŰ Hálózati Kft remained unchanged. E.ON Észak-dunántúli Áramszolgáltató Zrt could slightly improve the unfavorable results of 2006. The performance of E.ON Tiszántúli Áramszolgáltató Zrt also improved but it is still worse than the national average. The index of DÉMÁSZ Hálózati Kft declined prominently in 2007.

With regard to the outage index describing the non supplied electricity (the ratio of the supplied and the non supplied electricity), the evaluation stated that annual values, after the standardization in 2006, show a bigger standard deviation in 2007. The decline in the performance of DÉMÁSZ Hálózati Kft, which was improving and was characterized by the smallest outage index until 2005 continued in the last two years at an accelerating pace. The outage index has been growing in the last two years also at ELMŰ Hálózati Kft. The outage index of E.ON Dél-dunántúli Áramszolgáltató Zrt, which stagnated between 2004 and 2006 at a level lower than the national average, became even worse, dropped by 26% even relative to that poor value. The rate of the outage continued decreasing at a smaller rate at DÉMÁSZ Hálózati Elosztó Kft. The annual outage index of E.ON Észak-dunántúli Áramszolgáltató Zrt varied every year between +30 and -30%. This fluctuation stopped in 2007 and the values reached the level of the previous year, which was around the national average. Although the performance of E.ON Észak-dunántúli Áramszolgáltató Zrt was better in 2007 than in the previous years, due to the poor performance of the last two years it failed to keep even the level of the years 2002 to 2004. Its index declined by 12.96% in the average of the last three years.

To sum it up, it can be stated that distribution licensees tend to fail observing the levels determined in the resolution of HEO. The detailed documentation of the annual evaluations can be found on the webpage of HEO.

Consumer complaints

Significant changes took place in the complaint management of HEO in 2008. The Electricity Act divided the competence of complaint management amongst HEO and the Nemzeti Fogyasztóvédelmi Hatóság (Hungarian Consumer Complaint Authority). Since 1 January 2008, the latter authority manages all the consumer complaints on accounting, billing, paying of charges or measuring, and the suspension or disconnection of the electricity supply because of delayed payments, and after paying the dues to connect the consumer to the network again. On the other side, HEO manages similar complaints of non-residential consumers and all consumers on connection, accessibility and the appropriate availability of the network.

As a result of the division of authority, the number of consumer complaints received by HEO decreased to 1841 by 41.35% in 2008 in comparison with the previous year. In 329 of 1841 complaints, HEO did not have authority to proceed, so all of these complaints were transmitted to the Nemzeti Fogyasztóvédelmi Hatóság. Accordingly, HEO handled only 1512 notices in the end. From among these, 647 were not regarded as complaint. From among the total of 865 complaints, there were 233 that concerned electricity licensees. HEO started supervisory procedures in the case of each complaint and made the relevant resolutions on each case. Based on the resolutions, 33% of the complaints on distribution licensees - mainly in the field of compensation and breach of contract – and 44% of the resolutions on universal service providers - mainly in the field of billing and arrears management – could be qualified justified.

As a result of the decreasing number of complaints on electricity industry licensees, which was induced by the reasons detailed above, HEO had the opportunity to enhance its supervising activity. Within the framework of this activity in 2008, the monitored areas were the following: services performed for extra charge on the basis of consumers claims, disconnection procedures because of delayed paying, fill-in forms applied during these procedures, establishment of client service offices and local offices, their operational conditions, the fulfillment of penalties (especially the automatic ones) to be paid on the basis of Guaranteed Services, the management of the claims of users on contracting, the change of meters of expired authenticity, the timing of billing and the handling of the claims submitted in local client service offices. The evaluation of the data and information received is still in progress in several cases. In the course of the inspections closed by resolution, HEO did not find any deficiencies serious enough to impose a fine. However, HEO imposed various obligations on licensees including the transformation of workflows, provision for technical conditions and modification of the content of fill-in forms in its 8 resolutions closing the inspections, which were issued in 2008.

Regulation of natural gas market and its implementation

Regulation

Licensing

In 2008, HEO passed 108 resolutions on operational licenses. Previously issued operational licenses were modified in 34 cases. HEO issued 4 resolutions on the approval of the establishment of direct pipelines. The relevant resolutions of HEO permitted 4 new natural gas traders to operate on the competitive market, thus the number of natural gas trade licensees increased to 25. As a result of the model change, the circle of activities subject to license has changed. Universal service and the one-stop-shop capacity sale are new activities subject to license.

Universal service is a new institution with the main task to provide a special supply for small customers. Residential customers and other users having contracted capacities not exceeding 20 m³/hour capacities are entitled for universal service. In a transition period – till 30 June 2010 – the users who have license for district heat production determined in a separate law and the users whose consumption exceed 20 m³/hour but do not reach 100 m³/hour are entitled for universal service too.

As an annex to the new enforcement decree of the Gas Act, a separate Universal Service Code will come into force. The demand of enhancing the security of supply makes it necessary to build a new transmission pipeline crossing several countries. The new license specified in the Gas Act aims to facilitate the management of the applications for the construction of international pipelines operating on the basis of one-stop-shop principle by the appropriate modification of the regulatory environment. The one-stop-shop principle ensures comfort for traders because they have to contact and contract with only one company independently from the number of countries they wish to transport through. Simultaneously with the appearance of new license types, certain license types will cease (for example natural gas public utility wholesale license, operational license for natural gas public utility supply, operational license for access to cross-border transmission pipelines).

Allocation of cross-border capacities and congestion management

Natural gas turnover at cross-border points:

- Western entry point - Mosonmagyaróvár: 6 million m³/day imported gas for domestic use;
- Eastern entry point - Beregdaróc: 27 million m³/day imported gas for domestic use + 12 million m³/day transits towards Serbia and Bosnia-Herzegovina.

More than 50% of cross-border capacities are already booked through long term contracts.

Table 8 Scope of the long term natural gas import contracts

Panrusgas	9000	million m ³ /year	till 2015
E.On Ruhrgas	500	million m ³ /year	till 2015
Gaz de France	600	million m ³ /year	till 2012
O&G, Eurobridge	900	million m ³ /year	till 2008 (expired)
Bothli Trade AG	900	million m ³ /year	till 2014

The long term transit contract concluded with Serbia, which includes a 12 million m³/day continuously contracted pipeline capacity, will expire in 2012. There are contracted congestions on the Eastern, Beregdaróc cross-border point. In order to manage the congestion, the transmission licensee launched a new development project in 2007, which practically doubles the import capacity in the Eastern direction. In the course of the construction works in 2008, a new pipeline of 1000 mm caliber from Beregdaróc to the compressor station was built, which extends the Eastern entry capacity by 30 million m³/day. In addition to the dissolution of the aforementioned congestions, the primary aim of the pipeline is to ensure the possibility of filling up the strategic natural gas storage being built in Szóreg. The pipeline will be completed in 2009.

Regulation of the responsibilities of transmission and distribution companies

The national high pressure transmission pipeline system is operated by one single company (FGSZ Földgázz szállító Zrt.). This company owns two gas market operational licenses issued by HEO: one for natural gas transmission and another for system operation. The Gas Act specifies the general rules of the natural gas transmission activity and itemizes the conditions of issuing the license for natural gas transmission. The most important task of the natural gas transmission licensee is – beside natural gas transmission – daily balancing. The activity of the ensuring of balancing natural gas is not regarded as natural gas trade according to the law. The natural gas transmission licensee operates an IT system for carrying out its tasks, which ensures the data flow required to maintain the hydraulic balance of the cooperating natural gas system and to carry out nominations and accounting on Internet base.

The relevant provisions of the Directive 1775/2005/EC of the European Parliament and Council on conditions for access to the natural gas transmission networks were adapted to the Gas Act back in 2005 and play an important role in the new Gas Act too.

The new act introduces and regulates the daily natural gas and capacity trading. The goal of this provision is to ensure that the commercial transactions required to maintain the daily balance of the cooperating natural gas system be carried out under market circumstances. The new act gives further legal guiding on the contracting of capacities on the cooperating natural gas system and the access to the system. Eligible customers are entitled for the transmission, storage or cross-border transmission capacity contracted in their public utility contract even after the public utility contract itself ceased. This capacity is not regarded as a new demand for capacity contracting. The right of capacity and the right of connection are fixed to the point of consumption after the public utility segment ceased.

Natural gas distribution systems are operated by 10 regional distribution companies. The Gas Act specifies the general rules on the natural gas distribution activity and within this, it regulates the conditions of license issuing, the obligation of a distributor to cooperate in the interest of the development and operation of the cooperating natural gas system, and it also itemizes the cases when the distributor may deny the connection of any consumer, or the start of natural gas distribution activity or the continuing of supply for a consumer already connected. Natural gas distributors have to register the consumption places taking over natural gas from distribution pipelines, their typical and prescribed data and deliver this information on request to the user taking over natural gas at the consumption place or to the trader supplying it. The detailed rules of natural gas distribution services can be found in the Natural Gas Distribution Code constituting one of the annexes of the enforcement decree of the Gas Act.

Unbundling of activities

In accordance with the Gas Act, the accounting unbundling is obligatory for each natural gas undertaking without any exemption. If the activities of natural gas transmission, natural gas distribution and natural gas storage are performed by the same vertically integrated natural gas undertaking, the activities subject to licence have to be performed in a legally unbundled organisation independent from the directly not related activities and in respect of organisation and decision-making and legally unbundled, and by the application of an independent decision-making process, except for the following:

- a) natural gas transmission licensees having also a system operation license,
- b) natural gas traders supplying less than 100 000 customers,
- c) pipelined liquefied petroleum gas (LPG) suppliers.

FGSZ Földgázszállító Zrt is a legally unbundled company of the MOL Nyrt. In accordance with Article 6 of the enforcement decree of the Gas Act, the transmission activity has to be performed in a separate organizational unit and an independent decision making process must be ensured. The senior management of the system operator may not take part in any other natural gas activities (subject to license), either directly or indirectly. With regard to the flow of information, the system operator must perform its natural gas activities concerning affiliate companies in the same manner as with regard to other market players. In 2008, Article 51 of the Gas Act, Article 35 and Annex 6 of the enforcement decree of the Gas Act pertained to the general rules of accounting unbundling. The natural gas transmission company has been physically unbundled (headquarters, office building) from all other business organizations active in the natural gas industry.

In Hungary, 10 distribution companies carry out the operation of the distribution systems. From among them, 5 are large, regional companies supplying more than 100 000 customers. In accordance with the provisions of the Gas Directive 55/2003/EC, the 5 big public utility supply and natural gas distribution companies completed the legal unbundling already in the first half of 2007. They perform the natural gas distribution and the public utility supply activities in separated companies. The public utility wholesale activity is performed by E.ON Földgáz Trade Zrt, which is a vertically integrated company of E.ON Ruhrgas International GmbH, but operates legally unbundled from the gas storage licensee E.ON Földgáz Storage Zrt. E.ON KÖGÁZ Zrt and E.ON DDGÁZ Zrt performing natural gas distribution are legally unbundled companies too.

Competition

Wholesale market

In 2008, the total natural gas consumption and the structure of sources were characterized by the figures shown in *Table 9* (billion m³/year).

Table 9 The composition of the nationwide natural gas consumption and of its sources in 2008

Nationwide natural gas consumption	14,011
Domestic product	2,608
Import	11,403
- from eastern direction	9,418
- from western direction	1,985

The import sources of natural gas are primarily of Russian origin. Even the natural gas bought from Gaz de France and E.ON Ruhrgas coming from Baumgarten, Austria through the HAG pipeline is of Russian origin. 16% of the import from the East comes from Turkmenistan.

The public utility wholesale licensee E.ON Földgáz Trade Zrt sold 9.836 billion m³ natural gas in 2008 for the supply of public utility consumers. The traders of the competitive market supplied 4.175 billion m³ natural gas for eligible consumers and thus the share of the competitive segment of the total market increased to 29.8% in 2008. The number of registered eligible customers entering the competitive market increased to 3938 in 2008. The distribution of this figure broken down by distribution licensees is the following:

Table 10 Number of eligible consumers till 31 December 2008 (pcs)

Distributor	Non residential	Residential	Total
E.ON DDGÁZ	147	224	371
ISD POWER Kft.	4	0	4
Égáz-Dégáz	338	445	783
FÓGÁZ	256	820	1076
E.ON KÖGÁZ	108	193	301
MAGÁZ	3	5	8
OERG	3	0	3
TIGÁZ	544	828	1372
FGSZ (transmission pipeline consumers)	20	0	20
Total	1423	2515	3938

14 of the 25 holders of the license for free market natural gas trade issued until the end of 2008 was already supplying natural gas to eligible customers in the last year. The largest of all those was EMFESZ Kft.

The DG Competition of the European Commission in its resolution issued on 21 December 2005 (Case No COMP/M.3696-E.ON/MOL) approved the 100% acquisition of MOL Földgázellátó Rt. and MOL Földgáztároló Rt. by E.ON Ruhrgas International AG as subject of specific conditions.

One of the key conditions is the implementation of the Gas Release program, which means that E.ON Ruhrgas must offer 1 billion m³ gas for sale on the natural gas market annually for a period of 8 years (from 2006 to 2013). The program is to be implemented in the form of auctions during the given years, where the annual 1 billion m³ quantity must be divided into the following sales units:

- 5 lots of 100 million m³ units,
- 5 lots of 50 million m³ units,
- 10 lots of 25 million m³ units.

E.ON's affiliates are excluded from participating, directly or indirectly, in the auctions.

The successful bidders may enter into contract with E.ON under the following terms and conditions:

- The contracted gas will be equally split over two years and delivered at the two Hungarian entry points – 80% at Beregdaróc and 20% at Mosonmagyaróvár.
- The gas supply contracts will provide for the same flexibility as MOL Földgázellátó Rt.'s upstream gas supply contracts.

The auctions will be carried out by an international IT service provider.

E.ON Földgáz Trade Zrt. held its second natural gas auction on 6 March 2008. 6 of the 8 participating eligible customers and natural gas traders bought a total of 1 billion m³ of natural gas in the course of the online auction. The starting price – as it was specified by the DG Competition – was 95% of the weighted average cost of gas of E.ON Földgáz Trade Zrt. The contracts have come into force for two gas years, with effect from 1 July 2008.

Retail market

In the retail market, the share of the public utility segment was 77%, and the share of the competitive market was 23% in 2008. The public utility market is fixed to given places. Public utility suppliers can supply gas only on the settlements specified in their licenses. In general, these settlements can be found in a contiguous region, and the regions are bordered by the frontier. The public utility wholesaler also supplies gas to customers directly through transmission pipelines. Consequently, the retail market cannot be described as a competitive market for the time being. The share of market participants in the supply of some of the various customer groups reflects a traditional regional distribution like before the opening of the market, rather than a competitive situation. In 2008, the switching of small consumers has started primarily due to the activity of EMFESZ Kft natural gas trade licensee who offered favorable contract constructions for the small and residential customers.

Security of supply

Natural gas transmission

Maintenance and reconstruction works improving the availability and the security of the transmission capacity as well as the repairs or replacement of the malfunctioning sections of the transmission pipelines revealed with the help of advanced technological solutions (intelligent pig) were completed on the natural gas transmission system also in 2008. With regard to the security of supply, it is an important fact that the dispatch center of the natural gas system operator and the dispatch service of the Hungarian electricity system operator MAVIR Zrt. maintain a continuous operative relationship. MAVIR Zrt. informs the natural gas system operator before the beginning of each gas days on the expected size of power plant consumption. If a significant power plant upload is expected within a given gas day, MAVIR Zrt. indicates its expected size, which allows the natural gas dispatch center to regulate the mode of the connecting pipelines accordingly. If there is any change in the operation of the natural gas transmission system that affects the operation of power plants generating electricity, than the dispatch center will warn immediately MAVIR Zrt. about this event.

Table 11 The maximum technical capacity of the domestic natural gas pipeline system
[million m³/day]

Domestic production	10,5
Import HAG (western direction)	12,1
Import Beregszász (eastern direction)	30
Underground storage	51
Totally	103,6*

(* The technological capacity secures the continuous supply with natural gas at a daily mean temperature of -15 C°)

Strategic natural gas storage

In line with the provisions of Articles 3 and 4 of Directive 2004/67/EC, Hungary has also put the issue of strategic natural gas storage in the foreground. The Act 26 of 2006 on security natural gas stockpiling orders the storage of 1.2 billion m³ gas, and the establishment of an underground storage required for storing this quantity by 2010. The security natural gas stockpile must be placed in a storage facility that has a daily withdrawal capacity of 20 million m³ for at least 45 days. The security stockpile of natural gas as by the Act enacted primarily serves the secure supply of natural gas to household and communal customers, as well as the supply of those customers who cannot replace their gas consumption with other energy sources.

Until 31 December 2009, the spare capacity of the present natural gas storage facilities determines the degree of the security stockpile, which – if an adequate quantity of spare capacity is available – cannot be less than

- a) 150 million m³ from 1 October 2006 to 30 September 2007,
- b) 300 million m³ from 1 October 2007 to 31 December 2009.

If the determined degree of the stockpile cannot be ensured from the remaining and not contracted reserves, it can be replaced with a crude oil product, i.e. fuel oil of an adequate quantity. Use of the spare capacities of natural gas storage facilities for security stockpiling may be approved and ordered, respectively, by the President of HEO. The Hungarian Hydrocarbon Stockpiling Association called for tenders for the construction of the strategic storage facility, which was won by MOL Nyrt. The Hungarian Hydrocarbon Stockpiling Association and MOL Nyrt established MMBF Zrt for performing the tasks of investment and operation of the UGS facility. Construction started in 2007 on the Algyő gas-field, in Szőreg-I, Southern Hungary, which was continued in 2008 by drilling new double functioned wells (withdrawal-injection). From among the planned 44 wells, 34 wells were drilled in 2008. The aboveground technological equipment was delivered, compressors and gas preparatory units were installed. The implementation works were finished by deadline; there is no delay and the investment proceeds as planned.

The MMBF Zrt started the injection of the safety natural gas into the wells of Szőreg-I in 2008 and injected 300 million m³ natural gas by the end of the year.

In February 2008, HEO issued the natural gas storage license to MMBF Zrt for the operation of the underground natural gas storage facility. In 2008, MMBF Zrt submitted a claim on the modification of the license to extend the circle of its activities with commercial storage based on the increased amount of the storable working gas by 700 million m³. HEO conducted the examination and issued the license modification in October 2008.

Commercial storage of natural gas

With regard to the security of supply, it is another important fact that the system is able to meet more than half of the total daily peak demand from the storages.

On the basis of Section 1 of Article 12 of the 26 Act of 2006 on safety stockpiling of natural gas, the Hungarian Hydrocarbon Stockpiling Association has stored 200 million m³ natural gas as safety reserves in the Zsana UGS of E.ON Földgáz Storage Zrt.

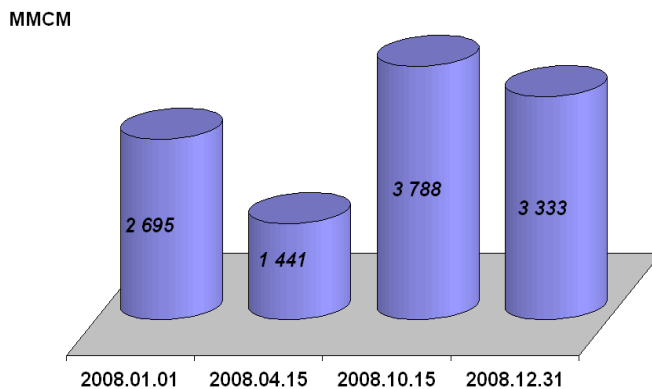
Table 12 Underground gas storage capacities of the natural gas storage licensee E.ON Földgáz Storage Zrt.

Name of the underground storage	Storable working gas reserves (million m ³)	Injection capacity (million m ³ /day)	Withdrawal capacity (million m ³ /day)
HAJDÚSZOBOSZLÓ	1440	10,30	19,7
KARDOSKÚT	280	1,92	2,9
PUSZTAEDERICS	330	2,15	2,9
ZSANA	1540	10,20	24,0

MAROS – I.	130	1,30	1,5
Total:	3720	25,87	51,0

Figure 2 shows the total storable working gas reserves of natural gas (million m³) in the commercial underground storages at the beginning of the year, at the shift of storage cycles and at the end of the year.

Figure 2 Total storable working gas reserves of natural gas (million m³)



Determination of the restriction order

The Office determined a restriction order for the case of supply disturbances effective until 30 September 2008. The restriction order is to provide for the continuity of gas supply to certain circles of customers. Currently, the Office ranks into the category of primarily restrictable customers all the gas fuelled power plant units that are able to switch to alternative fuelling and governed by the statutory provision which requires them to keep a liquid fuel stock sufficient to ensure a 16-day continuous operation.

Price preparation, price regulation

Characteristics of the present price system and price regulation

The Decree 105/2205 (19.12) of the Minister of Economy and Transport on the frameworks of natural gas price regulation orders the application of a regular price adjustment:

- with regard to 1 July (on the basis of the price formulas of the decree, the difference between the import price used to calculate tariffs and the effective import price (ik), and the factors influencing the purchase costs of natural gas);
- with regard to 1 January, April and October (on the basis of the factors influencing the purchase costs of natural gas).

In the case of small customers, the basic charge increased by 24%, the basic charges to be paid by medium-size customers grew by 21%, and the capacity charges remained unchanged during the year in the two categories of large customers. The gas charge increased similarly to the basic charge (by 24% and 21%, respectively) in the case of small and medium-size customers, while rose by 25% in the customer categories with contracted capacities over 100 m³/h. The reseller prices serving as the basis of payoff between the public utility wholesaler and the public utility suppliers – taking into consideration the legal regulations – were modified several times in 2008.

In July, reseller capacity charges increased in correlation with the changes in capacity bookings by 4.1%, while reseller gas prices were up by 25% at annual level (6.8%, 5.9% and 10.9% in turn) on the basis of the factors influencing natural gas purchase costs.

The Decree 70/2003 (28.10) of the Minister of Economy and Transport on setting the charges for natural gas system use (hereinafter the decree on natural gas system use) was modified in January, April, July and October in 2008.

Within the system use charge, the average price of transmission (within this the entering price with 3.1%, the exit price with 4.5%, and the price of commerce with 49%) increased by 13% (including a 3.1% increase in the entry charge, a 4.5% rise in the exit charge and a 45% shift in the turnover charge). The significant increase in the transmission turnover charge was justified by the extra costs acknowledged on the basis of the MOL Földgázszállító Zrt. request on price review, which derives from the considerable deviation of the gas prices taken into consideration in the transmission charges – in the proportion of quantity – and the effective gas prices.

The expected annual distribution revenue increased in correlation with the payoff margin (network loss) due to the rise in natural gas prices. This increment was taken into consideration in the basic charges in the categories under 100 m³/h capacities, since these charges (particularly in the category under 20 m³/h) significantly lag behind the justified rate. From among distribution charges, the flat rate to be paid by customers without meters remained unchanged in April, then increased by 16.5% and 4.7% in July and then in October. The basic charge of customers with meters of a capacity lower than 20 m³/h increased by 24%, while the turnover charge of those rose by 16%. The basic charge of customers with 20 to 100 m³/h meter increased by 26.5% while the turnover charge of those dropped by 12.6%. The distribution capacity charge of customers having contracted capacities from 101 to 500 m³/h remained unchanged during the year, while their turnover charge declined by 4.8%. The distribution capacity charges of customers above 500 m³/h contracted capacities increased by 17% in total, while their turnover charge lowered by 2.9%.

Table 13 shows the changes in distribution charges in 2008.

Table 13 Changes of the distribution charges in 2008

Distribution charges	Flat rate, basic or distribution capacity charge	Turnover charge
Customers without meters	21,6%	-
Customers with meters of a capacity lower than 20 m ³ /h	24,1%	16,4%
Customers with 20-100 m ³ /h meters	26,5%	-12,6%
Customers having contracted capacities from 101 to 500 m ³ /h	0,0%	-4,8%
Customers above 500 m ³ /h contracted capacities	-17,0%	-2,9%

The injection prices increased by 17.3% and the withdrawal prices by 11.1% during the regular price adjustment in July.

In 2008, the public utility end-user average prices increased by 22% in total at an annual rate. Quarterly changes can be seen in *Table 14*.

Table 142 Quarterly public utility end user average prices in 2008

	From 1 January	From 1 April	From 1 July	From 1 October
Public utility end user average prices without VAT (HUF/GJ)	2522	2660	2850	3082
Changes in comparison to the previous period	-7,0%	5,5%	7,2%	8,1%

Works in relation with price regulation, price preparation

The preparation of public utility prices and charges for system use, which came into effect on 1 January 2009 – took place in autumn 2008. The public utility end-user prices have not changed since 1 January 2009.

Profit cap and profit reimbursement

HEO evaluated the profitability position of the licensees specified by the law for 2007. Two companies – E.ON Földgáz Storage Zrt. and MOL Földgázszállító Zrt. – produced excess profit to be divided. As a result of an agreement with HEO, this extra profit was taken into

consideration in the price modification in 2008, which resulted in a price increase lower than it would have been necessary.

Requests on price reviews

In 2008 HEO, received three requests on price review, from which one was refused, one was partly acknowledged and one claim has been carried over to 2009.

Public service obligation, consumer protection

Approval of codes

The enforcement decree of the new Gas Act was not issued in 2008. Since the Business Conduct Rules of the licensees largely rely on the rules specified in the decree, it was not possible to issue new Business Conduct Rules. Apart from all of these, Business Conduct Rules had to be modified in several cases as a result of the structural changes and reorganisations of the activities at the given licensees. In 2008, HEO issued 8 resolutions in this subject.

Quality of supply

HEO issued the modifications of its former 5 resolutions issued on 1 January 2004 and modified in April 2005 for 5 distribution licensees having the largest circle of customers on the 'Definition of Minimum Quality Requirements and Expected Standard of the Distribution of Natural Gas'. On the same subject, new resolutions were issued for 3 licensees having only small customers circle. The new and the modified resolutions determined the expected values of the operation safety indices. The resolutions on the 'Definition of Minimum Quality Requirements and Expected Standard of Public Utility Supply of Natural Gas' remained in force also in 2008. New resolutions are expected to be issued only after the issue of the enforcement decree of the Gas Act in 2009.

In 2008, HEO conducted a consumer satisfaction survey giving a comprehensive picture on the satisfaction of customers with the activity of distributors and universal service licensees for the fourteenth time. 7400 residential customers and 2400 industrial customers participated in the survey. The method of the survey underwent a significant change relative to the previous years; therefore HEO issued 5 new resolutions on this subject in 2008. The modification was required for the better utilization of the received data in the regulatory work. According to the new methodology, the various activities performed by the licensees are evaluated on the basis of the rate of satisfaction weighted by importance instead of the difference of importance and satisfaction (GAP). As a consequence, the outcome of 2008 cannot be compared directly to the figures of the previous years.

The aggregated results suggest that 2008 did not bring any significant changes relative to the experience of the previous years. The customers' priorities are still the uninterrupted supply and the correct consumption metering from among the activities of the distribution licensees.

The majority of customers were satisfied with these services in 2008 as well. With regard to the responsibilities of the universal service licensee, the quick and professional administration at client services and the constructible bills were considered by customers as important. Similarly to the previous year, the satisfaction values of constructibility of bills, complaint management and the operation of call centres lagged behind the expected values.

Interruptions

Customers expect to be supplied by natural gas continuously and to avail natural gas without interruptions. Pipelined natural gas supply is certainly accompanied by various coincidental and planned interruptions. Interruptions can be caused by breakdowns on the one hand, and by maintenance or other reconstruction works, on the other hand. The quality of the physical process of pipelined natural gas supply can be described by the cause, time and duration of interruptions.

The share and the absolute sum of the interruptions falling under the direct responsibility of the suppliers were increasing in the first half of the examined period, which was followed by a continuous decline. It shows also the frequency of breakdowns resulting in interruptions, which is stably lower than the frequency of all interruptions.

The physical process of the pipelined natural gas supply is labelled by the specific indices of the number of events causing interruptions, and duration of the caused interruptions per 1 000 consumers. The specific number and the duration of interruptions compared to the total number of interruptions are fluctuating in the examined period, the indices related to the events falling under the direct responsibility of suppliers; however, are more favourable and show a continuous improvement.

Customer complaints

The division of authority between HEO and Hungarian Consumer Protection Authority concerning the field of electricity industry and introduced in Section 2.5.4 has not been introduced in the case of natural gas industry. Accordingly, in 2008, the judgment of each consumer complaints on natural gas distribution or public utility supplier licensees fell under HEO's sphere of authority independently from the type of complaints. In 2008, the number of complaints received by HEO decreased to 1841, by 41.35% in comparison with the previous year. On the base of the distribution of the type of complaints detailed in Section 2.5.4, 632 complaints were in relation with natural gas industry licensees. HEO started the supervisory procedure in the case of each complaint and issued the relevant resolutions. On the basis of the resolutions, 53% of the complaints pertaining to the distribution licensees (most frequently on breach of contract) and 32% of the complaints pertaining to the public utility suppliers (most frequently on billing and accounting) were regarded as justified.

In addition to managing the large amount of consumer complaints, HEO could conduct several inspections in 2008. In 2008, inspections extended to the following fields: the way of handling changes in the customer's data, the accounting of natural gas consumption without metering, the method of disconnection because of estimated bills, the issuing of bills, the posting of

information on price changes and the answering of consumer complaints. The evaluation of the received data and information is still in progress in several cases. HEO decided to impose a fine because of the revealed shortages in the accounting of the gas price subsidy of blockhouses.

Regulation of district heat production

Regulation

The activities of district heat production and supply are still subject to license. The establishment of district heat production facilities is subject to license only over a heat output of 5 MW. Licensing competence is distributed between the municipalities of the settlements and HEO. All district heat generators that also generate electricity must apply for a license to HEO, while district heat generating activity without electricity generation falls under the authority of municipalities.

The licensing and supervision of district heat suppliers has been transferred as a whole to the chief administrator of municipalities, while the tasks of consumer protection are provided for by the inspectorates for consumer protection. The setting of consumer tariffs remained within the authority of the municipalities of settlements, and in the case of Budapest, the metropolitan municipality. Before setting the tariffs, the Minister of Transport, Telecommunication and Energy gives its opinion on the prices of district heat supply.

From 1 July 2009, the District Heat Competitiveness Act extends the tasks of HEO with new ones pertaining to the field of price determination.

HEO has a dual task in the enforcement of the act:

- To conduct the price control procedure initiated by the district heat supplier with the purpose of changing the district heat connection fee and the prices of the residential district heat supply;
- Authority controls launched ex officio:
 - o to conduct a price control procedure at the district heat suppliers to supervise the district heat connection fee and the price of the residential district heat supply;
 - o to conduct a price control procedure that aims to supervise the price determined in the contract of the district heat producer and the district heat supplier.

In accordance with the provisions of the District Heat Act, HEO did not have any competence, responsibility, or any means of influence in connection with district heat supply, quality of district heat supply, district heat prices and charges in 2008.

Licensing process of district heat and electricity production for power plants below 50 MW nominal electric capacities

The licensing process of small power plants co-generating heat and electricity (power plants below 50 MW nominal electric capacities) is different from the viewpoint of district heat production and electricity generation.

- Licensing process of district heat production: in the case of the establishment of a cogeneration equipment with a heat output of 5 MW or over, the applicant has to apply to HEO for a license for the establishment of a district heat production equipment (below 5 MW heat output, the establishment of a district heat production equipment is not subject to license). After the establishment of the equipment and

following a successful test loading, the applicant has to apply for an operational license for district heat production irrespectively of the output.

- Licensing process of electricity generation: in the case of the establishment of an electricity generation equipment (including the establishment of a cogeneration equipment), if the nominal electric capacity falls between 0.5 and 50 MW, the applicant has to apply to the Office for a simplified licence for small power plants. The simplified electricity generation license relates to the selection of the primary energy source of small power plants and to the electric energy generation.

In the case of the establishment of power plants with installed electric capacity between 0.5 and 50 MW and in the case of the establishment of power plants based on combined cycle electricity generation (cogeneration) with a nominal heat output of 5 MW or over, the power plants have to submit the following applications to HEO in the following chronological order:

In the period of selecting the primary energy source:

Simplified license for small power plants (on the basis of the Electricity Act)

Before establishment:

License for the establishment of district heat production equipment (on the basis of the District Heat Act)

After commissioning:

Operational license for district heat production

Licensing activity of HEO in 2008

In 2008, HEO issued 19 resolutions on district heat licensing. From among these resolutions, 4 were operational licenses for district heat production, 7 modified existing operational licenses, 7 were approval of a merger or acquisition, and 1 was on the withdrawal of an operational license. HEO published the resolutions in all cases.

Competition

District heat supply is a local public utility service bound to a pipeline system. One supplier operates on one area; therefore competition among suppliers for the customers is not possible. There is only a limited scope for competition in district heat production primarily by the introduction of cogeneration, or in the case of customers' switching to another heating method, but it is still a limited possibility. More and more owner-occupied blocks are breaking off the district heat system because they are unsatisfied with the prices and occasionally the quality of district heat supply.

District heat suppliers supply thermal energy to household customers at administrative prices. Thermal energy is purchased from district heat producers (power plants) and/or produced in boilers by the suppliers themselves, more and more frequently using cogeneration equipment (gas engines). The number of settlements where the supplied thermal energy derived at least partly from power plants co-generating heat and electricity was more than 60. District heat production increasingly uses the economic advantages of cogeneration, which is further

enhanced by the feed-in obligation of electricity and the associating subsidised administrative prices.

Security of supply

Municipalities - in the capital, the metropolitan municipality - are obliged to ensure the district heat supply of facilities that are supplied by district heat through a licensee or licensees.

Most of district heat supply companies are owned by local municipalities and there are some places, where the district heat producer (a power plant subject to electricity license) has also acquired some shares in the district heat suppliers. In some settlements, however, the district heat supply company is operated by private companies based on a concession contract.

In those cases, when a district heat supplier buys the majority of the district heat from a power plant, and the power plant is privately owned or indirectly state-owned, the possible debates between the supplier and the power plant may jeopardize supply. In these debates, the Office may act as a mediator, but the debates can only be solved by the cooperation of the producer, the supplier and the municipality. The recent years witnessed an effort evolving, when municipalities tried to take measures to solve the problem of district heating through the municipality's own company or own supplier.

Price preparation, price regulation

Heat production prices are non-regulated prices. Municipalities have a price setting obligation only with regard to heat producers who also have a license for electricity generation, and have a heat capacity contracted for residential district heating purposes over 50 MW.

Charges to be applied by the district heat suppliers are defined by the body of representatives of the municipalities in decrees. Before setting the tariffs, the Minister responsible for the energy sector gives its opinion on the prices of district heat supply. From 1 July 2009, this process will be modified thus the supplier must submit its request on the rise of prices to HEO. The body of representatives may accept the proposal on price rise depending on the resolution of HEO.

The charges applied in various settlements differ significantly from case to case both in their structure and rate. Considering an average size flat, the annual charge of district heat ranges between 80% and 120% of the national average. In the tariff system of some suppliers, the basic charge varies from 30% to 50% of the annual charge. These differences may be justified only in part by the different conditions of service therefore from 1 July 2009 HEO may inspect individually both the pricing of the district heat suppliers and also the pricing of the thermal heat between the generator and the supplier.

Natural gas plays a key role in the fuel consumption of district heat supply (75 to 80%). The increased number of gas engines in the cogeneration of heat and electricity - beside its environmental advantages - also increases the dependence of district heat supply on natural gas as energy carrier.

Public service obligation, consumer protection

Municipalities are obliged to ensure the district heat supply of facilities supplied by district heat. Most of the district heat supply companies are owned by municipalities. The licensing of district heat suppliers has been transferred as a whole to the chief administrator of the municipalities. The setting of consumer tariffs remained within the competence of the municipalities of settlements. All in all, the whole district heat chain but the district heat production is in the hands of the municipalities.

In order to ensure the transparency of district heat supply prices, the enforcement decree of the District Heat Act defined the scope of financial data and associated technical information to be disclosed by district heat suppliers. In order to improve the information supply to household customers, district heat suppliers supplying 1000 or more households have to establish an electronic information system (homepage). The tasks related to consumer protection are performed by the Nemzeti Fogyasztóvédelmi Hatóság (Hungarian Consumer Protection Authority).

Energy efficiency, environmental protection

Energy efficiency, energy saving

Energy saving

The Governmental Decree 1107/1999 (8.11) determines the energy saving and energy efficiency strategy of the Government till 2010. Based on this strategy, the National Energy Saving Program started in 2000. This program helped the implementation of energy saving projects of consumers and the district heat sector with direct subsidies and soft loans. The Energia Központ Nonprofit Kft. was founded with an aim to implement the Energy Saving Programs announced year by year.

The HEO cooperates in the implementation of the Government's strategy of energy saving and energy efficiency. As an expert it takes part in the work of the interministerial committee that evaluates the energy efficiency tenders, in the work of the committee that selects and evaluates projects in the Environment and Energy Operative Program, in the preparation of the invitations for tenders, and if required it provides consultations on the tenders of modernisation of the suppliers side district heat and the use of renewable energy sources.

Within the framework of the National Energy Saving Program of 2008 and of the residential programs of energy saving and use of renewable energy sources (for individuals and communities), a total of 6865 tenderers won a support of 3.1 billion HUF and a soft loan of 1.6 billion HUF in total. The program allowed the successful tenderers to modernize a total of eleven thousand homes at a total cost of approximately 11.9 billion HUF.

The Operational Program for Environment and Energy associating with the New Hungary Development Program for the period 2007 to 2013 approved also by the European Commission indicates a close relation between energy saving, energy efficiency and environmental protection. The two main goals of the program in accordance with the Hungarian and EU energy policies are the following:

- Increased use of renewable energy sources, which will affect the structure of energy sources in a favourable way, i.e. shift from the traditional energy sources towards renewable energy sources.
- Enhancing energy efficiency, this will contribute to the improved security of supply, to soften the strong import dependence of energy carriers and the mitigation of environmental damages.

The implementation of the objectives will help Hungary to comply with our international undertakings. With this view, the National Development Agency initiated 3 calls for tenders for the period between 2007 and 2008 in order to promote energy efficiency and the use of renewable energy sources.

- The project 'Subsidies for the production of thermal energy or electricity using renewable energy sources' (Code number KEOP-2007-4.1.0) provides a 13.6 billion HUF support for these two years, co-financed by the Cohesion Fund and the budget of the Hungarian Republic.

- The allocated fund for the support of the project 'Enhancing energy efficiency' (Code number KEOP-2007-5.1.0) is 8.76 billion HUF for the years 2007 to 2008, which is co-financed by the Cohesion Fund and the Hungarian Republic.
- The allocated fund for the support of the project 'Third party financing' (Code number KEOP-2007-5.2.0) is 1.84 billion HUF, which is co-financed by the Cohesion Fund and the Hungarian Republic.

Additional tenders of the planning period will be invited on the basis of the experience of the tendering system and the results of the supported projects.

Environmental protection

Use of the renewable energy sources

The share of renewable energy sources within primary energy consumption amounted to 5%. Within this rate, the generation of electricity based on renewable sources has exceeded 2200 GWh, which means a 30% growth compared to the previous year. 80% of the renewable electricity generation derives from co-fired power plants based on the utilization of solid biomass. The electricity generation of the hydro and wind power plants amounted to 9% equally.

The amount of power generated from biomass increased in comparison with the former year. Primarily, the Mátra Power Plant, the Vértes Power Plant and the Bakony Power Plant increased their generation. One of the reasons of the increase is that the new regulation on feed-in obligation ceased the annual obligatory feed-in quotas; therefore power plants can decide by themselves how they want to use the total amount of their quotas in the period indicated in their licenses. The Mátra Power Plant sold approximately 50% of the electricity that it generated from renewable energy sources out of the framework of feed-in obligation.

Till the end of 2008, more than 120 MW capacities out of the licensed 330 MW wind power plant capacities were built, which means that the installed wind power plant capacity and the amount of electricity generated in wind power plants has almost doubled. Thus the generation of wind power plants has become equal to the generation of hydro power plants. There was a significant growth also in the use of gas deriving from waste deposits and in the use of sewage gas, but the amount of the electricity generated this way is insignificant compared to the total amount of electricity generated from renewable energy sources.

The share of electricity generated from renewable energy sources represents nearly 5.2 % of the total electricity consumption of the country, which exceeds Hungary's undertaking towards the EU to be achieved by 2010, which is 3.6%. A rapid increase in the installed capacity of wind power plants (by the middle of 2010 the total licensed 330 MW capacity is due to be built) and biogas power plants is expected also in the following years. The notable interest of the investors in wind power plants is explained by the fact that the Hungarian feed-in price of electricity generated from wind is by far the best even in comparison with the prices of other countries in the European Union, however the modification of the 330 MW capacity limit is not expected within a short period of time because of system operability limits of the electricity system.

The establishment and the operation of biomass and biogas power plants is not a profitable and attractive investment option at the present feed-in prices. From among the licensed power plants there is only one where the establishment is in course, while the preparations are laid off or stalled in several other power plants. The rethinking of the system of incentives should be important to accelerate the implementation of the biomass fired power plants. The quick expansion of power grass and woods, as well as the enhancement (by incentives) of the gathering of agricultural wastes and by-products are definitely required for the expansion of the production of this type. The figures of electricity generation from renewable energy sources can be seen in *Table 15*.

Table 15 Electricity generated from renewable energy sources in Hungary (GWh)

	2002	2003	2004	2005	2006	2007	2008
Water	194	171	206	203	186	210	209
Biogas	11,2	15,6	15	27	32	28	36
Wind	1,1	3,3	5,4	10	43	81	204
Biomass	0	75	655	1612	1278	1404	1812
Deponia gas							10
Total	206,3	264,9	881,4	1852	1539	1723	2271

* This data excludes the electricity generated from communal waste collected by a non-selective way

Greenhouse gas emission allowance trading

On 13 October 2003, the European Parliament and the Council adopted Directive 2003/87/EC on greenhouse gas emission allowance trading. In accordance with the Directive, facilities with a firing equipment of over 20 MW capacities may perform an activity including carbon dioxide emission only in possession of an allowance. In Hungary, 229 companies - power plants, oil refineries, coking plants, iron metallurgy and steel production, cement-, lime-, glass- and construction material production, as well as paper mills - are participating in the emission trading system of the EU.

In the first trading period – between 2005 and 2007 - the Ministry of Environment and Water (KvVM) allocated a total of 30.2 million allowances for 2005, and about 17 million of them in the electricity sector. With full knowledge of the data of the first period, it can be found that market participants were over-allocated by the State. The over-allocation of the allowances was probably due to the lack of emission data at the authorities. Before starting the system, the Government had to rely on the self-assessment of the relevant companies when allocating the allowances, and the companies, being afraid of a shortage in allowances in the future, tried to have the Government approve the highest possible amount of allowances. In most of the Member States of the European Union, a very similar situation evolved, so the price of allowances – because of the over-allocation – fell from 30 Euro to 0.5 to 1 Euro.

The preparation of the National Allocation Plan and List for the period of 2008 to 2012 started in 2006. The European Commission decided in its decree on 16 April 2007 that the National Allocation Plan failed to meet the criteria of the Directive 2003/87/EC on greenhouse gas emission allowance trading, particularly from the viewpoint of the total amount of allowances to be allocated. Therefore the Commission ordered to decrease the total of allowances allocated to Hungary by 4 million tons of CO₂. The Hungarian Government challenged the resolution at the European Court of Justice (the case is still in progress). According to the EU law in force, the appeal does not have delaying force on the implementation of the resolution, thus the National Allocation Plan 2 must be compiled again taking into account the amount of CO₂ to be allocated on the basis of the decision of the Commission. As a result, Hungary must probably expect a shortage of allowances in the second trading period.

The HEO participates as a professional authority in the determination of the total allowed annual sulphur dioxide and nitrogen oxide emission allowances of the power plants. It also helps with its expert opinion the preparation of the National Allocation Plan and the determination of the allowances of the new entrants on the basis of the Government Decree 213/2006 (27. 10) on the implementation of the Act 15 of 2005 on the greenhouse gas emission allowance trading. The HEO gives only its stance in the aspect of the electricity generator licensees, the allocation itself is the responsibility of the National Inspectorate for Environment, Nature and Water.

Operation of the HEO, institutional relations, publicity

Institutional and international relations, publicity

Bilateral institutional relations

In 2008, similarly to the previous years, the HEO maintained active relations with other administrative bodies working in the field of consumer protection (Hungarian Competition Authority, Parliamentary Commissioners' Office, Data Protection Ombudsman, Hungarian Consumer Protection Authority) and . An especially intensive dialogue developed between the HEO and the Hungarian Consumer Protection Authority. The HEO gave professional support in the management of the consumer complaints difficult to be judged, and the two authorities clarified the competences and the formal and contentual requirements of data supply obligation. The HEO operated the Energy Interest Representation Board (EIRB) also in 2008 with a view to ensure the continuity of the dialogue between customers and licensees.

International relations

The HEO is a member of the Council of European Energy Regulators (CEER – Európai energia Szabályozók Tanácsa) as well as of the European Regulators Group for Electricity and Gas (ERGEG – Európai Villamosenergia és Gázipari Szabályozók Csoportja). The Vice-President of the HEO was one of the Vice-Presidents of these organizations. The representatives of the HEO played an active role in the work of the Working Groups and the Task Forces of the CEER and the ERGEG also in 2008.

The HEO played an active role also in the work of the professional association gathering the energy regulators of the countries of Central and Eastern Europe, Asia and the Middle East, the Energy Regulators Regional Association (ERRA – Energia Szabályozók Regionális Egyesülete). The President of the ERRA is one of the Directors of the HEO and the secretary of ERRA resides and works in the building of the HEO.

The Energy Interest Representation Board (EIRB)

In 2008, the Energy Interest Representing Board held quarterly meetings with the participation of customers and licensees. The Magyar Energiafogyasztók Szövetsége (Association of the Hungarian Energy Customers), the Ipari Energiafogyasztók Fóruma (Forum of Industrial Energy Customers) and the Országos Fogyasztóvédelmi Egyesület (Association for Consumer Protection of Hungary) were permanent representatives of the customer's side.

In the first quarter, the meeting of the EIRB dealt with the experiences of the approval of the Business Conduct Codes, the preparations for the review of costs and assets of the electricity licensees, and elaborated the rules of participation of the consumer side in the review.

In the third quarter, the meeting of EIRB dealt with the issue of the information of the Hungarian Consumer Protection Authority about its new tasks determined by the new

Electricity Act, the bill of the new Gas Act, the new rules on universal supply and vulnerable customers and the answers given to the frequently asked questions on market opening.

In the fourth quarter, the meeting of EIRB dealt with the preparation of the decrees on the electricity market opening, the new accounting framework of feed-in-obligation and the report of the public utility suppliers on their preparation for the market opening.

Information supply

In 2007, the President of the Office – in accordance with his tasks ordered by law – submitted the annual report on the 2006 activity of the Office to the Government. The Office issued its publication on the activities of the Office and the key technical and economic data of the supervised sector, and also the Electricity Statistical Yearbook providing a summary on the technical and economic activities of the electricity industry.

After full market opening, since the beginning of 2008, the responsibilities of the Office and the circle and content of the relevant rights have been modified with regard to the electricity market. The number of data suppliers has increased, the types of licenses have changed, and the circle of data suppliers has modified. The changes of the regulation induced also a modification of the data demand of the Office. The Office determined the data to be submitted and effective from the beginning of 2008 in its resolutions issued for the licensees.

The Office regularly provided information to various international organizations (EUROSTAT, International Energy Agency etc.).

The senior management of the Office regularly informed the written and electronic press on the issues related to the customers.

On its homepage at www.eh.gov.hu, the Office regularly published its resolutions of public interest, provided information on actual issues related to its work and published a summary, with a content specified by a number of background legislation, on the public technical and economic data of the electricity and natural gas sectors. The most important events of the energy market can be tracked on the website, as well.

Conditions of operation

Conditions of operation

The own income of the Office is determined in the Joint Decree of the Minister of Economy and Transport and the Minister of Finance 19/2002 (November 5) modified by the Joint Decree of the Minister of Economy and Transport and the Minister of Finance 68/2005 (September 13). The budget of the Office is an individual item in the budget of the Ministry of Economy and Transport, has a full competence over its spending, and operates as an independent budgetary organization. The Office has been a governmental office by virtue of the Act 57 of 2006 since 1 July 2006.

The approved headcount as well as the effective staff number of the Office was 94 in 2007. Its experts have a comprehensive technical, economic, financial and legal knowledge; most of them have language skills and broad experience in the industry. The Office is well-equipped and duly provided with devices of information technology and telecommunication, as well as office appliances.

Information system, information processing

Information processing

The Office continuously processed and evaluated the regularly received information on the operation and activity of licensed companies. The scope of information includes the daily, monthly, quarterly and annual data on the generation, supply, distribution and transmission of electricity and natural gas, and the production of district heat.

The majority of data arrives to the Office directly, in an electronic format. In addition to the data demand of the Office required for the daily work, the information system also satisfies the demand for information requested by the interested stakeholders, both from Hungary and abroad. The professional and confidential handling of information has an utmost importance in order to keep the confidence of the licensees supplying the necessary data. Data is managed in accordance with the Information Safety Regulation created and audited by external experts, as well as with the provisions of the internal regulation on data management. The requirements of data security are met by the continuous monitoring of compliance with the regulations, as well as the operation and development of the appropriate information safety systems.

The Office regularly provides information to various international organizations. Data on the average prices of Hungarian electricity and natural gas, broken down by consumer groups, is submitted to the International Energy Agency (IEA) quarterly. From 2002, the average consumer price data of electricity and natural gas is sent to EUROSTAT every half years. The processing of the electricity and natural gas prices of the member states of the ERRA was also performed continuously in 2007. The supply of data organized by the Office provides data on the ERRA member states and the whole region, which are suitable for comparison since the beginning of 2000. The figures are published on the homepage of ERRA.